Understanding the Characteristics of Low Income Households Most at Risk from Living in Cold Homes

Final Report to the Welsh Government: Executive Summary

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Understanding the Characteristics of Low Income Households
Most at Risk from Living in Cold Homes: Final Report to the Welsh
Government

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Views expressed in this report are those of the researcher and not necessarily those
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Introduction

1. The Welsh Government are currently considering the future of a national energy efficiency scheme that provides fully funded improvement measures to low income households. The key objective of this scheme will be to reach the low income households that are more vulnerable than others to living in a cold home, both in terms of their likelihood of living in a cold home and their susceptibility to the harmful effects of living in a cold home. Therefore, the Welsh Government wish to have a clear understanding of:

   • which low income households would gain a significant reduction in vulnerability through receiving home energy efficiency improvements;

   • the most effective options are for targeting these households; and

   • given different budget scenarios, which groups should be prioritised first.

2. As a result, the Welsh Government commissioned an independent piece of research to assist and inform decision making and the design of future energy efficiency schemes in Wales. The research broadly involved two key aspects:

   a. an **evidence assessment** of recent literature identifying the impacts of cold homes on different types of households and individuals, supported by the analysis of various national datasets; and

   b. **domestic energy efficiency policy modelling** performed on a modelled housing stock dataset for Wales using the National Household Model (NHM) and targeting the households identified in Paragraph a, above.

3. Welsh Government specified that, in order to tackle those most in need of energy efficiency improvements, any future scheme should focus on owner-occupied and privately rented dwellings and on dwellings with low energy efficiency ratings.

4. A 'relative' definition of low income was adopted, as it aligns with the current method of measuring poverty. This defines households as low income if their combined household income is below 60 per cent of the median income of all households before. This is the definition used for 'low income' throughout this Report.

Key findings from the evidence assessment

5. The evidence assessment found a strong consensus in the research literature that living in a cold home can have significant and lasting adverse impacts on the health, education and social aspects of peoples' lives. Numerous studies identify associations between certain characteristics of individuals or households, and being particularly vulnerable to the harmful effects of living in a cold home. In particular the following types of households are recognised as vulnerable:

   • Households including **older adults** (aged 65 years and over);

   • Households including **dependent children** (of all ages, but recognising that younger children aged less than five years are particularly vulnerable);

   • Households including at least one person with a disability or limiting long-term illness;

   • Households including individuals with a respiratory or circulatory disease; and

   • Households including individuals with a mental health condition.

6. In addition to being the most vulnerable to the effects of living in a cold home, the evidence suggests that these households also have an above average likelihood of living in a cold home, and are more likely to be on a low income.

7. The study considered various approaches for identifying and targeting eligible households. Such systems must take into account various considerations, including administrative cost, targeting efficiency, the available methods for reaching and engaging eligible people and the journey the recipient takes through the process, including the process of demonstrating eligibility.

8. Five options are considered, with particular consideration given to the ability of systems to reach those with certain health conditions. These options were as follows:
   - to identify households through data matching of housing and income data;
   - a self-qualification system with partial, retrospective verification;
   - a self-qualification system with full validation;
   - the use of third party referral organisations;
   - the creation of a bespoke means tested approach specifically for the scheme.

9. Whilst data matching would have significant advantages both practically and in cost terms and a proposal has been made to create a data matching arrangement to assist citizens living in fuel poverty in the UK, it is unlikely to be commissioned within the timescales for a new national energy efficiency scheme in Wales.

10. Self-qualification referral systems are part of some existing schemes targeting low income households and can theoretically reduce costs. One advantage of including an element of self-qualification is that both individuals who are eligible for but not in receipt of benefits and individuals with specific health conditions could receive measures, allowing the scheme to be as inclusive as possible. In practice, however, the Welsh Government will need assurance that the scheme is reaching the most vulnerable households and it is a requirement of the Welsh Government that an applicant's eligibility can be demonstrated.

11. Means tested benefits are recommended as a relatively simple way for eligible households to demonstrate that applicants qualify for the scheme, as the majority of benefit recipients will fall into the target group (Income below 60% median, with additional vulnerabilities). As a result of previous use of means tested benefits for predecessor schemes, well-tested systems have already been established which have proven successful in targeting vulnerable people and allowing them to effectively demonstrate their eligibility, as found in the recent Warm Homes Nest evaluation. The receipt of certain means tested benefits indicates that recipients have one of the proposed additional vulnerability markers. Requiring the receipt of one of these benefits would therefore help a future scheme to narrow the qualifying criteria to focus on vulnerable low income households rather than on all low income households.

12. The following benefits are recommended for the means tested aspect of demonstrating eligibility: Pension Credit; Child Tax Credit on a low income; income related Jobseekers Allowance and in receipt of Child Benefit; income related Employment Support Allowance (ESA); Income support; and Universal Credit. In combination, these enable identification of households with most of the identified markers of vulnerability.

13. However, some households receiving the qualifying means tested benefits will either have incomes above the low income threshold or will not have an additional vulnerability marker. Taking into account only owner occupied and privately rented households and housing with an energy efficient rating below the recommended threshold, the modelling results suggest that between 19 and 25 per cent of the households eligible for the scheme would fall into one of these two groups (see Table A, below). This 'leakage effect' is a reality of any such targeting scheme but compared with other schemes across the UK, this leakage rate compares favourably.

14. A pre-approved third party referral system would involve agencies that are already working with vulnerable households referring those households they knew were most likely to fit the eligibility criteria for the scheme. This would rely on the expert knowledge of local authorities, health workers, charities and other outreach professionals to recommend people to a scheme based on their knowledge of their client base. A key advantage of this system is that referral agencies will already have gathered evidence relating to some of the issues that would make people eligible, in many cases removing the requirement for additional evidence to be provided. It is recommended that this system, or a version of it, is explored and used in the targeting of a future energy efficiency scheme. The agencies approved to administer the referral process should also be provided with materials to help them to raise awareness of the scheme among vulnerable households.

Table A Estimated number of households eligible under proposed eligibility criteria by household type

Household type	Dwellings in SAP bands E, F or G (SAP < 54)		Dwellings in SAP bands D, E, F or G (SAP < 68)	
	Number eligible for scheme	Proportion of all eligible hhlds	Number eligible for scheme	Proportion of all eligible hhlds
Income above 60% median *(qualifying through being on means tested benefits)*	12,934	19%	16,245	15%
Income below 60% median, but no additional vulnerabilities *(qualifying through being on means tested benefits)*	4,128	6%	4,568	4%
Income below 60% median, with disabled or long term sick person	7,461	11%	10,259	9%
Income below 60% median, with person over 65 years	9,952	15%	12,661	11%
Income below 60% median, with people over 65 years and disabled or long term sick	15,539	23%	33,339	30%
Income below 60% median, with dependent children	7,398	11%	19,239	17%
Income below 60% median, with dependent children and disabled or long term sick household member (child or adult)	10,726	16%	15,447	14%
All qualifying households	**68,139**	**100%**	**111,758**	**100%**

Source: Modelled Wales Housing Stock constructed for the NHM by CSE using the EHS 2012 and the LiW Survey 2008.

Findings from the modelling exercise

15. The NHM was used to model a future energy efficiency scheme by targeting improvement measures at eligible households in a modelled Wales housing stock database created using data from the English Housing Survey (EHS) 2012 and the Living in Wales (LiW) 2008 survey. The model identified the combination of measures that would result in the greatest energy cost reduction for a household, ensuring that the cost of improvements for each dwelling did not exceed the spending cap. The research explored the use of four different annual budgets (£10m, £25m, £50m and £100m) for a five year scheme, adjusting the eligibility criteria to include a larger pool of households for higher budgets. Table B summarises the eligibility criteria used in each modelled annual budget scenario.

Table B Eligibility criteria by annual budget scenario

Annual budget	Household characteristics	SAP rating
£10 m	Households including people aged over 75 years or less than 5 years AND in receipt of a qualifying means tested benefit	E,F or G
£25 m	Households with members who are over 75 or under 5 AND in receipt of a qualifying means tested benefit**Error! Reference source not found.**; **OR** Low income households which include people with a respiratory or circulatory disease	E,F or G
£50 m	Households which include people who are in receipt of a qualifying means tested benefit **OR** Low income households which include people with a respiratory or circulatory disease	E,F or G
£100 m	Households which include people who are in receipt of a qualifying means tested benefit **OR** Low income households which include people with a respiratory or circulatory disease	D, E, F or G

16. The analysis shows that with an annual budget of £10 million over five years, approximately 21,400 dwellings receive improvements, 19,600 of which were inhabited by low income, vulnerable households. In total, 12 per cent of low income vulnerable households received a measure in the £10 million scenario. Increasing the annual budget and widening the eligibility criteria allowed more low income vulnerable households to receive improvements so that for the £100 million scenario, approximately 110,700 dwellings were improved, with 54 per cent of the target group receiving measures.

17. Average bill reductions for those benefiting from the scheme range from £279 to £371, depending on the scenario. For the £100 million scenario, the average bill reduction was lower because in general D rated dwellings have less opportunity for improvement than those rated E or below.

18. Spending £10 million a year more than halved the number of F and G rated dwellings in the eligible group and improved 9,800 homes to a D rating. Increasing spending to £50 million per year removed over 15,700 properties from the F and G bands. The £100 million scenario, where those in SAP band D were eligible, resulted in more significant SAP improvements with only 6 per cent of properties remaining in bands F and G and 76 per cent of properties improved to band D or above after five years.

Table C: Headline results from modelling the budget scenarios

Annual Budget	Estimated size of eligible group	No. of households receiving measures	Average annual bill reduction	Average cost per dwelling
£10m	23,457	21,407	£319	£2,335
£25m	49,696	36,725	£354	£3,403
£50m	68,139	63,189	£371	£3,950
£100m	111,758	110,674	£279	£3,010

Key Recommendations

Definition of low income for use in targeting

19. Low income households should be defined as those with a relative low income i.e. an income of below 60% of the median income in Wales before housing costs.

Markers of vulnerability for use in targeting

20. Low income households with additional markers of vulnerability should be the target group for a future energy efficiency scheme. Markers of vulnerability should include: (older adults (aged over 65 years), children (particularly children aged less than 5 years), disabled people and people with limiting long-term health conditions, people with respiratory or circulatory diseases and people with mental health conditions.

Demonstrating eligibility

21. It is recommended that the Welsh Government consider a combination of options that together represent an advance on current practice:

    a. where possible, using the receipt of means tested benefits to build on existing established systems to allow households to demonstrate their eligibility for the scheme – in doing so, the Welsh Government should accept that a 'leakage rate' of around 30% will result, allowing some households to receive measures when they either have incomes above the low income threshold or have incomes below the income threshold but no additional vulnerability marker;

    b. using some element of self-qualification involving the referral to the scheme by a third party for households where eligibility is complex to evidence; and

    c. using a pre-approved third party referral system that allows those with relative low incomes and certain health conditions but who are not receiving means tested benefits to be included.

Future scheme design

22. The level of total funding available should be used to guide the eligibility criteria, ensuring that the most vulnerable are prioritised first.

23. If larger amounts of funding are available (£100 million annually), the eligibility criteria should be widened to include D rated properties.

24. Spending caps should be implemented for improvement works in each dwelling to help ensure that cost effective measures are prioritised, but also so that a greater level of

resource is focused on improving the coldest or most inefficient homes occupied by low income vulnerable households.