

Statistical bulletin

# Unpaid care expectancy and health outcomes of unpaid carers, England: April 2024

Average number of years people are expected to provide unpaid care beyond their current age between 2020 and 2022, and health outcomes for unpaid carers.

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# 1 . Main points

- In 2020 to 2022, at age 15 years, females can expect to spend more years of their remaining life providing unpaid care (7.6 years) than males (5.3 years).
- In 2020 to 2022, at age 50 years, females can expect to spend 4.7 years of their remaining life providing unpaid care (13.7% of remaining life expectancy), while males are expected to spend 3.5 years providing unpaid care (11.4% of remaining life expectancy).
- In 2021, around one in four adults who were providing unpaid care reported being in “not good health” after adjusting for age, compared with fewer than one in five adults who were not providing any unpaid care; the probability of reporting being in “not good health” was higher for people providing more hours of unpaid care.
- In 2021, the risk of one or more accident and emergency (A&E) attendances was higher for female unpaid carers who were providing increased hours of unpaid care, compared to female non-carers, after adjusting for demographic and socioeconomic characteristics.
- Based on data collected in 2015, 2017 and 2019, 48.6% of unpaid carers reported at least one adverse health effect from providing unpaid care; this was higher among females (53.0%) than males (42.7%) and was also higher among those providing more hours of unpaid care.
- In 2019, low mental well-being was more common among unpaid carers (19.5%) than those not providing unpaid care (14.8%), after adjusting for age.

## 2 . Unpaid carers

Unpaid carers, also referred to as informal carers, provide care to anyone because of long-term physical or mental ill-health or disability, or care needs relating to old age. Census 2021 (see [Section 8: Glossary](#)) indicates that [8.8% of people in England provided unpaid care](#).

This bulletin provides data on unpaid care expectancy and health of unpaid carers in England. Where possible, this analysis uses Census 2021 data to identify unpaid carers, as the census provides the most detailed picture of the entire population. An overview of the data sources and methods used in this analysis is provided in [Section 9: Measuring the data](#).

Factors linked with health, such as age, sex and socioeconomic status, differ for unpaid carers and non-carers. Adjusting estimates for these differences allows our analysis to identify associations between unpaid care and health outcomes such as self-reported health status and hospital admissions.

The estimates presented in this analysis show associations between health and unpaid care provision. While our analysis has adjusted for several demographic and socioeconomic factors, the differences in health outcomes between unpaid carers and non-carers might not be a direct effect of providing unpaid care.

## 3 . Unpaid care expectancy

Unpaid care expectancy (UCE) estimates the average number of years spent occupying an unpaid carer role. The estimate can provide some insight into the unmet need for social care services and different patterns across geographical areas. For example, where unpaid care expectancy is higher, there may be a need for further formal care provision or support for unpaid carers.

Data for 2010 to 2012 can be found in the [accompanying dataset](#).

## Figure 1: Females aged 15, 50 and 65 years, on average, can expect to spend more years of their remaining life providing unpaid care than males, with a smaller difference at age 65 years

Estimated average years of remaining life spent providing unpaid care, England, 2020 to 2022

### Notes:

1. Figures are conditional on surviving to the stated age group and are reported from the start of the age group.
2. The term “unpaid carer” refers to those who were recorded as providing unpaid care during Census 2021.
3. Confidence intervals can be found in the [accompanying dataset](#).

[Download the data](#)

In 2020 to 2022, females at age 15 years can expect to spend on average 7.6 years of their remaining life providing unpaid care, compared with 5.3 years for males. Although males at age 15 years have shorter life expectancies than females, males still spend a smaller proportion of their remaining lives (8.3%) providing unpaid care compared with females (11.1%).

For females at age 15 years, those in the North East can expect to spend on average the highest number of years of their remaining life providing unpaid care compared with all other regions (8.4 years, 12.6% of their remaining life expectancy). Females in London can expect to spend on average the lowest number of years of their remaining life providing unpaid care compared with all other regions (6.6 years, 9.6% of their remaining life expectancy).

Similarly, for males at age 15 years, those in London have the lowest unpaid care expectancy (4.8 years, 7.4% of remaining life expectancy) compared with all other regions.

At age 50 years, females can still expect to spend on average more years of their remaining life providing unpaid care (4.7 years) compared with males (3.5 years). Despite shorter life expectancy for males at this age, males still spend a smaller proportion of their remaining lives providing unpaid care (11.4%) compared with females (13.7%).

At age 65 years, females can expect to spend on average 2.1 years of their remaining life providing unpaid care, compared with 1.9 years for males. However, because of the shorter life expectancy of males at this age, males spend a slightly larger proportion of their remaining lives from 65 years providing unpaid care (10.6%) compared with females (10.1%).

At age 50 and 65 years, regional differences in unpaid care expectancy are largely reduced.

## Figure 2: Unpaid care expectancy at 15 years, by sex, upper-tier local authorities in England, 2020 to 2022

### Notes:

1. Figures are conditional on surviving to the stated age group and are reported from the start of the age group.
2. The term “unpaid carer” refers to those who were recorded as providing unpaid care during Census 2021.
3. Confidence intervals can be found in the [accompanying dataset](#).
4. Unpaid care expectancy figures are not available for Isles of Scilly and City of London because of insufficient population size.

[Download the data](#)

## 4 . Health of unpaid carers

### General health status

In Census 2021, around one in four male (24.9%) and female (25.4%) unpaid carers reported being in “not good health” (see [Section 8: Glossary](#)) compared with fewer than one in five male (19.0%) and female (19.4%) non-carers based on age-adjusted percentages. Among unpaid carers, the percentage of those reporting being in “not good health” was higher for increased hours of unpaid care provision.

#### **Figure 3: Around a third of males and females providing 50 or more hours of unpaid care a week reported being in “not good health”**

Estimated percentage of “not good health” by intensity of unpaid care provision, England, 2021

##### Notes:

1. Estimated percentage has been adjusted for age.
2. People aged 16 to 94 years linked to an NHS number.
3. “Not good health” is derived from individual responses to the Census 2021 general health status question.
4. Confidence intervals can be found in the [accompanying dataset](#).

[Download the data](#)

We modelled the odds (see [Section 8: Glossary](#)) of reporting being in “not good health” for males and females by unpaid care status. After controlling for demographic and socioeconomic factors (see [Section 8: Glossary](#)), unpaid carers had higher odds of reporting being in “not good health” than non-carers (1.44 times higher for females and 1.44 times higher for males); the odds were higher with increased provision of unpaid care.

#### **Figure 4: Odds of being in “not good health” were highest for male and female unpaid carers providing 50 or more hours of unpaid care per week compared with non-carers**

Odds ratio of being in “not good health”, males and females by provision of unpaid care, England, 2021

##### Notes:

1. Binary logistic regression after adjusting for demographic and socioeconomic characteristics.
2. People aged 16 to 94 years linked to an NHS number.
3. "Not good health" is derived from individual responses to the Census 2021 general health status question.

[Download the data](#)

We modelled the odds of reporting being in "not good health" for four separate age groups to reflect the different life stages of adult unpaid care after controlling for demographic and socioeconomic factors.

### **Figure 5: The odds ratio of unpaid carers reporting being in "not good health" compared with non-carers was highest in the 16 to 34 years age band**

**Odds ratio of being in "not good health" by age group and by provision of unpaid care compared with non-carers, England, 2021**

**Notes:**

1. Binary logistic regression after adjusting for demographic and socioeconomic characteristics.
2. People aged 16 to 94 years linked to an NHS number.
3. "Not good health" is derived from individual responses to the Census 2021 general health status question.

[Download the data](#)

At age 16 to 34 years, the odds ratios were 1.93 for those providing 1 to 19 hours of unpaid care per week and 1.98 for those providing 50 hours, compared with non-carers. This suggests that the relationship between providing unpaid care and being in "not good health" is stronger among younger adults.

## **5 . Perceived health impacts of unpaid care provision**

This section uses data from the Health Survey for England (HSE) in 2015, 2017 and 2019 combined.

Respondents who identified as unpaid carers (see [Section 9: Measuring the data](#)) were asked about the perceived health impacts of providing unpaid care. Almost half (48.6%) of unpaid carers reported at least one adverse health effect of providing care. Around one-third of unpaid carers reported feeling tired (32.6%) or experiencing general stress (30.1%), and nearly one-quarter reported disturbed sleep (23.8%).

### **Figure 6: Female unpaid carers were more likely than male unpaid carers to report adverse health effects of caring**

**Estimated percentage of male and female unpaid carers reporting adverse health effects of providing care, England, 2015, 2017 and 2019**

**Notes:**

1. Health Survey for England collects data from a sample of the population and so the data are weighted to be representative of adults living in private households in England.
2. Carers were asked about health effects related to providing care felt in the past three months.
3. Confidence intervals can be found in the [accompanying dataset](#).

[Download the data](#)

The percentage of unpaid carers reporting at least one health effect related to providing care was higher with increased unpaid care intensity. The highest percentage of adverse health effects were among carers providing 50 or more hours (82.6%) or 20 to 49 hours (75.4%) of unpaid care in the previous week, compared with those providing 1 to 19 hours (43.0%) or no hours of care (34.9%) in the previous week.

### **Figure 7: Unpaid carers providing 20 to 49, or 50 or more, hours of unpaid care in the last week were more likely to report adverse health effects than those providing fewer hours of care**

**Estimated percentage of unpaid carers reporting adverse health effects of providing care, by care intensity, England, 2015, 2017 and 2019**

#### **Notes:**

1. Health Survey for England collects data from a sample of the population and so the data are weighted to be representative of adults living in private households in England.
2. Carers were asked about health effects related to providing care felt in the past three months.
3. Some estimates in the data are suppressed when the number of respondents is fewer than 10 because of low reliability and to maintain confidentiality.
4. Confidence intervals can be found in the [accompanying dataset](#).

[Download the data](#)

Among unpaid carers who self-reported adverse health effects from caring, a higher proportion of females had visited their general practitioner (GP) for these health concerns (19.1%) compared with males (12.3%).

In 2019, the HSE asked respondents about their mental well-being using the [Warwick-Edinburgh Mental Wellbeing Scales](#). A higher proportion of unpaid carers (19.5%) had low mental well-being (see [Section 8: Glossary](#)) when compared with non-carers (14.8%) after adjusting for age differences.

## **6 . Accident and emergency attendances and hospital admissions**

This section uses data from Census 2021 linked to accident and emergency (A&E) services attendances and hospital admissions between 21 March 2021 and 31 March 2022.

The percentage of male and female unpaid carers having one or more A&E attendances was higher in those providing 20 to 49 hours, and 50 or more hours of unpaid care per week compared with unpaid carers providing 1 to 19 hours of unpaid care, and non-carers, after adjusting for age.

## Figure 8: One in four females providing 20 to 49, or 50 or more, hours of unpaid care had one or more attendances to A&E between 21 March 2021 and 31 March 2022

Estimated percentage of one or more accident and emergency (A&E) attendances during the study period for males and females by provision of unpaid care compared with non-carers, England, 2021

### Notes:

1. Estimated percentage has been adjusted for age.
2. People aged 16 to 94 years linked to an NHS number.
3. A&E attendance is measured on an individual basis, for one or more attendances to emergency services between 21 March 2021 and 31 March 2022.
4. Confidence intervals can be found in the [accompanying dataset](#).

[Download the data](#)

The odds (see [Section 8: Glossary](#)) of one or more A&E attendances during the study period for male and female populations were modelled using logistic regression after controlling for demographic and socioeconomic factors (see [Section 8: Glossary](#)). The odds of an A&E attendance were highest for male (1.08) and female (1.14) unpaid carers providing 20 to 49 hours of unpaid care per week when compared with non-carers.

A&E attendances are classified from most severe to least severe; the latter are referred to as “low-acuity”. The odds ratio of a low-acuity attendance for male unpaid carers was similar to male non-carers across all provisions. However, the odds were higher for females providing 20 to 49 hours (1.20) and 50 or more hours (1.16) of unpaid care per week when compared with female non-carers.

We are unable to determine the underlying reasons behind the association of unpaid care status with A&E attendance. However, the data could suggest that females providing higher intensity hours of unpaid care are using A&E services, particularly for low-acuity conditions, possibly because of poorer access to primary care services than female non-carers.

The odds of reporting one or more A&E attendances were modelled across four age groups to reflect the different life stages of adult unpaid carers after adjusting for demographic and socioeconomic factors.

The odds ratios of unpaid care status on A&E attendances were generally higher in age groups 16 to 34 years, and 35 to 54 years, when compared with non-carers of the same age. For example, the odds ratio of an unpaid carer providing 50 or more hours of unpaid care per week aged 16 to 34 years was higher (1.21) than at age 65 to 94 years (0.99) when compared with non-carers in the same age group.

## Figure 9: The odds ratio of A&E attendances for unpaid carers was generally higher among younger age groups

Odds ratio of one or more accident and emergency (A&E) attendances during the study period by age group and provision of unpaid care, compared with non-carers, England 2021

### Notes:

1. Binary logistic regression after adjusting for demographic and socioeconomic characteristics.
2. People aged 16 to 94 years linked to an NHS number.
3. A&E attendance is measured on an individual basis for one or more attendances to emergency services between 21 March 2021 and 31 March 2022.

[Download the data](#)

We modelled the odds of one or more admissions to hospital (see [Section 8: Glossary](#)) during the study period for males and females by unpaid care status. Hospital admissions include admissions to non-emergency services and outpatient services. The models were adjusted for demographic and socioeconomic factors.

In contrast to A&E attendance, the odds ratio of a hospital admission for female unpaid carers was less than for female non-carers (0.91), suggesting female unpaid carers were less likely than female non-carers to have a hospital admission. The odds of a hospital admission were lowest for females providing 1 to 19 hours of unpaid care per week compared with non-carers (odds ratio: 0.84).

### **Figure 10: Female unpaid carers had lower odds of a hospital admission compared with female non-carers**

**Odds ratio of one or more hospital admissions during the study period by males and females and provision of unpaid care compared with non-carers, England, 2021**

**Notes:**

1. Binary logistic regression after adjusting for demographic and socioeconomic characteristics.
2. People aged 16 to 94 years linked to an NHS number.
3. Hospital admission outcome is measured on an individual basis for one or more hospital admissions between 21 March 2021 and 31 March 2022.

[Download the data](#)

The odds of A&E attendance and hospital admissions were also modelled with the addition of self-reported health status, after adjusting for demographic and socioeconomic characteristics. Any remaining relationship between unpaid care status and A&E attendance or hospital admission may be the result of differences in healthcare-seeking behaviours between unpaid carers and non-carers, as well as other factors not accounted for in our models. The results are available in the [accompanying datasets](#).

## 7 . Unpaid care expectancy and health outcomes of unpaid carers data

### [Unpaid care expectancies, England](#)

Dataset | Released 18 April 2024

Average number of years people are expected to provide unpaid care beyond their current age between 2010 to 2012 and 2020 to 2022.

### [Health outcomes of unpaid carers using Census 2021, Hospital Episode Statistics \(HES\) and Emergency Care Data Sets \(ECDS\), England](#)

Dataset | Released 18 April 2024

Association between self-reported health status, hospital admissions and A&E department attendance with unpaid care status in England, using Census 2021 data, Hospital Episode Statistics and the Emergency Care Data Set. These are official statistics in development.

### [Health outcomes of unpaid carers using the Health Survey for England](#)

Dataset | Released 18 April 2024

Relationship between individual health outcomes and providing unpaid care, including self-perceived health effects of caring, antidepressant prescription, well-being measures and engagement with healthcare services.

## 8 . Glossary

### A&E attendances

In England, the [Emergency Care Data Set \(ECDS\)](#) is the national dataset for urgent and emergency care. The ECDS data include attendance to emergency care for the following services, referred to in the analysis as “A&E”:

- Type 1 – general emergency departments
- Type 2 – specialist emergency departments (for example, paediatric, ophthalmology)
- Type 3 – minor injury units
- Type 4 – walk-in centres

### Acuity

Acuity measures the severity of a person’s condition and the urgency with which they need to be seen and assessed. The acuity of a person’s condition can be ranked as either low-acuity emergency care, standard emergency care, urgent, very urgent and immediate emergency care. This ranking corresponds to the [acuity coding](#) used in the [Emergency Care Data Set \(ECDS\)](#).

### Age adjustment

Age-adjustment allows comparison between groups that may contain different proportions of people across ages.

## Census 2021

The census provides the most detailed picture of the entire population, with the same core questions asked to everybody across England and Wales.

On Census Day (21 March 2021), data were collected on general health and provision of unpaid care from the population of England and Wales. Data collected on health and unpaid care contribute to the funding, development and planning of health care and carers' services, and to helping reduce inequalities experienced by those with caring responsibilities.

## Demographic and socioeconomic status

Demographic and socioeconomic status were derived using Census 2021 data for the following characteristics: age, sex, ethnicity, legal partnership status, region, economic activity status, housing tenure and highest level of qualification.

The [English Index of Multiple Deprivation 2019 \(IMD\)](#), was used to derive deprivation decile for individuals in the study population, linked via output areas found in Census 2021.

## General health

The "not good health" outcome was derived from the general health question in the Census 2021: people were asked "How is your health in general?". The response options were:

- very good
- good
- fair
- bad
- very bad

This analysis has grouped responses containing "very good" and "good health" as "good health". The remaining responses include "fair", "bad", or "very bad" and were grouped together as "not good health".

## Unpaid care question

In Census 2021, people were asked, "Do you look after, or give any help or support to, anyone because they have long-term physical or mental health conditions or illnesses, or problems related to old age?". The response options were:

- no
- yes, 9 hours a week or less
- yes, 10 to 19 hours a week
- yes, 20 to 34 hours a week
- yes, 35 to 49 hours a week
- yes, 50 or more hours a week

This analysis has grouped responses containing "Yes, 9 hours a week or less" and "Yes, 10 to 19 hours a week" as "1 to 19 hours a week", and responses containing "Yes, 20 to 34 hours a week" and "Yes, 35 to 49 hours a week" as "20 to 49 hours a week".

## Health Survey for England

The Health Survey for England (HSE) is a survey managed by NHS Digital that monitors trends in the health, and health-related behaviours, of people in England. It is used to estimate the proportion of people in England who have health conditions, and the prevalence of risk factors and behaviours associated with certain health conditions.

## Hospital admission

In England, Hospital Episode Statistics (HES) are the national datasets for NHS hospital admissions including care delivered by treatment centres funded by the NHS. This analysis uses data from the Hospital Admitted Patient Care activity datasets, which contains “Finished Consultant Episodes”. Each episode relates to a period of care for a patient under a single consultant at a single hospital. Therefore, admitted patient care (APC) data count the number of episodes of care for admitted patients rather than the number of patients, which are referred to as “hospital admissions” in this analysis.

## Logistic regression

Logistic regression is a statistical modelling technique for quantifying the strength of association between the occurrence of an outcome, such as hospital admission, and a set of characteristics. The model can be used to understand the independent relationship between the outcome and a particular factor of interest, such as unpaid care status. This is while “adjusting” or “controlling” for other characteristics, which may be related to hospital admissions (such as age, sex and ethnicity), or both using hospital admissions and unpaid care status (such as health status).

## Mental wellbeing

Mental wellbeing was measured using the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS). This analysis grouped WEMWBS scores into two categories: “low mental wellbeing” (scores of 42 or below) and “average or high mental wellbeing” (scores of 43 or above). Further information about the WEMWBS, including scoring and interpretation, is available from the [University of Warwick Medical School webpage](#).

## Odds

Odds provide a measure of the likelihood of an outcome (for example, a hospital admission). Odds are calculated as the ratio of people who experienced an outcome (for example, people with a hospital admission between 2021 and 2022) to those who did not experience it (for example, people with no hospital admissions during this time).

## Odds ratio

Odds ratios quantify the strength of the association between an outcome (for example, hospital admission) and a factor of interest (for example, unpaid care status). Odds ratios compare the odds of experiencing an outcome for people in the presence of the factor of interest (for example, unpaid carers) with the same odds for people in the absence of the factor of interest (for example, non-carers).

Odds ratios equal to 1 indicate that providing unpaid care are not associated with a person’s odds of a hospital admission, relative to people in the reference category (for example, people who do not provide unpaid care). Odds ratios greater than 1 indicate that providing unpaid care is associated with higher odds of a hospital admission, relative to people in the reference category. Odds ratios less than 1 indicate that providing unpaid care is associated with a lower odds of hospital admission, relative to people in the reference category.

## Statistical significance

The [statistical significance](#) of differences noted within the release are based on non-overlapping [confidence intervals](#). This approach is not a formal null hypothesis test, and it means that some differences that are statistically significant may not be highlighted as such in the article.

## Unpaid care expectancy

Unpaid care expectancy is the average remaining years of life a person is expected to provide unpaid care. See [Section 9: Measuring the data](#) for more information on how it is calculated.

## 9 . Measuring the data

### Unpaid care expectancy

Unpaid care expectancy (UCE) estimates are calculated by combining the unpaid care data collected in Census 2021 (and the 2011 Census for 2010 to 2012 estimates), with death counts and mid-year population estimates. Death data are aggregated over a three-year period to ensure a large enough number of deaths for care expectancy analyses.

The UCE estimates are calculated using the [Sullivan Method \(PDF, 928KB\)](#), and the same core methodology as the health state life expectancy (HSLE). The UCE method combines census data on the proportion of people providing unpaid care with life expectancy, to calculate the average number of years lived providing unpaid care from a given age.

Respondents who provided any duration of care per week were classified as an unpaid carer for calculation of UCE. The estimates divide expected lifespan into time spent in two distinct states: providing unpaid care and not providing unpaid care. An abridged life table (five year age bands) method was used to account for the small numbers in some ages.

More quality and methodology information (QMI) is available in our [Health state life expectancies, UK QMI](#).

### Accident and emergency attendances and hospital admissions, Census 2021

The study population for the analysis of self-reported health status, accident and emergency (A&E) attendances, and hospital admissions was derived from [Census 2021](#). The population included usual residents in England aged 16 years to 95 years who could be linked to the 2019 Personal Demographics Service (PDS).

A stratified random sample of the target population was used and included 25% of male and female respondents who did not provide unpaid care in Census 2021, and 1% of male and female respondents identified as unpaid carers in Census 2021.

Self-reported health status was derived from Census 2021, and A&E attendance and hospital admissions were derived from the [Emergency Care Data Set \(ECDS\)](#) and [Hospital Episode Statistics \(HES\)](#), respectively.

A binary variable was derived based on one or more A&E attendances or hospital admissions between 21 March 2021 and 31 March 2022 (group of interest), and no A&E attendances or hospital admissions during the study period (reference category).

Hospital admission was based on one or more discharged admitted patient care (APC) admissions, as recorded in HES, excluding episode types two, three and four relating to pregnancy and childbirth. A&E attendance was based on one or more A&E attendances as recorded in ECDS.

Models were fitted using a logistic regression, with unpaid care status or care intensity as the exposure variable after adjusting for age. Models were also fitted with an interaction between sex and unpaid care status or provision. The models with and without interaction effect were compared using a Wald test.

The model that provided a statistically significant better fit was used to calculate marginal means to estimate the percentage (and 95% confidence intervals) of people with the outcome of interest, after adjusting for the weighted age distribution of unpaid carers. Age was included in the models in five-year age bands.

To estimate the differences in health outcomes by unpaid care status after adjusting for demographic and socioeconomic factors logistic regression were used. This enabled us to quantify differences in health outcomes by intensity of unpaid care, without reflecting differences in confounding factors between unpaid carers and non-carers. The models were stratified by sex and by age group.

Models were also run for A&E admissions and hospital admissions after adjusting for self-reported health status.

## Health outcomes of unpaid carers using the Health Survey for England

Unpaid carers were defined as respondents aged 16 years and over who confirmed provision of unpaid care in the previous month and provided compatible responses to questions regarding number of people cared for and hours of care provided.

Analysis of self-perceived health outcomes of unpaid carers combined multiple years (2015, 2017 and 2019) of data to boost the sample size of unpaid carers to 4,290.

Analysis comparing health and well-being outcomes and healthcare service use was based on a sample of 1,146 unpaid carers and 6,788 non-carers from the 2019 Health Survey for England (HSE), because of lack of comparability across survey years.

HSE complex survey design was accounted for when estimating standard errors. Survey weights were used to increase the representativeness of the sample to the population living in private households in England. Comparisons of health outcomes between unpaid carers and non-carers were also age-adjusted. More information about the HSE is available on the [NHS Digital website](#).

## 10 . Strengths and limitations

### Unpaid care expectancy

The figures represent a snapshot of the mortality and unpaid carer status of the entire specified area population in a given time period. They are not the number of years that a person in an area will actually expect to live as an unpaid carer or non-unpaid carer. This is because:

- mortality rates are susceptible to change in the future
- unpaid carer rates may change because of changes to the criteria for accessing social care
- the impacts of new health care treatments offset the impairing effects of health conditions
- unpaid care provision is intermittent for some carers; the census does not capture this, which limits the potential to calculate an estimate that reflects this changing nature
- migration into and out of a given area means people will live in a different area for part of their lives

### Health outcomes of unpaid carers using census-linked data

The analysis has used Census 2021 data, which provide whole-population coverage, to identify unpaid carers in England. Recent research suggests that sampling frames derived from other data sources are incomplete, as explained in the [Can you tell we care? article](#) on The Health Foundation's website.

By using Census 2021 data linked with Hospital Episodes Statistics (HES) and Emergency Care Department Statistics (ECDS), we have conducted large-scale observational analysis across a variety of outcome measures. The linked data can support estimation of health outcomes between non-carers and carers, as well as within the unpaid care population, while controlling for covariates of health and unpaid care using census data.

An important limitation of observational analysis is that we are unable to determine the cause of any associations we might find. Additionally, census data are captured every 10 years and cannot support longitudinal analysis or measurement of relationships of unpaid care and health over time.

### Health outcomes of unpaid carers using the Health Survey for England

The Health Survey for England (HSE) provides data about health concerns directly related to providing unpaid care. Sample size is a limitation of HSE and although the survey weights increase representativeness, this is not definitive. Some estimates are affected by low counts when disaggregating into multiple groups of interest, such as care intensity and sex.

## 11 . Related links

### [Unpaid care by age, sex and deprivation, England and Wales: Census 2021](#)

Article | Released 13 February 2023

The provision of unpaid care at country, regional and local authority level and analysis on deprivation with comparisons with Census 2001 and 2011.

### [Unpaid care and protected characteristics, England and Wales: Census 2021](#)

Article | Released 24 April 2023

The provision of unpaid care by protected characteristics across England and Wales, with comparisons with the 2011 Census.

### [The geographic divide in general health, disability and unpaid care: Census 2021](#)

Interactive article | Released 6 March 2023

Despite improvements, parts of the north of England and areas of Wales had some of the highest proportions of people who reported being in bad or very bad health, were disabled and limited a lot in their day-to-day activities, or spent 20 hours or more per week providing unpaid care. How does your area compare?

## 12 . Cite this statistical bulletin

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