TOO BIG TO BE WARM

Fuel poverty and under-occupation in private homes

A new report for the National Right Fuel Campaign
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Executive summary

Methods

This study examines the links between under-occupancy and fuel poverty in private sector housing by:

- Reviewing national data primarily from the English House Condition Survey 1996 (EHCS), and the English House Condition Survey 1996 Energy Report, along with other publications and research findings;
- A technical assessment of 6 example houses;
- In-depth interviews with housing professionals, advice and care agencies.
- A workshop with housing professionals, advice and care agencies, Government departments and fuel poverty organisations.

Incidence of fuel poverty in under-occupied homes in 1996

- Two million or 29% of fuel poor households[1] in England were under-occupying their homes by two or more bedrooms over the English House Condition Survey bedroom standard. Four and half million or 64.6% of fuel poor households were under-occupying by one bedroom or more over the standard. In both instances, this is a smaller proportion than for the population as a whole;
- Owner-occupiers who are under-occupying by one or more bedrooms over a bedroom standard account for 39.5% of all fuel poor households;
- Fuel poor under-occupying households are primarily single householders over 60, couples who are over 60 or single adults under 60;
- Fuel poverty is more strongly related to living in homes at standard levels of occupation and overcrowded homes than in under-occupied homes;

[1] Throughout this report the term 'fuel poor households' refers to those households who need to spend more than 10% of their disposable income (excluding housing costs) in order to be warm.

Technical assessment of six example houses

Six example house types, (three and four bedroom dwellings) were used to assess energy running costs and internal temperatures if under-occupied by a single person. One and half million under-occupy in homes with two bedrooms whereas nearly three million under-occupy in larger properties with three, four and five bedrooms. It is in large houses, where householders under-occupy by having two or more bedrooms in excess of the standard, that the problems are most likely to be severe and for this reason six larger properties were chosen for analysis.

The national data shows that 2.3 million fuel poor households under-occupied in three bedroom houses in England in 1996. For this reason the results for House 2, which has three bedrooms, deserve particular attention. This analysis used seven different combinations of insulation, heating patterns and airflow to show that:

- Providing better insulation results in a range of savings (across all six house types) of between £154 and £309 per annum over the baseline energy costs. The savings in the three bedroom house are calculated as £169. This involves expensive improvements such as wall insulation and double glazing. This would effectively remove the health risks of living in cold conditions.

- Part house heating alone (a commonly adopted strategy) results in average savings in the range of £53 and £148 per annum over the baseline energy costs and this costs nothing to implement. The savings in the three bedroom house are calculated as £53. This strategy does have a cost in low temperatures in unheated rooms and particularly unheated rooms at night. This could be a health risk and could lead to increased risk of condensation. Limiting internal airflow in addition to part house heating results in a small additional average saving of £21 per annum that would be low cost to implement and would result in an improvement in comfort.

- Additional measures to reduce internal airflow and internal insulation in better insulated houses produces very modest additional savings and would involve expensive and disruptive measures (i.e. insulating internal walls);

- A combination of measures (better insulation, limiting internal airflows and part house heating) does result in significant savings on energy costs, but in most cases this would still not be sufficient to take most single, low-income under-occupiers out of fuel poverty.

- Low temperatures in unused rooms in part heated under-occupied homes are likely to result in elevated relative humidity and hence at risk of condensation and mould. However this effect is partly counteracted in larger under-occupied homes because the larger volume of air should result in lower moisture concentrations.

Health impacts

This study provides evidence that suggests that under-occupancy, when it results in part house heating, could lead to health risks such as hypothermia and cold stress. There is also some indication that under-occupation might be linked to depression. Householder behaviour could significantly reduce these risks.

It is not clear whether there is a link between under-occupancy and respiratory illness resulting from living with damp and mould. On the one hand under-occupancy means that there is reduced moisture production and in large homes a large volume of air to carry that moisture which should reduce condensation problems. But on the other hand modelling demonstrates that there can be very low temperatures in fuel poor under-occupied homes that could greatly increase the risks of condensation.

Staying warm and staying put

The comments from our interviewees show clearly that:

- The insulation of only the parts of a dwelling that are being used is not a good use of resources and comments received back up our technical analysis which shows that the savings achieved are very small and the costs relatively large.

- Improving heating controls to enable background heating of unused rooms is worth consideration as this is likely to reduce the risk of damp and mould in these unused rooms. This option will only be effective if the use of the heating controls is well understood by the householder and where appropriate, ensuring that they are designed for easy manipulation by older people or people with disabilities. Whether householders will be prepared to pay for background heating for unused rooms is an unknown factor.

- Improved insulation to the whole property remains the best option. Having organised contractors to come to a property it is most economically efficient to have a complete job done. The main limitation on this option is cost and the adequacy of the current grant regime to meet these costs in larger dwellings. The technical analysis suggests that better insulation may be insufficient to take single under-occupiers in large properties out of fuel poverty, so additional measures would be needed.

- Raising sufficient funds to cover the cost of energy efficiency improvements and up-to-date heating systems and controls currently requires specialist advice, as there are multiple sources of possible funding. Some sources, such as the various equity release schemes, need careful consideration because of the longer-term commitments involved.

- Local authorities and Home Improvement Agencies have a key role in advising under-occupiers about their options for improving their homes and implementing improvements.

Moving on

- The need for affordable warmth is rarely sufficient reason on its own for an individual to move.

- If fuel poor owner-occupiers want to move to private sector housing, their choices are constrained by the equity they can realise, the very limited supply of energy efficient one and two bedroom dwellings, limited support and advice available, and increasing age and infirmity.

- Owner-occupiers who want to move into social housing may also face barriers of eligibility.

- Fuel poor under-occupiers in private rented accommodation who want to move are effectively limited to seeking housing from social landlords.

- Given that there are two million fuel poor households under-occupying by two or more bedrooms in England, there are insufficient smaller, affordable homes to make moving an option, even if the households wanted to.

Recommendations for the fuel poverty strategy

- Warm Front grants should be awarded on a sliding scale that is related to the size and state of repair of the property;

- Warm Front grants should cover the cost of draught proofing internal doors.

- Better integration of Warm Front grants with other funding sources (such as the Energy Efficiency Commitment) is needed to tackle fuel poverty in under-occupied homes;

- Central Government funding for Home Improvement Agencies should be increased so that there is coverage across the whole country;

- Home Improvement Agencies should be given the overall co-ordinating role for tackling fuel poverty and disrepair in private housing, working in partnership with local authorities and other agencies;

- In providing guidance to local authorities on the formulation of private sector housing strategies, the Government should require local authorities to put in place measures that will meet the target to eradicate fuel poverty by 2016 (consistent with the requirements of the Warm Homes and Energy Conservation Act 2000).

- Regional and local planning authorities should be placing a higher priority on the provision of smaller housing units in every community in regional planning guidance and local plans;

- Local planning authorities should use planning obligations to encourage developers to provide small affordable housing units;

- The Housing Corporation and local authorities should be providing encouragement to Registered Social Landlords (RSLs) to develop schemes that include smaller housing units (one and two bedrooms) for rent, shared-ownership and for sale;

- Local authorities and RSLs should ensure that their allocation policies allow low-income owner-occupiers to move into appropriate local social housing.

Two recommendations for action to tackle fuel poverty in under-occupied private sector households

Firstly, a programme, delivered prior to retirement, is suggested that would combine the following:

- Advice on staying put and moving on, including financial advice and assistance applying for grants;

- Production of an advice leaflet summarising the main points covered in face-to-face advice, that can be left with householder;

- A 'house health check' which would include damp proofing, roof repairs and a safety check on electrical wiring and fittings, gas appliances and systems (possibly funded through local authority grants);

- Energy efficiency improvements (funded by Warm Front, Energy Efficiency Commitment);

- Mobility and access improvements if appropriate (funded by Disability Facilities Grant);

- Organisation and supervision of any building works by an agency (Home Improvement Agency).

Secondly, it is recommended that planning advice is produced, with the aim of improving the provision of smaller homes in all communities in the long-term. The advice would be aimed at local authority planners and housing providers as part of the agenda for creating sustainable communities. A project to produce such advice might include:

- assessing current provision of smaller housing

- a survey of low-income 50-65 year olds to look at their attitudes to their future housing needs including the types and tenure of housing they would favour
- reviewing how this approach fits into the sustainable communities agenda
- setting out the benefits for the health and social services
- the market opportunities for private housing developers
- the planning response and use of planning obligations

Unanswered questions

- The research has identified a number of issues that need further investigation. A fundamental issue is the need to develop a more appropriate definition of under-occupation for housing policy makers.
- The different situations of under-occupiers in different age groups needs further study. In particular very little information was discovered about middle-aged under-occupiers. It also seems possible that very old (over 75 years) under-occupiers, who are increasing in number, will have special problems.
- The degree of under-occupancy associated with fuel poverty in the private rented sector has proved particularly hard to investigate and more work is needed.
- The general availability and affordability of small homes and retirement homes deserves further attention.

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Copies of the full report can be downloaded from www.cagconsultants.co.uk