

Article

Public service productivity, adult social care, England: financial year ending 2021

Trends in publicly funded adult social care inputs, quantity and quality of output, and productivity in England, between financial year ending 1997 and financial year ending 2021.

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Table of contents

1. [Main points](#)
2. [Overview](#)
3. [Productivity](#)
4. [Inputs, and non-quality-adjusted and quality output](#)
5. [Residential and nursing care productivity](#)
6. [Public service productivity: adult social care, England, financial year ending 2021 data](#)
7. [Glossary](#)
8. [Data sources and quality](#)
9. [Related links](#)

1 . Main points

- Productivity in publicly funded adult social care (ASC) services fell by 10.2% in the financial year ending (FYE) 2021 compared with FYE 2020, mainly driven by an increase in inputs of 10.9%, owing to the financial burden of the coronavirus pandemic.
- While the quantity of publicly funded ASC services provided grew by 2.6% in FYE 2021, after taking account of changes in quality, overall output fell by 0.4%.
- The fall in productivity in FYE 2021 is not dissimilar to that observed in our timely quarterly public service productivity statistics for the same period, reflecting the new cost pressures and disruption to public services following the coronavirus pandemic.

This release covers the period from financial year ending (FYE) 1997 to FYE 2021, which overlaps with the period affected by the coronavirus (COVID-19) pandemic.

2 . Overview

This article focuses on the inputs, output and productivity of public service adult social care (ASC) for England. It covers the period from the financial year ending (FYE) 1997 to FYE 2021, which includes the impact of the coronavirus (COVID-19) pandemic on the Adult Social Care sector.

As explained in [Section 8: Data sources and quality](#), two methodological changes have been introduced this year following expert consultations:

- commissioning and service delivery is excluded from the measure of ASC output
- changes to the method of calculating the quality adjustment, to account for a much-reduced sample size over FYE 2021 in the data source

This article should therefore be read considering these changes.

In this publication, "productivity" and "output" are adjusted for quality, unless "non-quality-adjusted" is specified. "Quantity output" and "non-quality-adjusted output" are used interchangeably.

3 . Productivity

Conceptually, productivity in publicly funded adult social care measures changes in the volume of care provided for each unit of input, controlling for changes in the quality of care delivered.

Productivity in publicly funded adult social care (ASC) services fell by 10.2% in the financial year ending (FYE) 2021. This was a result of inputs increasing by 10.9% because of the additional cost burden created by the coronavirus (COVID-19) pandemic, while output fell by 0.4%. The volume of output fell, driven by a fall in the quality adjustment, despite the direct measure of outputs before quality adjustment increasing. This fall in quality adjustment may reflect the adverse effect of the coronavirus pandemic on the care-related quality of life of clients receiving ASC services.

Figure 1 also shows non-quality-adjusted productivity, which decreased by 7.5% in FYE 2021. The non-quality-adjusted productivity registered a negative growth also in the previous five years, falling by 1.2% from FYE 2016 until FYE 2020.

Figure 1: Public service adult social care (ASC) quality and non-quality-adjusted productivity have experienced a strong fall in the financial year ending (FYE) 2021

Public service ASC quality and non-quality-adjusted productivity indices, FYE 1997 to FYE 2021

Figure 1: Public service adult social care (ASC) quality and non-quality-adjusted productivity have experienced a strong fall in the financial year ending (FYE) 2021

Public service ASC quality and non-quality-adjusted productivity indices, FYE 1997 to FYE 2021



Source: Office for National Statistics – Public Service Productivity

Notes:

1. Output is quality adjusted from FYE 2012 onwards, except FYE 2015 because of a change in data coverage. No equivalent data are available to quality adjust output before this.
2. No productivity change is calculated for FYE 2015 because of a change of data source.
3. "[x]" indicates that data are not available for these years (as displayed in the data download).

The falls in ASC productivity could be because of a deterioration in the efficiency of service provision.

However, it is important to consider how clients' levels of need (and consequently, the intensity of support they require) may have increased over time. The ASC output measure partly controls for this by giving different weights for different activities, client age groups, and primary reasons for needing support. However, the lack of data on the level of care clients need within each different activity prevents us fully controlling for these needs.

In addition, there are some changes to methods during the series, including the introduction of quality adjustment from FYE 2012 onwards. As a result, care must be taken when comparing productivity over the whole series.

The level of productivity of publicly funded adult social care services cannot be compared with other service areas, only changes over time can be analysed.

4 . Inputs, and non-quality-adjusted and quality output

Inputs

Inputs cover the labour, intermediate consumption of goods and services, and capital used by local authorities in providing ASC (adult social care) services, as well as inputs used in providing care purchased from independent sector providers. More information on inputs can be found in our [Sources and methods for public service productivity](#).

Inputs grew by 10.9% in the financial year ending (FYE) 2021. This growth is mostly driven by the increase in public expenditure in 2020 to 2021 specifically to support the adult social care sector during the coronavirus (COVID-19) pandemic.

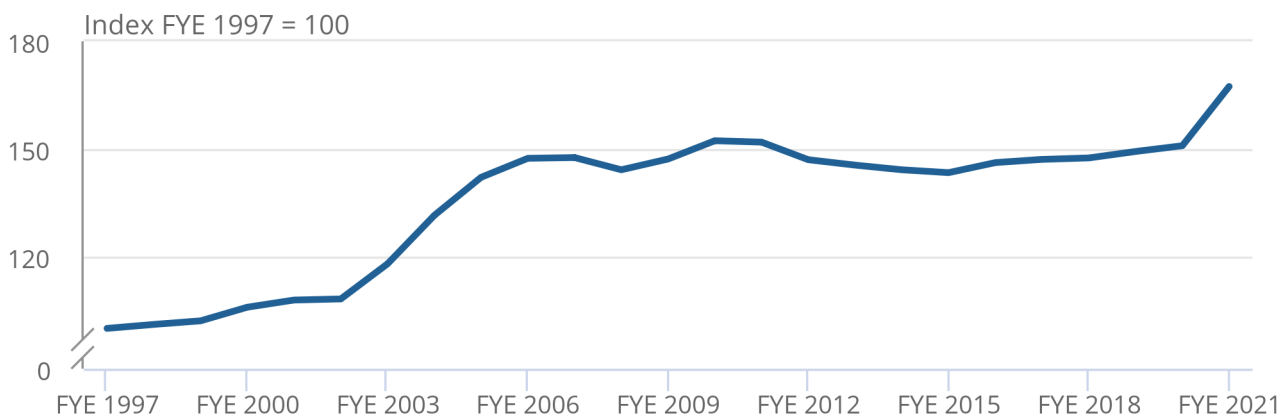
It should be noted that the level of inputs has increased over the series, registering 50.9% growth between FYE 1997 and FYE 2020.

Figure 2: The volume of adult social care (ASC) inputs grew by 10.9% in the financial year ending (FYE) 2021

Public service ASC inputs index, FYE 1997 to FYE 2021

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Public service ASC inputs index, FYE 1997 to FYE 2021



Source: Office for National Statistics – Public Service Productivity

Non-quality-adjusted output

Non-quality-adjusted output relates to the amount of adult social care (ASC) services provided in a given year.

The non-quality adjusted quantity of publicly funded ASC services provided grew by 2.6% in FYE 2021. This figure differs from the one used to calculate productivity in the Quality output section, since it does not adjust output to account for the quality of services provided.

The trend of ASC non-quality-adjusted output can be described in five distinct phases:

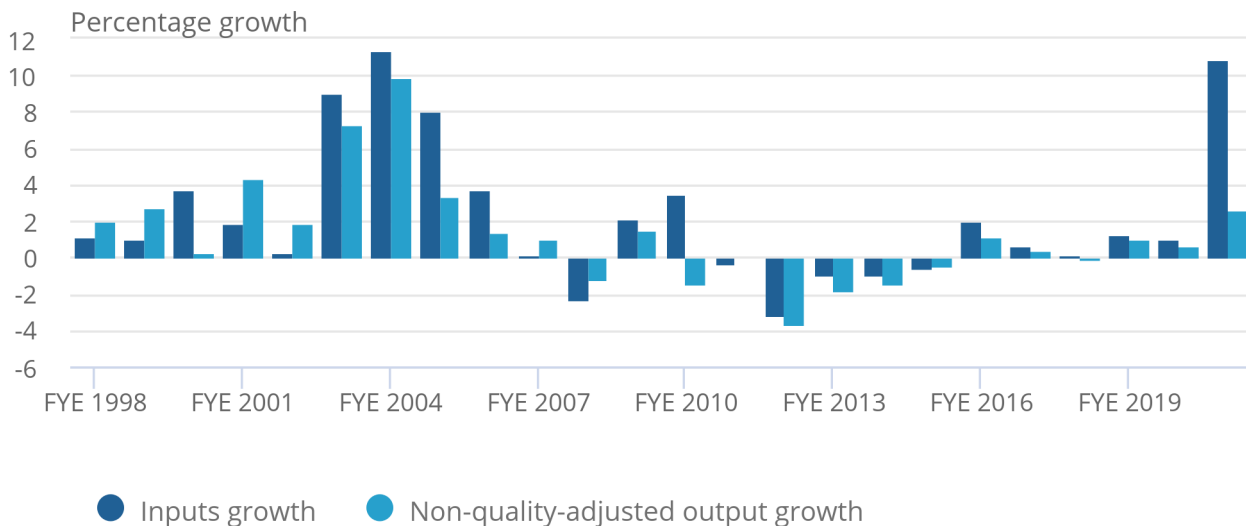
- from FYE 1997 to FYE 2006: non-quality-adjusted output increased by about 38%
- from FYE 2007 to FYE 2010: non-quality-adjusted output was largely unchanged
- from FYE 2011 to FYE 2015: non-quality-adjusted output fell by 7.2%
- from FYE 2016 to FYE 2020: non-quality-adjusted output increased by 2% overall, driven by the growth in FYE 2016 (the year the Better Care Fund was introduced)
- during FYE 2021: non-quality-adjusted output grew by 2.6%.

Figure 3: In the financial year ending (FYE) 2021 both inputs and non-quality-adjusted output increased

Public service adult social care (ASC) inputs and non-quality-adjusted output growth rates, FYE 1998 to FYE 2021

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Public service adult social care (ASC) inputs and non-quality-adjusted output growth rates, FYE 1998 to FYE 2021



Source: Office for National Statistics – Public Service Productivity

Quality output

ASC quantity output is adjusted for changes in the quality of the service from the financial year ending (FYE) 2012 onwards, except FYE 2015 because of a change in data coverage. No equivalent data are available to quality adjust output before this.

The quality adjustment to adult social care (ASC) output is based on the concept of adjusted social care-related quality of life and produced using data from the [NHS' Adult Social Care Survey](#) (ASCS). The quality adjustment measures changes in how well needs are met across domains of quality of life that are affected by social care, while taking account of factors outside the control of ASC services. More information is available in our [guide to quality adjustment in public service productivity measures](#), while details of the quality adjustment used for ASC output can be found in our [Public service productivity: adult social care, sources and methods, 2019 update methodology article](#).

Before applying a quality adjustment, output increased 2.6% in FYE 2021. However, after accounting for the change in the quality of services provided, the volume of output fell by 0.4%.

For the first five years in which quality was measured, the quality adjustment was positive, resulting in an increase to output, but the change in quality was negative in FYE 2018, FYE 2019, and FYE 2021, decreasing output. In FYE 2018 this was coupled with a decrease in the quantity of output provided, whereas in FYE 2019 and in FYE 2021, the fall in quality offset an increase in the quantity of output.

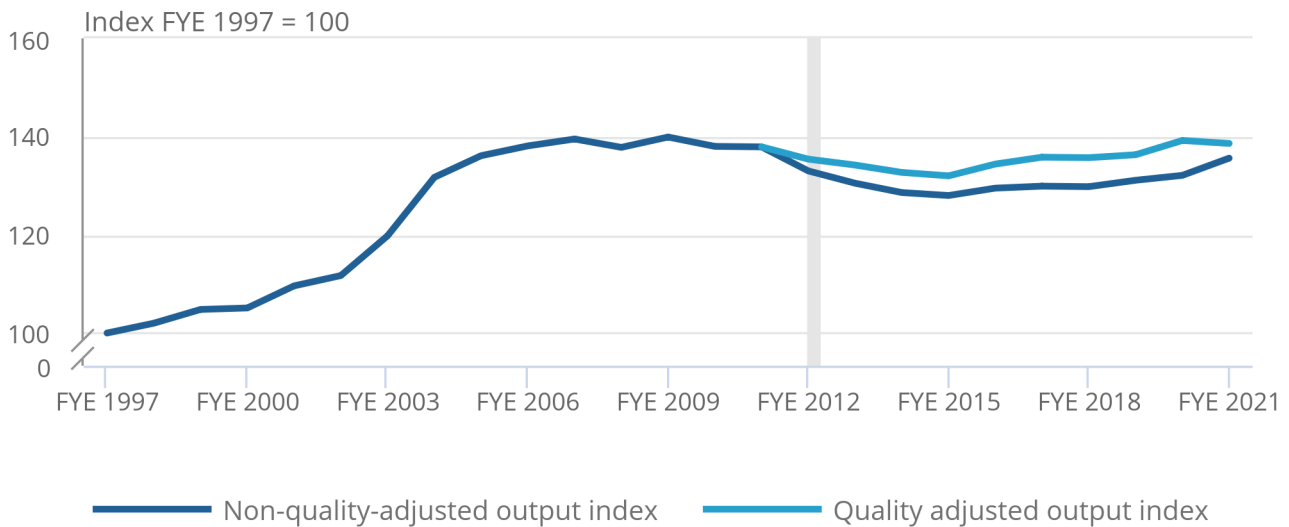
Figure 4: In the financial year ending (FYE) 2021, the fall in quality offset an increase in the quantity of output

Public service adult social care (ASC) non-quality-adjusted and quality-adjusted output indices, England, FYE 1997 to FYE 2021

Figure 4: In the financial year ending (FYE) 2021, the fall in quality offset an increase in the quantity of output

Quality adjustment introduced FYE 2012

Public service adult social care (ASC) non-quality-adjusted and quality-adjusted output indices, England, FYE 1997 to FYE 2021



Source: Office for National Statistics – Public Service Productivity

Notes:

1. Output is quality adjusted from FYE 2012 onwards, except FYE 2015 because of a change in data coverage. No equivalent data are available to quality adjust output before this.
2. "[x]" indicates that data are not available for these years (as displayed in the data download).

5 . Residential and nursing care productivity

While using both directly and indirectly measured output is necessary to ensure total output growth can be measured, directly measured output is generally preferred to indirect measurement, as it enables the calculation of productivity change. This section analyses productivity in residential and nursing care, which are the only services in these adult social care (ASC) statistics that are measured directly using activity data across the whole series, except from financial year ending (FYE) 2015 when there was a change in data collection.

Services provided in residential and nursing care settings accounted for 30.2% of ASC spending in FYE 2021. In FYE 1997 these settings accounted for 45.3% of spending, while in FYE 2020 it included 32.8%, confirming a decrease in spending on this area over time.

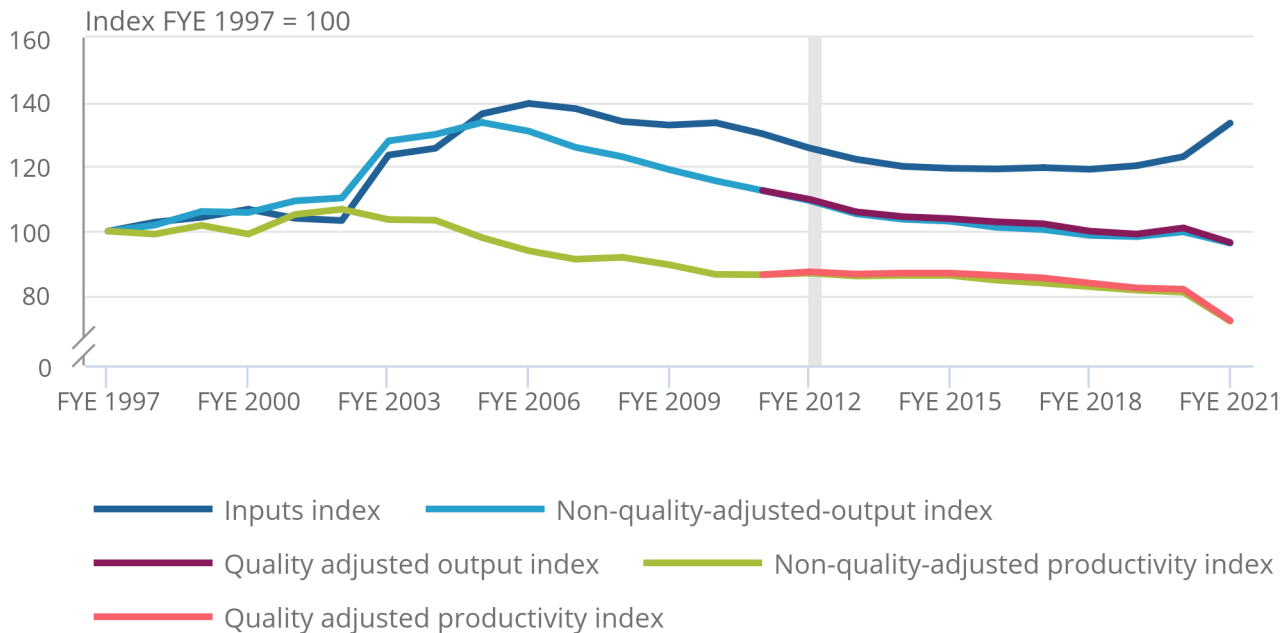
Residential and nursing care productivity fell by 11.9% in FYE 2021. The fall in productivity in FYE 2021 was a result of inputs growing by 8.4% and quality-adjusted-output decreasing by 4.5%. A fall in the quantity of output produced was exacerbated by a decline in the quality of services provided. As mentioned in the [King's Fund Social Care 360 report \(March 2022\)](#), this is consistent with the broad policy direction of supporting people in their own homes, rather than in residential care. Furthermore, the coronavirus (COVID-19) pandemic may have accelerated a public preference to be cared for at home.

Figure 5: Residential and nursing care productivity fell by 11.9% in the financial year ending (FYE) 2021, its sixth consecutive year of negative growth

Public service residential and nursing care; inputs, and quality-adjusted and non-quality-adjusted output and productivity, FYE 1997 to FYE 2021

Figure 5: Residential and nursing care productivity fell by 11.9% in the financial year ending (FYE) 2021, its sixth consecutive year of negative growth

Public service residential and nursing care; inputs, and quality-adjusted and non-quality-adjusted output and productivity, FYE 1997 to FYE 2021



Source: Office for National Statistics – Public Service Productivity

Notes:

1. No productivity change is calculated for FYE 2015 because of a change of data source.
2. Output is quality adjusted from FYE 2012 onwards, except FYE 2015 because of a change in data coverage. No equivalent data are available to quality adjust output before this.
3. It is not possible to calculate the exact proportion of 'commissioning services delivery' (CSD) inputs that were used to deliver residential and nursing care services only. ONS has therefore approximately allocated a proportion of 'commissioning services delivery' inputs to residential and nursing care based on relative expenditure shares. It is assumed CSD costs were allocated equally to different areas of adult social care output. Consequently, CSD inputs are included within the inputs for residential and nursing care on an approximate rather than exact basis.
4. "[x]" indicates that data are not available for these years (as displayed in the data download).

6 . Public service productivity: adult social care, England, financial year ending 2021 data

[Reference tables adult social care productivity England, FYE 2021](#)

Dataset | 25th July 2022

Annual public service adult social care growth rates and indices for inputs, quality- and non-quality-adjusted output and productivity, totals and by components, for England, financial year ending March 2021

7 . Glossary

Public services

This publication only covers publicly funded ASC services, with public funding covering both local authority funding and contributions from the NHS (from financial year ending (FYE) 2005 onwards). Privately funded ASC services are excluded from input, outputs and productivity. However, publicly funded services provided by independent sector providers are included.

Adult social care services

ASC services provide care and support to adults with learning or physical disabilities, adults with mental health problems, drug and alcohol misusers, and carers.

Public service productivity

Public service productivity is estimated by comparing growth in the total quantity of inputs used with growth in the total quantity of output provided, adjusted for the quality of this output.

Inputs

Inputs are composed of labour, goods and services, and capital consumption, and are measured on a volume basis using expenditure adjusted for the specific input cost inflation rates faced by adult social care (ASC) services.

Non-quality-adjusted output

Non-quality-adjusted (or "quantity") output is measured as the number of individual activities performed weighted by their cost, where activity data are available. Where activity data are not available, output is measured using the equivalent deflated expenditure data as inputs.

Quality adjustment

In line with the recommendations of the [Atkinson Review \(PDF, 1.08MB\)](#), a quality adjustment is applied to the estimate of adult social care to control for the success of the service in meeting selected outcomes. For more information see [A guide to quality adjustment in public service productivity measures](#).

8 . Data sources and quality

Method changes in the current publication

While most of the information on data sources and quality can be found in our [previous article](#), this section focuses on the methodological changes introduced this year.

Removal of commissioning and service delivery from output measurement

One element of adult social care (ASC) expenditure is no longer measured in ASC output: "commissioning and service delivery". This element includes expenditure on the overhead costs of the provision of other care services and is defined in the [NHS-Digital report](#). Given this can be considered an overhead for care services and not a set of defined activities in its own right, the "output-equals-inputs" convention does not apply to this item of spending, as increased spending does not necessarily constitute an increase in the services provided to care clients. This contrasts to other elements of ASC expenditure measured as indirectly measured output, such as "social care activities", which includes obvious care-related activities such as care assessments and safeguarding. Another justification for excluding commissioning and service delivery from output in the financial year ending (FYE) 2021 is that the category is used to record spending funded by the grants received by Local authorities (LAs) to support ASC service providers with the additional costs incurred during the coronavirus (COVID-19) pandemic. Such costs include the provision of financial support to independent providers to improve the sustainability of capacity as well as to cover additional costs, such as increased hospital discharge costs and infection prevention and control activities. Again, these costs do not generally result in an increase in the quantity of care provided. Furthermore, a large, but unknown, proportion of this support went to residential care providers, the output of which is already included on a directly measured basis. Excluding commissioning and service delivery therefore means that the increase in costs from coronavirus that does not result in an increase in the quantity of care provided should not cause an increase in output.

Change to the quality adjustment

In previous years, the full sample of the [NHS' Adult Social Care Survey](#) (ASCS) has been used as the main data source to measure the quality adjustment of ASC. However, owing to the impact of coronavirus, the FYE 2021 survey was voluntary, and councils could choose whether to participate. As a result, 18 Councils with Adult Social Services Responsibilities (CASSRs) took part in the survey compared with 151 Local Authorities in the previous years. Two adjustments have been introduced to tackle this issue, taking into consideration method differences to calculate the [quality adjustment for community care, and residential and nursing care](#).

Firstly, in case of the quality adjustment for community care, we use the data provided this year (18 CASSRs) and compare it with the data from the same 18 CASSRs the previous year (FYE 2020) to calculate a growth rate. Each CASSR is weighted based on the information published in the ASCS. This gives us the most accurate representation of the change in quality, based on those CASSRs for which we have data in both periods. Analysis of the 18 CASSRs over time showed that while scores showed slightly greater volatility than the whole sample, the overall trends in quality remained similar to the whole sample. Therefore, we use the subsample of 18 CASSRs as a reasonable proxy predictor of trends for the whole sample.

Secondly, the [residential and nursing care quality adjustment](#) measures the change in adjusted social-care-related quality of life relative to a predicted change in adjusted social-care-related quality of life. This predicted change is produced based on changes in the characteristics of individuals in the data, with the scale of the effect of these changes determined by "coefficients" produced using a regression model. While these coefficients are usually updated annually, owing to the small sample size they have not been recalculated by a model including FYE 2021 as the small sample from this year would introduce only a small number of additional observations to the calculation and the partial nature of the geographical coverage of these observations may mean they are not representative of England. However, predicted scores for adjusted social-care-related quality of life have still been calculated for FYE 2021 using coefficients produced using data from FYE 2018 to FYE 2020.

Acknowledgements

The authors are grateful to colleagues at the Office for National Statistics (ONS) and at the Department of Health and Social Care for providing helpful comments. We would like also to thank LaingBuisson and the Department of Health and Social Care for the provision of data for the deflators used in measuring adult social care inputs.

9 . Related links

[Adult Social Care Activity and Finance Report, England - 2020-21](#)

Publication | Released 21 October 2021

This publication contains data taken from the Adult Social Care Finance Return (ASC-FR) and Short and Long Term (SALT) collection to provide information regarding adult social care activity and finance on local authorities in England for 2020 to 2021.

[Personal Social Services Adult Social Care Survey, England 2020-21](#)

Publication | Released 21 October 2021

This report contains findings from the Adult Social Care Survey 2020 to 2021 (ASCS). The national survey takes place every year and is conducted by Councils with Adult Social Services Responsibilities (CASSRs).

[Improved methods for total public service productivity: total, UK, 2018](#)

Article | Released 1 April 2021

Explaining methodological improvements to education quality adjustment, healthcare, adult social care, education and police inputs, and the National Accounts data source used in the upcoming Public service productivity article.

[Public service productivity: total, UK, 2019](#)

Article | Released 22 February 2022

Updated measures of output, inputs, and productivity for public services in the UK between 1997 and 2019. Includes service area breakdown, as well as impact of quality adjustment and latest revisions.