RUNNING ON EMPTY
Technical appendix

This report draws on analysis of Understanding Society and interviews and workshops with unpaid carers across England, Scotland and Wales.

This research uses a mixed-methods design, combining nationally representative quantitative data with in-depth qualitative research. Using both methods allows us to understand the scale and distribution of fuel poverty among unpaid carers, and to explore lived experiences in greater depth.

About Understanding Society
Understanding Society is a national study of people across the UK and covers income, wellbeing, care and expenditure amongst other things[3]. Each wave of the study covers an 18-month period, with the most recent data covering interviews from January 2022 to May 2024. In this wave, over 35,000 people 16 years and older were interviewed and included in the main dataset.

The data set was chosen for its comprehensive coverage of topics relating to the research questions and its scale, allowing for cross-break analysis for key populations relating to care and fuel poverty.

Data notes

The data was weighted using weights included in the Understanding Society data set, and derived variables were created to account for fuel poverty, caring responsibilities and household size (single adult vs multi adult households). Weights were applied to correct for survey design and attrition and to ensure findings are representative of the UK population.

Analysis primarily used descriptive statistics and cross-breaks by caring status and household type, with subgroup analyses conducted only where base sizes were sufficient.

The fuel poverty measure was created using household-level fuel costs and income after household costs, that is, household income with rent or mortgage payments removed. Where income or fuel costs were missing this data is excluded from the analysis, similarly where income was reported as £0.

Unpaid care was based on the variables aidhh and aidxhh combined to identify care in and out of the home.

aidhh: Is there anyone living with you who is sick, disabled or elderly whom you look after or give special help to (for example, a sick, disabled or elderly relative, husband, wife or friend etc)?

aidxhh: Do you provide some regular service or help for any sick, disabled or elderly person not living with you?

It should be noted that completion of the survey requires recall of income and fuel outgoings and there may be some respondent error. Further, as all individuals in a household share the same fuel poverty status (as the measure is based on total household income and outgoings) it is assumed in the data that all household members share the responsibilities and impact of this status. This assumes all individuals contribute equally and in reality it may be the case that unpaid carers take on a disproportionate responsibility for outgoings in the household. Further, as care is self-reported it may be the case that this is under-reported too.

Base sizes

The below provides the unweighted base sizes for all figures included in the report. All base sizes are for 2022-2024 Understanding society (wave n) unless stated otherwise.

Figure	Population	Base size
1, 3	Unpaid carer in single adult household	661
1	Non-unpaid carer in single adult household	4521
1, 3	Unpaid carer in multi-adult household	3860
1	Non-unpaid carer in multi-adult household	17749
2	Unpaid carer caring in home in multi-adult household	1975
2	Unpaid carer caring only outside the home in multi-adult household	1885
3	Unpaid carer in single adult household, 2021-2023	476
3	Unpaid carer in mujlt-adult household, 2021-2023	2979
3	Unpaid carer in single adult household, 2020-2022	552
3	Unpaid carer in mujlt-adult household, 2020-2022	3278
3	Unpaid carer in single adult household, 2019-2021	578
3	Unpaid carer in mujlt-adult household, 2019-2021	3684
3	Unpaid carer in single adult household, 2018-2020	675
3	Unpaid carer in mujlt-adult household, 2018-2020	4137

Figure	Population	Base size
4, 7, 11	Unpaid carer in single adult household in fuel poverty	174
4, 11	Non-unpaid carer in single adult household in fuel poverty	1195
4, 7, 11	Unpaid carer in multi-adult household in fuel poverty	400
4, 11	Non-unpaid carer in multi-adult household in fuel poverty	1559
4	Unpaid carer in single adult household not in fuel poverty	487
4	Non-unpaid carer in single adult household not in fuel poverty	3326
4	Unpaid carer in multi-adult household not in fuel poverty	3460
4	Non-unpaid carer in multi-adult household not in fuel poverty	16190
5	Unpaid carer caring in the home in a multi-adult household and unable to work	315
5	Unpaid carer caring in the home in a multi-adult household and unable to work as much as would like	299
5	Unpaid carer caring in the home in a multi-adult household and caring doesn't affect work	755
6	Unpaid carer in single adult household in receipt of Universal Credit	115
6	Unpaid carer in multi-adult household in receipt of Universal Credit	300
6	Unpaid carer in multi-adult household in receipt of Carer's Allowance	370

Figure	Population	Base size
8	Unpaid carer in single adult household caring up to 35 hours a week	545
8	Unpaid carer in single adult household caring 35 hours a week or more	100
8	Unpaid carer in multi-adult household caring up to 35 hours a week	2893
8	Unpaid carer in multi-adult household caring 35 hours a week or more	853
9	Unpaid carer in multi-adult household aged 16-24 years old	188
9	Non- unpaid carer in multi-adult household aged 16-24 years old	2279
9	Unpaid carer in multi-adult household aged 25-64 years old	2595
9	Non- unpaid carer in multi-adult household aged 25-64 years old	11170
9	Unpaid carer in multi-adult household aged 65 years old or over	1076
9	Non- unpaid carer in multi-adult household aged 65 years old or over	4297
10	Unpaid carer in single adult household with child(ren)	110
10	Non-unpaid carer in single adult household with child(ren)	474
10	Unpaid carer in single adult household without child(ren)	551
10	Non-unpaid carer in single adult household without child(ren)	4047
10	Unpaid carer in multi-adult household with child(ren)	952
10	Non-unpaid carer in multi-adult household with child(ren)	5482
10	Unpaid carer in multi-adult household without child(ren)	2908
10	Non-unpaid carer in multi-adult household without child(ren)	12267

Figure	Population	Base size
12	Unpaid care with caring responsibilities in the home in multi-adult household in England	1568
12	Unpaid care with caring responsibilities outside the home only in multi-adult household in England	1448
12	Non-unpaid carer in multi-adult household in England	14185
12	Unpaid care with caring responsibilities in the home in multi-adult household in Scotland	152
12	Unpaid care with caring responsibilities outside the home only in multi-adult household in Scotland	196
12	Non-unpaid carer in multi-adult household in Scotland	1624
12	Unpaid care with caring responsibilities in the home in multi-adult household in Wales	131
12	Unpaid care with caring responsibilities outside the home only in multi-adult household in Wales	129
12	Non-unpaid carer in multi-adult household in Wales	1021

Qualitative research
In our qualitative research, we spoke to 30 unpaid carers and 8 carer support service staff (the majority of whom were also unpaid carers). We worked with local support services to reach these unpaid carers, and our interviews spanned England, Scotland and Wales. Given the number of interviews we conducted the qualitative findings should not be taken to be representative of unpaid care across the UK and are instead demonstrative of some of the lived experience and challenges faced.

This included:
- 1x focus group in Stockport, England with unpaid carers
- 1x focus group in Sutton, England with unpaid carers
- 1x focus group in Sutton, England with carer support staff (to test our findings so far)
- 12 interviews online with unpaid carers from Scotland and Wales

Given the use of support services to share information about this research, those we spoke to were all connected to a service in some way and may be more likely to know about the support available than others. It is also important to note that, due to the risk of alienation, participants were recruited based on their general sense of high fuel costs and financial pressure rather than a named fuel poverty criteria. All participants were experiencing high fuel costs and concerns relating to these.

Focus groups and interviews covered the same topic guide (adapted for the context) and spanned questions about unpaid carers' caring responsibilities, fuel usage (in relation to their care), financial concerns and what they would like to see change. These guides were developed by Care Full with input from the Carers Trust policy and research teams and from the Carers Trust Money Matters Lived Experience group.

Focus groups were hosted in local service venues, whilst interviews took place online or on the phone, depending on the interviewee's preference. In the age of AI and internet recruitment, three interviews were removed on suspicion of being falsified.

With consent, focus groups were recorded and notes taken from interview to allow for further analysis. A thematic analysis of these qualitative interviews and focus groups was carried out by the Care Full research team, drawing key themes across general experiences of pressures on fuel bills and additional concerns related to caring responsibilities.