Cold Enough

Excess Winter Deaths, Winter Fuel Payments and the UK’s problem with the cold

James Lloyd

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Winter deaths and the cost of cold

‘Excess winter deaths’ refers to the increase in the death rate across the population that occurs each winter.

The number of excess winter deaths in England and Wales during 2011-12 was around 24,000. Most of these deaths occurred among those aged 75 and over. Around 20,000 of these deaths were linked to respiratory diseases, circulatory diseases, dementia and Alzheimer’s disease.

Preventable winter deaths are not just experienced by those in fuel poverty, and evidence on the link between excess winter deaths and socio-economic characteristics is inconclusive. This may be because the poorest pensioners usually live in social housing, which tends to be better insulated.

In addition to excess winter deaths, cold-related illness among the population may require a spell in hospital or other medical treatment. As a result, the cost of cold homes to the NHS in England is estimated to be around £1.36 billion per year, according to the charity Age UK.

Evaluating Winter Fuel Payments and other policy responses

Multiple government departments have implemented policies relating to these issues:

- Department for Work & Pensions (DWP);
- Department of Health (DH);
- Department for Communities and Local Government (DCLG);
- Department of Energy & Climate Change (DECC).

The policies deployed can be roughly categorised as focusing on the:

- **Cost of heating**
  - Winter Fuel Payments (DWP);
  - Cold Weather Payments (DWP);
  - Warmer Homes Discount (DWP);
- **Cold weather responses**
  - The Cold Weather Plan (DH);
- **General public health interventions**
  - Seasonal flu vaccination programme (DH);
  - Public Health Outcomes Framework (DH, DCLG);
- **Home insulation**
  - The Green Deal (DECC);
  - Energy Company Obligation (DECC);
  - Code for Sustainable Homes (DCLG);
  - Warm Front Programme (DECC);
  - Home Energy Conservation Act (DECC);
- **Generalised attempts to address the effects of the cold**
  - Warm Homes, Healthy People funds (DH).

In many respects, public policy has made admirable progress:

- The **Cold Weather Plan** has provided a framework for all stakeholders in health and social care delivery to plan their cold-related interventions, and respond to weather warnings from the Met Office;
The Winter Fuel Payment succeeds in directly increasing household expenditure on fuel in the age group most at risk of cold-related illness and excess winter deaths; The Warm Home Discount Scheme represents a bold attempt to tie private sector companies into delivering social policy goals around fuel poverty.

However, the UK’s policy response to excess winter deaths and the effects of the cold is nevertheless characterised by:

- A fragmented, uncoordinated approach across different government departments;
- The domination of the issue of ‘fuel poverty’ over the health effects of the cold, and an over-reliance on incomplete government means testing data; and,
- The clear need to do better.

**Conclusion**

In improving its policy response, the government needs to look at who the target groups for policy intervention are, and how policy measures can reach these target groups.

Multiple new policy interventions could be deployed, variously focused on behaviour change, cold weather responses, the cost of heating and home insulation.

After carefully considering the options, the recommendations of this report are:

- **Make Winter Fuel Payments liable for income tax.** This will enable HM Treasury to recoup some expenditure on Winter Fuel Payments from the 15% of pensioners that pay income tax, while nevertheless retaining the positive behavioural effects it has on fuel expenditure.
- **Raise the age-threshold of Winter Fuel Payments to 70.** This will trim expenditure on the Winter Fuel Payment, while minimising the negative public health consequences.
- **Introduce an annual public health campaign linked to the Winter Fuel Payment to further influence cold-related behaviour.** The government could do far more to extract positive behavioural responses from receipt of the Winter Fuel Payment by explicitly linking it to an annual public health and awareness campaign.
- **Formally reclassify Winter Fuel Payments as part of the State Pension for public accounting purposes.**
- **Consider renaming Winter Fuel Payments as ‘Winter Warmth Payments’.**
- **Create a single national ‘at-risk’ register for the cold.** The proliferation of different targeting regimes under clinical commissioning groups (CCGs), Health and Wellbeing Boards, DWP, DECC and DH should be consolidated into a single national database coordinated by Public Health England, containing at-risk individuals referred from DWP, energy companies, clinical commissioning groups and local authorities.
- **Build a national, differentiated risk register into the Cold Weather Plan.** The Cold Weather Plan should in future specify different activities and interventions for households identified as being at High, Medium or Low risk on the national register.

- **Local performance measurement for excess winter deaths.** Public Health England should monitor and publish data on how many individuals on the ‘at-risk’ register die each year, broken down by local authority area.

- **Build on the Cold Weather Plan by integrating it more closely with the work of CCGs and Health and Wellbeing Boards.**

- **Give CCGs responsibilities for excess winter deaths.**

- **Enable CCGs and Health and Wellbeing Boards to refer households for free home insulation under the Energy Company Obligation (ECO).**

- **CCGs and Health and Wellbeing Boards should pilot more telecare remote monitoring of indoor temperature.** Although telecare has traditionally been the domain of local authorities, CCGs and Health and Wellbeing Boards should pilot the use of remote monitoring of indoor temperatures for at-risk individuals with long-term conditions.

- **Free energy for High-risk households at Level 2 and above Cold Weather Alerts.** Those individuals identified as being at High risk on the national at-risk register should be automatically entitled to free energy – and informed of this – when the Met Office triggers a Level 2 or above Cold Weather Alert.

- **Make excess winter deaths and cold-related illness a Ministerial priority.** Appoint a cross-departmental working group to focus on the issue, and appoint a Ministerial lead within the Cabinet.
1. Introduction

The UK has a problem with the cold.

Each year, thousands of people die preventable deaths because of the cold weather.

This problem has long been known about, but no government has ever developed an adequate response. Indeed, aside from annual official statistics detailing ‘excess winter death’ estimates, the issue is given negligible consideration by politicians or the public, despite touching upon thousands of families.

However, not all affected by the cold go on to experience a preventable death. Instead, some experience preventable ill health and rely on medical treatment. But such treatment comes at a cost: the most recent estimate of the cost of cold homes in England to the NHS is £1.36 billion each year. This is equivalent to around 1.5% of all public spending on the NHS in the UK.

The underlying issues causing these problems have been known about for years, and are reflected in a diverse, but ultimately fragmented and inadequate suite of policy interventions.

Cold Enough: Excess winter deaths, Winter Fuel Payments and the UK’s problem with the cold

Given intense demographic and fiscal pressures on the NHS, and the needless human tragedy represented by excess winter mortality, it is time for the UK to face up to these issues once and for all.

This discussion paper therefore explores these problems and sets out what the government should do.

Chapter 2 reviews the evidence on excess winter deaths and cold-related illness, and what outcomes the government should be aiming to achieve.

Chapter 3 explores the diverse and changing suite of related policy responses by multiple different government departments. The report focuses in particular on by far the largest item of related public spending: Winter Fuel Payments.

Chapter 4 then identifies and evaluates a broad range of potential policy innovations, looking in particular at joining up interventions across benefits, health and energy emissions policy.

Chapter 5 concludes the report with key recommendations for policymakers.
2. Where are we now? Winter deaths and the cost of the cold

What are excess winter deaths?

‘Excess winter deaths’ refers to the increase in the death rate across the population that occurs each winter.

In the UK, it is the Office for National Statistics (ONS) that is responsible for setting the official definition of ‘excess winter mortality’ (EWM). The ONS standard method defines the winter period as December to March, and compares the number of deaths that occur in a given winter period with the average number of deaths in the preceding August to November and the following April to July. As such, EWM equals the number of ‘winter’ deaths in the period November to March, minus the average in the preceding and following periods.¹

How many excess winter deaths occur each year?

According to the ONS, the number of excess winter deaths in England and Wales during 2011-12 in was around 24,000.² Unusually, deaths peaked in February 2012, whereas normally the highest mortality is seen in January.

The number of excess winter deaths fluctuates year to year, not least because of changing weather conditions and the type and nature of viruses circulating in the population. For example, in 2010-11, there were 26,080 excess winter deaths in England and Wales, and in 2008-09 there were 36,450.

The ONS provides data on excess winter deaths stretching back to 1951. Despite fluctuations year on year, the overall trend is positive. In the 1950s, there were on average 59,000 excess winter deaths each year, while the equivalent figure for the 1980s was 37,250.

Using ONS data, it is also possible to calculate excess winter deaths within specific periods. For example, under the 1997-2010 Labour governments, there were around 385,270 excess winter deaths. Under the Coalition Government elected in 2010, there have been 50,080 excess winter deaths (excluding the 2012-13 winter).

On the basis of all available ONS data, it is possible to calculate that between 1950-51 and 2011-12, there have been around 2,663,390 excess winter deaths in the UK.

Which groups are most likely experience winter deaths?

According to the ONS, in 2011-12, there were 10,700 excess winter deaths in males and 13,300 excess winter deaths in females. The majority of these deaths occurred among those aged 75 and over in both sexes, with females aged 85 and over experiencing the greatest number of excess winter deaths. A higher proportion of the female population are aged 75 and over (9.2% compared with 6.4% of males in 2011), and the ONS has suggested this may wholly, or partially, explain the higher number of excess winter deaths in women.
Why do people die of the cold?

Although hypothermia – in which the body’s core temperature drops below the required temperature for normal metabolism and bodily functions – can be a cause of death, the role of cold weather in causing excess winter deaths usually relates to a person being cold as a ‘risk factor’ in relation to other conditions. As such, a large proportion of excess winter deaths are attributable to respiratory problems or cardiovascular diseases, not least because being cold can lower a person’s heart rate and increase blood pressure. In effect, an episode of ‘cold weather’ can be the tipping point that results in individuals with certain conditions who are vulnerable to the effects of cold dying or requiring hospital treatment.

Detailed data from the ONS on cause of death is available for the winter of 2010-11. In this year, the number of excess winter deaths by age group in England and Wales were as follows:

<table>
<thead>
<tr>
<th>Age range</th>
<th>No. of deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-64</td>
<td>3,630</td>
</tr>
<tr>
<td>65-74</td>
<td>3,050</td>
</tr>
<tr>
<td>75-84</td>
<td>7,350</td>
</tr>
<tr>
<td>85+</td>
<td>12,040</td>
</tr>
<tr>
<td>All ages</td>
<td>26,080</td>
</tr>
</tbody>
</table>

Among these 26,080 deaths, the ONS has provided estimates of cause of death as follows:

<table>
<thead>
<tr>
<th>Cause of death</th>
<th>No. of deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory diseases</td>
<td>10,110</td>
</tr>
<tr>
<td>Circulatory diseases</td>
<td>6,850</td>
</tr>
<tr>
<td>Dementia and Alzheimer’s disease</td>
<td>4,110</td>
</tr>
<tr>
<td>Injury and poisoning</td>
<td>500</td>
</tr>
</tbody>
</table>

Are excess winter deaths found in other countries?

Yes. However, it has long been noted that excess winter mortality varies across different countries. A detailed, widely cited study by Healy (2003) compared winter death rates among 14 countries and found the highest incidence among Portugal, Ireland and Spain. Finland – one of the cold countries compared – was found to have among lowest rate of excess winter mortality.

Variations in excess winter mortality across different countries suggest several conclusions. First, since the coldest countries do not have the highest rates of excess winter mortality, this suggests that it is the way in which societies respond to cold weather that affects winter mortality, rather than cold weather alone.

Second, excess winter mortality is preventable.

Are excess winter deaths only experienced by those in ‘fuel poverty’?

No. First, excess winter deaths can arise from exposure to cold outside the home, as well as within it.

Second, even individuals who can afford to heat their home adequately and are not in...
‘fuel poverty’ may not in fact do so because they are afraid of the cost, or because of other reasons. This is why the problems of excess winter deaths and cold-related costs to the NHS are distinct to the policy challenge represented by fuel poverty, which relates to incomes, the cost of energy and home insulation. It is also why excess winter deaths and the cost of cold-related illnesses can be categorised as relating to behavioural issues among households – literally, how households respond to the cold - rather than being solely about household income and the cost of energy.

Indeed, it is important to highlight the role of behaviour, informed by knowledge and attitudes, in shaping cold-related behaviour, quite independently of issues of fuel poverty. For example, qualitative research with focus groups of older people in the UK found that the association between cold weather and the increased risk of having a heart attack or stroke was not common knowledge among older people and carers. Interestingly, the researchers also found trial participants highly resistant to the idea of keeping their windows closed, which the researchers attribute to:

“a legacy of a pre-central heating culture when pulmonary tuberculosis was still dominant in the public consciousness, and ‘fresh air’ was considered salutogenic (by both the public and health-care providers), and leaving windows open in unheated bedrooms would have made less of a difference to the resulting room temperature.

Gascoigne C et al. (2010)

**Are poorer people more likely to die of the cold?**

Academic research across different countries is inconclusive as to the relationship between winter mortality and socio-economic characteristics. For example, a 2000 study using English data found excess winter mortality is not associated with socio-economic deprivation. However, a 2003 cross-country study did highlight a positive correlation with socio-economic status and excess winter mortality.

Overall, it appears that a complex set of socio-economic risk factors, rather than simply income, may be associated with excess winter mortality. Indeed, as the Marmot Review Team note, in the UK most low-income older households live in social housing, which can often be better insulated and more energy efficient because of the responsibility of local authorities in its maintenance.

To put the role of socio-economic characteristics in context, it is interesting to note that a 2001 study of over 80,000 deaths from cardio-vascular disease in England between 1986 and 1991 by postcode, which found that:

- Overall, deaths from cardiovascular disease were 22.9% higher in the winter months (December to March) than in other months of the year;
- The percentage of winter excess varied little by region or socioeconomic group, but rose steeply with age;
Statistically significant excesses of winter death were seen with age of the property (28.2% winter excess in properties built before 1850 compared to 15.0% in properties built after 1980) and with poorer thermal efficiency ratings.

A strong association was also seen with lower indoor temperatures: the coldest homes had a risk around 20% greater than that of the warmest homes.

**Does cold weather result in greater prevalence of illness and use of health services?**

Yes, individuals experiencing illness brought on or exacerbated by cold weather may use GP or hospital services paid for by the NHS. In its 2012 Cold Weather Plan, the government notes:

> “The impact of cold weather on health is predictable and mostly preventable. Direct effects of winter weather include an increase in incidence of: heart attack; stroke; respiratory disease; flu; falls and injuries; hypothermia. Indirect effects of cold include mental health illnesses such as depression, and carbon monoxide poisoning from poorly maintained or poorly ventilated boilers, cooking and heating appliances and heating.”


The ‘at-risk’ groups identified by DH in its Cold Weather Plan include those who are:

- Over 75 years old;
- Otherwise ‘frail’ older people;
- Have pre-existing chronic medical conditions such as heart disease, stroke or transient ischaemic attack (TIA), asthma, chronic obstructive pulmonary disease (COPD) or diabetes;
- Mental ill-health that reduces individual’s ability to self-care;
- Dementia;
- Assessed as being at risk of, or has had, recurrent falls;
- Housebound or otherwise low mobility;
- Living in deprived circumstances;
- Living in houses with mould;
- Fuel-poor (needing to spend 10% or more of household income on heating the home);
- Older people who live alone and do not have additional social services support.

**What is the cost of cold weather to the NHS?**

In its 2009 Cold Weather Plan, the Department of Health states that the annual cost of cold private homes to the NHS is over £850 million. However, this figure was calculated using relatively old data on households from the 2001 Census and other sources. In 2012, Age UK re-estimated this figure using more up-to-date data and adjusting for inflation, and on this basis calculated that the annual cost to the NHS of cold homes in England is £1.36 billion. To explain this figure, it is worthwhile highlighting that the cost of an older person staying in hospital for one week is estimated to be £1,750–£2,100.8
What is the cost of cold weather to local authority social services?

Cold-related illnesses may see individuals requiring additional care and support from local authority social services, particularly following a spell in hospital resulting from the cold weather. However, no research has been published regarding the extra cost of cold weather and cold-related illnesses to council social services.

What is the government trying to achieve in relation to excess winter deaths?

In its 2010 White Paper on public health – Healthy Lives, Healthy People - the Coalition Government noted:

“We could prevent many of the yearly excess winter deaths – 35,000 in 2008/09 - through warmer housing, and prevent further deaths through full take-up of seasonal flu vaccinations.”

The government also noted:

“Neighbourhoods and houses can be better designed to support people’s health, such as by creating Lifetime Homes, and by maintaining benefits such as the winter fuel allowance and free bus travel, which keep people active and reduce isolation.”

Department of Health (2010) Healthy Lives, Healthy People

The government has also included excess winter deaths in its Public Health Outcomes Framework. However, the government has not set out specific targets in relation to:

- Reducing the prevalence of excess winter deaths;
- Reducing the prevalence of cold-related illness;
- Reducing the cost of cold-related illness to the NHS and social services.

As such, despite around 25,000 preventable winter deaths occurring each year, the issue of excess winter deaths did not feature in either the 2010 Coalition Agreement or the 2013 ‘Mid-term Review’.

Why do excess winter deaths not receive more attention from politicians and the public?

More people die each year in the UK from the cold weather than die from traffic accidents: around 24,000 vs. 2,600. However, the issue of excess winter deaths is not generally well known among the public and has little political salience.

One explanation for this may be that besides news coverage of the ONS estimates of excess deaths each winter, the issue has no other news ‘hook’ during the calendar year.

What should be the government’s objectives in relation to excess winter deaths?

As described above, the prevalence of excess winter mortality is linked to how a society responds to cold weather. Indeed, an oft-noted anomaly is that the prevalence of excess winter deaths is higher in some
Mediterranean countries than among colder Scandinavian countries.

As such, excess winter deaths are preventable and realistic policy objectives for the UK government would include:

- In the short-to-medium term: reduce rates of excess winter deaths to the lowest levels found overseas;
- In the long-term: eliminate excess winter mortality in the UK.

**What should be the government’s objectives in relation to the cost of cold to the NHS?**

The government’s objective should be nothing less than to eliminate the £1.36 billion annual cost of cold-related illnesses to the NHS in England.

**Which other government policy objectives overlap or relate to these issues?**

To understand government policy objectives around excess winter deaths and cold-related illness, it is important to situate them in the context of policy objectives that are overlapping in terms of the outcomes to be achieved and the means to achieve them.

Several relevant policy objectives can be identified:

- Energy efficiency – improving the efficiency of energy use, whether through home insulation or more people switching off lights to consume less electricity;
- Emissions targets – reducing the UK’s greenhouse gas emissions through changing the mix of energy sources in the UK toward renewable energy sources (e.g. wind-power over coal), and consuming less energy overall.

The opportunities and tensions arising from these overlapping policy objectives are explored more in the next chapter.

**Key points:**

- The number of excess winter deaths in England and Wales last year was around 24,000, mostly among the over-75s, and many linked to respiratory and circulatory diseases.
- Winter deaths are not just experienced by those in fuel poverty, and evidence on the link between excess winter deaths and socio-economic characteristics is inconclusive. This may be because the poorest pensioners usually live in social housing, which tends to be better insulated.
- The cost of cold homes to the NHS in England is estimated to be around £1.36 billion per year.
3. Adequate and Effective? Evaluating Winter Fuel Payments and other policy responses

How have governments tried to tackle the problem of excess winter deaths and cold-related illness?

A notable feature of the way in which successive governments have treated these challenges is the different ways in which the issues have been framed, including as:

- An income poverty problem – “people don’t have enough money to stay warm”;
- A fuel poverty problem – “poor home insulation and rising energy costs push people into poverty or cause them to ‘under-consume’ heating”;
- A home insulation problem – “people get cold because of poor quality housing”;
- A public health problem – “people don’t know how to stay healthy or warm in cold weather”; 
- A behavioural problem – “people get cold because they are irrational and are afraid to turn the heating on, don’t wrap themselves up and display other poor behavioural responses to the costs”;
- An energy market competition problem – “there isn’t enough competition in the energy market to ensure affordable heating for households”;
- A consumer behaviour problem – “people don’t shop around for the cheapest energy tariffs so end up getting cold because they can’t afford to keep warm”.

In truth, all of these ‘frames’ for the problem of excess winter deaths and cold-related illnesses contain some truth. There is no one causal pathway that results in excess winter deaths.

Which specific government policies and government departments seek to address excess winter deaths, cold-related illnesses and the cost to the NHS?

A striking feature of the government’s response to excess winter deaths and the effects of the cold on public health is the broad range of policies deployed. Multiple government departments have had lead responsibility for these policies, including:

- Department for Work & Pensions (DWP);
- Department of Health (DH);
- Department for Communities and Local Government (DCLG);
- Department of Energy & Climate Change (DECC).

The policies deployed can be roughly categorised as focused on:

- Cost of heating
  - Winter Fuel Payments (DWP);
  - Cold Weather Payments (DWP);
  - Warm Homes Discount (DWP);
- Cold weather responses
  - The Cold Weather Plan (DH);
- General public health interventions
  - Seasonal flu vaccination programme (DH);
  - Public Health Outcomes Framework (DH, DCLG);
- Home insulation
  - The Green Deal (DECC);
  - Energy Company Obligation (DECC);
  - Code for Sustainable Homes (DCLG);
  - Warm Front Programme (DECC);
- Home Energy Conservation Act (DECC);
- Generalised attempts to address the effects of the cold:
  - Warm Homes, Healthy People funds (DH).

The rest of this chapter reviews and evaluates these different policies. Given that public spending on Winter Fuel Payments far outstrips public spending on the other policies listed, the chapter begins with – and provides particular detail on – Winter Fuel Payments.

**What are Winter Fuel Payments?**

The Winter Fuel Payment is a non-means tested, tax-free cash payment worth between £100-£300 depending on a person’s circumstances. The stated purpose of the Winter Fuel Payment is: to “help pay your heating bills”. Most payments are made automatically between November and December,14 - i.e. deliberately before the coldest point in the year. Winter Fuel Payments are paid automatically to anyone born on or before 5 July 1951 in receipt of the State Pension or another social security benefit (not Housing Benefit, Council Tax Benefit or Child Benefit).

**How much is the Winter Fuel Payment worth?**

The value of the Winter Fuel Payment depends on a person’s age, whether they receive any means tested benefits and whether they live with someone else who also qualifies for it:

<table>
<thead>
<tr>
<th>Circumstance</th>
<th>Born on or before 5 July 1951</th>
<th>Aged 80 or over in the qualifying week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualify and live alone (or none of the people you live with qualify)</td>
<td>£200</td>
<td>£300</td>
</tr>
<tr>
<td>Qualify and get one of the benefits listed**</td>
<td>£200</td>
<td>£300</td>
</tr>
<tr>
<td>Live with someone under 80 who also qualifies</td>
<td>£100</td>
<td>£200</td>
</tr>
<tr>
<td>Live with someone 80 or over who also qualifies</td>
<td>£100</td>
<td>£150</td>
</tr>
<tr>
<td>Qualify and live with your partner or civil partner and they get one of the benefits listed**</td>
<td>Nil***</td>
<td>Nil***</td>
</tr>
<tr>
<td>Qualify but live in a care home and don’t get one of the benefits listed**</td>
<td>£100</td>
<td>£150</td>
</tr>
</tbody>
</table>

** Benefits: Pension Credit, income-based Jobseeker’s Allowance (USA), income-related Employment and Support Allowance (ESA)
*** A partner getting the benefit will receive the Winter Fuel Payment on a person’s behalf

Source: DWP

**How much do Winter Fuel Payments cost the Exchequer?**

Winter Fuel Payments cost the Exchequer £2.15 billion in 2011-12, and were paid to 12,686,000 people in the UK.15 To put these figures in context, public expenditure on the State Pension for 2011-12 was around £76 billion16 and total public spending was £696.4 billion.17
How do people spend Winter Fuel Payments?

Winter Fuel Payments are paid as an unrestricted cash payment. Economic theory would predict recipients would treat the payments as cash, and the receipt of the payment would not affect how households spend their money, including the value of the Winter Fuel Payment.

However, by far the most detailed, reliable study of this question suggests recipients of Winter Fuel Payments do not behave as economic theory would predict.

In an important study using the Living Costs and Food Survey (LCFS), the Institute for Fiscal Studies (IFS) looked at the impact of receiving Winter Fuel Payments on household fuel expenditure, using data for the years 2000 through 2008. The LCFS includes detailed information on fuel spending: some information is collected via the survey questionnaire (e.g. last payment of electricity on account) and some from a diary kept by survey respondents (e.g. slot meter payments). Total spending on fuel includes gas and electricity payments, and the purchase of coal, coke and bottled gas for central heating.

The authors of the IFS analysis summarise their findings as follows:

“We find statistically significant and robust evidence of a substantial labelling effect. We estimate that households spend an average of 41% of the WFP on household fuel. If the payment was treated in an equivalent manner to other increases in income we would expect households to spend only about 3% of the payment on fuel.”

The authors conclude:

“The interpretation of this is straightforward: if households are given an unconditional and neutrally-named cash transfer of £100 they would be expected to spend approximately £3 on household fuel. If they are given an unconditional cash transfer called the Winter Fuel Payment in the middle of winter we estimate that they will spend between £15 and £66 on fuel (our point estimate is £41).”

Beatty T et al. (2012) Cash by any other name? Evidence on labeling from the UK Winter Fuel Payment

As such, the most reliable evidence on how households spend Winter Fuel Payments suggests 41% of its value is spent on fuel, and the policy is therefore successful in increasing household spending on fuel by 38%, compared to an unlabelled cash payment, such as a payment of the State Pension.

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1 The authors also conducted a number of tests on their findings, which they describe as follows: “We conduct a number of robustness and falsification tests. We carefully test – and reject – the possibility that this effect arises from non-separabilities between consumption and leisure: the effect we observe cannot be explained by retirements around age 60 altering the demand for heating fuel. We also find a statistically significant effect for both singles and couples, confirming that this is not an intra-household allocation effect. Thus this dramatic difference in the marginal propensity to consume fuel out of the WFP is evidence that the name of the benefit (possibly combined with the fact that it is paid in November or December) has some persuasive influence on how it is spent.”
In short, contrary to what economic theory would predict, around two-fifths of the value of Winter Fuel Payments does get spent on fuel, in a way that non-labelled equivalent cash payments would not.

**What proportion of public expenditure on Winter Fuel Payments is spent on fuel?**

Using the key figure of 41% from the IFS analysis described above to project aggregate spending, it is possible to project that the £2.15 billion of public spending in 2011-12 on Winter Fuel Payments resulted in £0.817 billion of extra spending on fuel by recipients of Winter Fuel Payments.

Put another way, if individuals had simply been given a State Pension increase equivalent to the value of Winter Fuel Payments in 2011-12, this would have increased spending on fuel by older households by no more than £65 million.

**What do recipients do with the rest of the payments?**

No evidence is available for how recipients of Winter Fuel Payments spend the 59% of its value not typically spent directly on fuel. However, it is important to note that there are multiple ways in which older people may seek to keep warm in winter, in addition to spending on fuel and heating:

- Buying winter clothes, such as thermal underwear;
- Taking taxis to warm environments, such as community centres, day centres, coffee shops, shopping centres;
- Insulating their home.

In this context, it is reasonable to hypothesise that the observed behavioural effect of labelling the Winter Fuel Payment extends to other positive cold-related behaviours, such that older people use some of the remaining 59% of the value of the Winter Fuel Payment on keeping warm in other ways.

**Do older people spend Winter Fuel Payments on other things not related to the cold?**

On the basis of the above figures, it is likely that a proportion of the value of the Winter Fuel Payment – no more than 59% - is used to fund general household spending.

**Does the Winter Fuel Payment get spent on ‘trivial consumption’?**

It is sometimes assumed that where older people do not spend Winter Fuel Payments on heating, the money is instead used for ‘trivial consumption’ such as leisure, entertainment or “gifts for the grandchildren”.

While this assumption may be true in some cases, it is also likely that non-fuel uses of Winter Fuel Payments by households see the money used to fund ‘essential spending’, particularly to cope with poverty and disability, which are particularly prevalent among the older population.
According to the government’s own estimates, among 12 million older people in the UK, around 3.9 million are at risk of income poverty, of whom around two thirds receive means tested Pension Credit.  

As such, when individuals do not spend Winter Fuel Payments on fuel or other means of keeping warm, it could be that this money is being used to fund other types of essential spending such as food, rather than funding leisure and entertainment.

Indeed, it should be noted that cold weather is often associated with increased metabolic rates, i.e. the body burns more calories to stay warm. The implication of this is that individuals will need to consume more food in cold weather. As such, a ‘cold-adjusted’ measure of income poverty among older people would be higher in cold weather than the level of Pension Credit, which is held constant throughout the year.

More generally, if the remaining 59% of the value of Winter Fuel Payments is treated as cash by recipients, then it would be used to fund the normal basket of household purchases by older households.

According to the ONS, household expenditure as a percentage of total expenditure for households with a household-head over 65 comprised: food and non-alcoholic drinks (11%), alcoholic drinks, tobacco and narcotics (2%), clothing (4%), household goods and services (6%), health (1%), transport (14%), communication (3%), recreation (13%), and restaurants and hotels (8%).

Why do people spend Winter Fuel Payments on fuel, rather than treat the payment as cash?

People do not treat Winter Fuel Payments as cash because of a ‘labelling effect’: the way in which this cash transfer is labelled affects how the money is used.

As the IFS notes in its analysis of how households spend the Winter Fuel Payment, there is limited previous empirical evidence available in relation to other types of benefits and transfer programmes to test whether labelling a transfer affects how money is used.

Nevertheless, the proposition that individuals engage in ‘mental accounting’ has existed for many years, and UK behavioural economists have shown interest in the potential of ‘labelling effects’ in designing public policy.

In addition, social scientists have long investigated the issue of whether individuals treat their money as ‘fungible’, i.e. substitutable with money from other sources, no matter how the money is labelled, where it is received from or what its purpose is.

Multiple academic studies across different countries and types of spending have found evidence of individuals not treating money as ‘fungible’. For example, a German study using an experiment in a restaurant found...
that even in a very simple situation, when a label is attached to a part of their budget, subjects change how they spend their money according to the suggestion of the label.\textsuperscript{23} The study further noted that those with lower mathematical abilities were more likely to be influenced in their decisions by the label in their budget.

As such, evidence of a labelling effect in how households spend their Winter Fuel Payments should not be surprising. While this outcome contradicts classical economic theory that underpins much of the discipline of economics, it is entirely consistent with behavioural economics theory.

Evidence that mathematical ability may determine how much individuals respond to labels in their budgets is particularly important in the context of a labelling effect found among the older population and extensive evidence of declining cognitive ability associated with ageing. Indeed, the English Longitudinal Study of Ageing (ELSA) has provided detailed evidence on age-related declines in cognitive functioning across a range of measures among the older population, including mathematical ability.\textsuperscript{24}

In this context, it is reasonable to hypothesise that the power of labelling effects will be stronger among the older population experiencing age-related reductions in cognitive function, potentially increasing the effectiveness of any policy deploying a labelling effect in relation to this group.

**What impact have Winter Fuel Payments had on excess winter deaths?**

Establishing a measurable link between excess winter mortality rates and Winter Fuel Payments is extremely difficult due to:

- Large fluctuations in rates of excess winter mortality year-to-year;
- Changes in energy costs, which determine how much warmth is supplied for each £200 that a household spends on fuel.

As such, no research has been undertaken that seeks to evaluate the marginal effectiveness of Winter Fuel Payments on rates of excess winter mortality.

Nevertheless, in the absence of Winter Fuel Payments it is reasonable to project that older households would spend up to £0.9 billion less each year on fuel. It would not therefore be credible to suggest that Winter Fuel Payments do not have a positive effect in relation to both reducing the prevalence of excess winter deaths and the costs of cold-related illnesses to the NHS.

As such, a balanced assessment on the basis of available evidence does suggest that Winter Fuel Payments do reduce the prevalence of excess winter deaths and the cost of cold-related illnesses to the NHS.
Do Winter Fuel Payments reduce the prevalence of excess winter deaths and cold-related illness among higher-income pensioners?

As described above, academic research has not found a consistent, strong correlation between socio-economic characteristics and excess winter deaths.

Among the drivers of excess winter deaths and cold-related illness among older people, failing to heat the home adequately is only one among multiple potential drivers, including failing to wear warm clothes outside, and draughty homes.

However, it could be argued that as a contributory factor toward excess winter deaths and cold-related illness, failure to heat the home adequately is only one among multiple potential drivers, including failing to wear warm clothes outside, and draughty homes.

Is this point of view a valid one? There are several reasons to think not.

First, to determine the efficacy of Winter Fuel Payments proportional to income – and to change the policy on this basis – requires consideration of how many pensioners could be identified as ‘high-income’.

It is first worthwhile pointing out that among 12 million pensioners in the UK, the DWP estimates that around 3.9 million – or one in four - are at risk of poverty, in that the State Pension and their private pension income does not take them up to the government’s measure of retirement income poverty: the ‘minimum income guarantee’. Within this group, around 1.3 million fail to receive means tested income support (Pension Credit), and therefore have incomes below the ‘minimum income guarantee’, and would be officially designated as living in poverty.

More broadly, the income distribution of pensioners is relatively flat but for the highest income quintile, as the table above shows.

This suggests that if the efficacy of Winter Fuel Payments is strongly determined by a person’s other income, the largest marginal difference in effectiveness would presumably lie between the fourth and fifth – highest - income quintiles. Among the remaining income quintiles, there is relatively little
difference in income, particularly proportional to the value of Winter Fuel Payments. Second, it is important to consider the relationship between income and the cost of heating a home adequately. In relation to older people, especially those with a long-term condition, adequate warmth is likely to be a higher level than for younger individuals in good health. This means that conventional measures of poverty, or low-income indicators, may not be pertinent to those most at risk of excess winter deaths. Just as a cold-related adjusted measure of income poverty would be higher in winter because of the body’s need to consume more food, a income poverty measure adjusted for long-term health conditions, would also be higher.

Third, if someone lives in a large, old, draughty home, the cost of heating the home adequately will be commensurately higher. In fact, unlike the poorest pensioners who tend to live in relatively well-insulated social housing, medium-to-high income pensioners may be more likely to live in poorly-insulated homes, and therefore confront higher costs to heat their homes to an adequate level, which they may fail to do because of concerns about this cost.

**Besides Winter Fuel Payments, what other government policies seek to address excess winter deaths and the cost of cold-related illness to the NHS?**

A number of policies can be identified:

- Cold Weather Plan;
- Seasonal flu vaccination programme;
- Public Health Outcomes Framework;
- Green Deal;
- Warm Homes, Healthy People Fund
- Code for Sustainable Homes
- Warm Front Programme
- Home Energy Conservation Act

**What is the Cold Weather Payment?**

Individuals in receipt of working-age and pensioner income support – such as Jobseeker’s Allowance and Pension Credit – may be entitled to Cold Weather Payments, when local temperatures are recorded as, or forecast to be, an average of zero degrees Celsius or below over seven consecutive days. Cold Weather Payments are worth £25 for each seven-day period of very cold weather between 1 November and 31 March, and are paid automatically.

In short, Cold Weather Payments are one-off, temperature contingent cash-payments to poorer households.

The cost of the Cold Weather Payment to the Exchequer varies each year with weather patterns. During the 2011-12, the total cost was £129 million, but during 2010-11, the cost was £430 million.  

**How effective is the Cold Weather Payment in tackling excess winter deaths and the effects of cold-related illness?**

No research has been published to evaluate Cold Weather Payments in this regard.
What is the Warm Home Discount Scheme?

Introduced in 2011, the Warm Home Discount is a scheme coordinated by DWP, under which older pensioners on low-incomes receive a one-off annual discount worth up to £130 off their electricity bill, from participating energy suppliers.

Individuals may be entitled to the discount if they are:

- 80 or over and receive the Guarantee Credit element of Pension Credit;
- Under 80 and receiving the Guarantee Credit element of Pension Credit only.

These individuals are designated part of the so-called ‘Core Group’ under the Scheme. In addition, the Scheme contains provisions for a wider group of fuel poor customers – the ‘Broader Group’ - to whom suppliers are required to provide a minimum number of rebates. Suppliers can either use the predetermined criteria set out in the Scheme’s regulations or adopt their own criteria, which must be approved by Ofgem. Rebates are provided at the same value as the Core Group throughout the duration of the scheme.

The Scheme replaced the previous voluntary arrangement between government and companies in the energy industry, established in 2008, who would maintain ‘Priority Service Registers’ of vulnerable individuals, such as those of pensionable age, or those with a disability; a hearing and/or visual impairment, or a long-term ill-health condition. Individuals on a Priority Service Register would potentially be eligible for cheaper tariffs or other benefits. However, Priority Service Registers struggled significantly with identifying vulnerable households, limited voluntary take-up among households, and significant variations in entitlement among those on Priority Service Registers.

How does the Warm Home Discount Scheme work?

The aim of the Warm Home Discount Scheme is to deliver benefits to those who are in or at risk of fuel poverty, through a series of formal obligations placed on suppliers. The scheme is administered by Ofgem.

In order to target low-income households, most rebates (around 597,820 in Year 1) result from matching DWP income-related benefits with the customer data of energy companies. Customers who were not matched, but believed to be eligible, are sent a letter asking them to contact a Government call centre – referred to as the ‘sweep up process’.

How effective is the Warm Homes Discount Scheme?

In administrative terms, the Scheme has been a success. A review by Ofgem found that in its first year a total of 701,746 electricity accounts of low-income pensioners were provided with a rebate, valued at £120 and the majority of the payments took place.
between October 2011 and April 2012. Expenditure by the industry on this core group totalled £84.2m. Ofgem found that 99.9% of rebates were paid and 99.8% of rebates were paid within designated time scales.

However, it is still too early to evaluate the Warm Home Discounts Scheme in relation to policy objectives around excess winter deaths and cold-related illness.

Indeed, in relation to these policy objectives, several challenges for the scheme can be identified:

- Efficacy – to be effective in relation to cold-related illness, Core Group households will have to be more likely to heat their home to an adequate level than they would have without the scheme. Measuring such behaviour change may be difficult to undertake;
- Targeting through DWP administrative data – by the DWP’s own estimates, one in three pensioners in poverty (around 1.3 million people) do not claim income-related benefits, and these people will be excluded from support under the Scheme;
- Focus on income – many individuals at risk of excess winter death or cold-related illness may not meet the government’s definition of income poverty, and so will not be helped.

Overall, in relation to excess Winter deaths and cold-related illness, the most significant weaknesses of the Warm Home Discount Scheme are its assumptions that the poorest pensioners are most at risk, and its reliance on DWP data to target poorer households, which the DWP’s own estimates show to be highly incomplete.

**What is the Cold Weather Plan?**

A key policy framework for dealing with the effects of cold weather on the population is the annual Cold Weather Plan, the second of which was published by the Department of Health in 2012, and which is targeted at individuals, commissioners and service providers in health and care, as well as the third-sector.

The Cold Weather Plan is a ‘best practice’ guide and describes a set of actions that different public health stakeholders should take at different levels of ‘Cold Weather Alert’. Level 0 represents all-year around preparedness, while Level 1-4 Alerts are triggered depending on temperature levels, and should prompt health and social care services to take action. For example, the plan sets out that health and social care services should contact people identified to be at risk and ensure that rooms are adequately heated and that people are receiving all the benefits and services to which they are entitled.

The Cold Weather Plan is therefore concerned with pre-emptive, targeted, coordinated measures by local and government and health actors in response to incidences of cold weather.
What does the Cold Weather Plan recommend individuals to do?

The Cold Weather Plan is a public health intervention, and includes a range of recommended activities to individuals. ‘Year round’ advice to individuals (members of the public) includes:

- Access appropriate energy advice about improving the energy efficiency of your home and staying warm in winter;
- Protect water pipes from freezing if possible;
- Undertake energy efficiency improvements to your home or encourage your landlord to do so;
- Ask your fuel supplier if they operate a Priority Service Register for vulnerable customers, what this provides and if you are eligible;
- Have all gas, solid fuel and oil burning appliances (i.e. boilers, heaters, cookers) serviced by an appropriately registered engineer to prevent breakdown.

Advice on winter ‘preparedness’ for individuals, for November to March includes:

- Find good information about health risks;
- Get a flu jab if you are in a high-risk group;
- Protect water pipes from freezing by insulating them – seek energy advice where needed Draught-proof around windows or doors – seek energy advice on this;
- Avoid blocking ventilation points in the home;
- Check that your heating is working properly;
- Make sure that you have access to sufficient fuel supplies for the winter period especially if you rely on oil, liquid petroleum gas (LPG) or wood deliveries.

How has the Cold Weather Plan been received?

The first Cold Weather Plan – which actually fell in an unusually mild winter – has generally been well received by stakeholders. An evaluation by the Health Protection Agency (HPA) found:

- Nearly all (98%) of professionals surveyed received Cold Weather Alerts, and a very high proportion of them forwarded the alerts to front-line staff;
- The plan and associated documents were found clear, easy to understand (76%) and helpful (63%) by most respondents, with a large proportion stating that the plan was feasible to implement.

The HPA evaluation went on to recommend:

- The profile of the Cold Weather Plan should be raised and prevention of excess winter deaths should be put on the agenda of Health and Well Being Boards and Local Health Resilience Partnerships;
- The Cold Weather Plan should be embedded in the Joint Strategic Needs Assessments of every local authority and should also engage GPs and CCGs;
- Guidance should be offered on data and information sharing, and how this can be
done according to information governance guidance - particularly for cross-agency partnership working and targeting vulnerable groups;

- The Met Office cold weather alerting system needs to be more locally focused and geographically specific;
- There should be a level of graduation and ‘scalability’ in the actions within an alert level, so that locally a more proportionate response could be initiated based on factoring in the local likelihood and impact of cold weather.

**How effective has the Cold Weather Plan been in relation to excess winter deaths and the effects of cold-related illness?**

Although the HPA has evaluated the Cold Weather Plan in terms of implementation, no evaluation has been undertaken into its effectiveness in addressing excess winter deaths and cold-related illness. Indeed, the effectiveness of the Plan in this regard depends on the success of health and care commissioners and providers in identifying at-risk individuals, and in its Appendix, the Plan suggests some potential toolkits for doing this. However, there is no evidence in the Plan or elsewhere on how effective such local agents are being in identifying those at risk of cold-related illness.

**What is the seasonal flu vaccination programme?**

Each year, DH launches the seasonal flu vaccination programme. According to DH, in 2010, around 602 people with flu died in the UK, with about 70% of deaths among in young and middle-aged people aged 15 to 64 years. Under the programme, GPs will provide free vaccinations to:

- Pregnant women (in any stage of pregnancy);
- Anyone with a long-term condition including diabetes, asthma, liver disease, kidney disease or heart or chest problems;
- People undergoing medical treatment who may have a compromised immune system;
- People with a neurological condition such as multiple sclerosis (MS) or cerebral palsy;
- A frontline health or social care worker;
- People living in a residential or nursing home;
- A main carer for an elderly or disabled person whose welfare may be at risk if they fall ill;
- Anyone aged 65 or over.

**What is the Public Health Outcomes Framework?**

The Coalition Government published the Public Health Outcomes Framework in January 2012, as part of its reorganisation of the NHS. The framework sets out the desired outcomes for public health and how these will be measured. One indicator included in the framework is excess winter deaths. As a result, Directors of Public Health will have responsibility for commissioning local services to tackle excess winter deaths. However, the inclusion of excess winter deaths as an indicator in the Public Health
Outcomes Framework does not necessarily mean that individual Directors of Public Health (who are appointed by local authorities) and their departments will use their discretion to make winter deaths a priority.

What is the ‘Warm Homes, Healthy People’ fund?

The ‘Warm Homes, Healthy People’ fund was launched by the DH in 2011-12, with the aim of making around £20 million available to local authorities and charities to help them reduce illness and death caused by living in cold homes. Bids for funding were invited for initiatives that demonstrate how local authorities will reduce deaths over the winter months, and fundable activities that seek to:

- Deliver energy efficiency and heating improvements to the most vulnerable people;
- Provide residents with benefits advice;
- Ensure better public awareness of the impacts of cold weather;
- Provide staff and volunteers with fuel poverty/cold weather awareness training.

An evaluation by the Health Protection Agency (HPA) has estimated that between 130,000 to 200,000 people in England (62% of them elderly) received a wide range of interventions, including structural interventions (such as loft insulation), provision of warm goods (such as blankets and ‘warm packs’) and income maximisation (such as benefits advice and ‘fuel vouchers’). The HPA also found many bodies used the money to promote awareness through local media campaigns.

DH re-launched the Fund in September 2012.

What effect has Warm Homes Healthy People fund had on excess winter deaths?

In its evaluation of the scheme, the Health Protection Agency observes that the fund is a useful adjunct to the Cold Weather Plan, but that it is too early to attempt to measure any effect on excess winter deaths or the cost of cold to the NHS.

What is the Warm Front Scheme?

As a precursor to the Warm Homes, Healthy People fund, it is useful to note the Warm Front Scheme, which concluded on January 19th, 2013, and which provided help to households in England worth up to £3,500 for heating and insulation improvements to their home, such as:

- Insulation - loft, cavity wall or hot water tank
- Draught-proofing
- Gas, electric or oil heating

The Scheme was targeted at households in receipt of means tested benefits such as: Pension Credit; Child Tax Credit; Working Tax Credit, and Jobseeker’s Allowance. In effect, the Warm Front Programme was direct financial support for the poorest households to insulate their home.
The Marmot Review Team have pointed out that the conclusion of the Warm Front Scheme brought to an end direct central government funding of improvements to residential energy efficiency.34

**How effective was the Warm Front Scheme?**

A review by the National Audit Office (NAO) found that the Scheme assisted over 635,000 households between June 2005 and March 2008, at a cost of £852 million.35 The NAO highlighted some key issues with the Scheme.

First, the scheme relied on the benefits system to target households who were likely to be in fuel poverty. As such, the NAO note that analysis of the English House Condition Survey for 2006 indicates that 57% of vulnerable households in fuel poverty do not claim the relevant benefits to qualify for the Scheme. However, nearly 75% of households who would qualify were not necessarily in fuel poverty.

In relation to older people, it is important to note that only around two-thirds of older people who would be entitled to means tested Pension Credit actually receive this income supplement, according to estimates from the Department for Work and Pensions.36

A second issue was that when the grant to households did not cover the costs of work and alternative sources of funding could not be found, households either had to pay to cost or withdraw. The NAO note that the average contribution required of households in 2007-08 was £581, and nearly 25% of applicants that year were asked to contribute to the cost of the work required.37 Although over 129,000 households between June 2005 and October 2008 agreed to pay the difference, 6,076 households withdrew from the Scheme and a further 14,326 households (as at October 2008) withdrew from the Scheme.

In terms of successes, the NAO cited findings from the government’s delivery partner for the Scheme – eaga – who estimated that work done under the Scheme reduced a household’s energy bill by approximately £300 a year, which was calculated to have delivered savings to households of over £240 million between June 2005 and March 2008.38

**What is the Green Deal?**

Home energy-efficiency measures such as double-glazing and loft insulation can make a difference to both the cost of heating a home and to the temperatures experienced living in it. The average cost of making a property ‘energy efficient’ has been estimated at £7,500.39

New homes are required to be built to energy efficient standards. Retrofitting the existing housing stock to increase energy efficiency would make it much less likely that households would be in fuel poverty or suffer from cold-related illnesses. It has been estimated that raising all properties in England to SAP 81 (equivalent to Energy...
One way in which the government has sought to encourage households to insulate their homes is the Green Deal, which essentially sees households borrow from a government loan company to undertake approved home insulation and energy efficiency modifications, with the cost repaid via lower energy bills for the property.

The Coalition Government formally launched the Green Deal in January 2013, with policy leadership provided by the Department for Energy and Climate Change (DECC).

How does the Green Deal work?

First, a Green Deal Assessor will go to someone’s home, talk about energy use and review what energy efficiency improvements could be made. The Assessor will recommend appropriate improvements, and approved Green Deal Providers will then quote for the recommended improvements, although households can seek quotes from other providers.

Once a Green Deal Provider has been selected, the provider will write up a Green Deal Plan, which is a contract between the households and the Provider, setting out the work to be done, the repayments to be made and the interest that will be charged.

The government has set up the Green Deal Finance Company as a not-for-profit company to provide financing to households via providers, and the Company has set its interest rate at 6.96%, although it is expected that the costs for households will vary between 6% and 9%.

In addition, each Green Deal plan will have a set-up charge of £63. There is also an annual operating charge of £20 payable by providers, who may choose to add this to the overall cost of finance to the household, depending on the size and length of the plan.

How do households make repayments under the Green Deal?

After the work, the cost of the Green Deal repayments will be automatically added to the electricity bill for the home. The amount that households repay for Green Deal improvements is based on what a typical household or business is expected to save on energy bills by having the work done. The cost is shown on the household’s Green Deal Plan, and will include interest costs.

Repayments are made via the household’s electricity bill, in order that the Green Deal ‘stays with’ the property, i.e. it can be ‘inherited’ by a future resident.

Some help with costs and repayments is available to those on benefits, a low income or who live in an old property.

Is the Green Deal suitable for older people?

As set out in the previous chapter, and as the government’s Cold Weather Plan identifies, it is older people who are most at risk of death or ill-health related to the cold weather.
Is the Green Deal therefore suited to the highest-risk group? In this context, it is important to note that the Green Deal essentially comprises a loan repaid via future energy bills. As such, Age UK have noted that many older people have concerns about taking on debt, and the Green Deal is unlikely to be attractive to many older people. Indeed, even though it is difficult to distinguish between ‘life course’ and ‘cohort’ effects, it is important to note research finding that fewer older people report a positive attitude to debt.

Will the Green Deal help with excess winter deaths and the cost of cold-related illnesses to the NHS?

It is important to underline that the Green Deal is designed to encourage households to invest in measures to improve the energy efficiency of their home, rather than as a scheme to reduce the number of excess winter deaths or the cost of cold to the NHS. Nevertheless, given attitudes to debt among older people, particularly those aged over 75, and the fact that the Green Deal Finance Company is setting its interest rates at 6.96%, it would be reasonable to expect that few of the households most at risk from the effects of cold weather will seek out and participate in Green Deal, and it will therefore have negligible effect on excess winter deaths in the short to medium term.

What is the Energy Company Obligation?

Ultimately, the Green Deal is focused on home insulation measures that meet the ‘golden rule’ of paying for themselves over the lifetime of the improvement. However, Green Deal interventions will be unsuitable for those homes that require expensive home insulation, or for those on low income: hence the Energy Company Obligation (ECO).

The ECO was introduced in January 2013, alongside the Green Deal, in order to reduce carbon emissions and tackle fuel poverty. It will do this by placing obligations on energy suppliers to achieve certain emissions targets by improving the energy efficiency of properties in the domestic sector through the establishment of three distinct targets:

- Carbon Emissions Reduction Obligation (20.9 million lifetime tonnes of carbon dioxide) - focusing on hard to treat homes and measures that cannot be fully funded through the Green Deal.
- The Carbon Saving Community Obligation (6.8 million lifetime tonnes of carbon dioxide) - focusing on the provision of insulation measures and connections to district heating systems to domestic energy users that live within an area of low income.
- The Home Heating Cost Reduction Obligation (£4.2bn of lifetime cost savings) - requiring energy suppliers to provide measures which improve the ability of low income and vulnerable households (the ‘Affordable Warmth Group’) to affordably heat their homes.

Source: Ofgem
However, at the time of writing, it is unclear what form interventions by energy companies under the ECO will take, although some insights can be gleaned from the operation of similar, earlier schemes, such as the Community Energy Saving Programme.

**What is the Code for Sustainable Homes?**

As background to the above schemes, it is important to note the Code for Sustainable Homes, which was introduced in 2007 to ensure that new-built homes reduce society’s carbon emissions and are energy efficiency. However, as the Marmot Review Team note, it is only since 2007 that the standards for new buildings have begun to approach those of other northern European countries, and although the strict targets imposed by the Code make fuel poverty unlikely, the proportion of the housing stock built since 2007 with these standards is very small.43

**What is the Home Energy Conservation Act?**

The Home Energy Conservation Act (1995) put an obligation on local authorities to draw up plans to increase domestic energy efficiency. The Act has been amended since 1995, and in July 2012, the government issued new guidance under the Act to local authorities in England. This will see local authorities required to identify practicable and cost-effective measures likely to result in significant energy reduction in all residential accommodation in their area.

The guidance – issued by the Department of Energy and Climate Change (DECC) - also asks local authorities to consider the role key local partners, such as social housing providers and community organisations, can play in supporting their plans. In publishing the guidance, DECC restated the government’s belief that:

“local authorities are best placed to assess the green needs and ambitions of their areas, which they know better than anyone else. A well developed report in response to HECA, highlighting key opportunities, will help attract potential funding partners to work with the authority and other local community groups and stakeholders to the benefit of local residents and businesses.”

Department of Energy and Climate Change (2012)

**DISCUSSION**

This chapter has reviewed the diverse range of policy interventions that directly or indirectly address the policy challenges posed by the persistent issue of excess winter deaths, and the cost of cold-related illnesses to the NHS. Various themes emerge:

**Fragmentation**

As described at the start of this chapter, government policy has treated the problem of excess winter deaths and cold-related illness as an income problem, a behavioural problem, a home energy efficiency problem, etc.

Four government departments have all sought to address the effect of cold weather on households. However, in undertaking a broad overview and evaluation of these
diverse policies, the overall picture is one of fragmentation, rather than joined-up policymaking.

In particular, although it is noticeable that while DWP and DECC have sought to join-up policymaking – for example, under the Warm Home Discount Scheme – and DH and CLG are responsible for the Cold Weather Plan which covers both the NHS and local government, there appears to have been little joined-up policymaking across these two branches of activity. For example, it is not clear why the ‘Core Group’ of the Warm Home Discount Scheme does not use data for targeting rebates derived from NHS on at risk older households. The next chapter therefore explores such opportunities in more depth.

**Domination of fuel poverty and energy efficiency**

Excess winter deaths and cold-related illness are primarily problems of public health. However, related policy measures such as energy discounts and home insulation schemes have come to be seen primarily in terms of fuel poverty, energy efficiency, emissions and climate change. In particular, the emphasis on fuel poverty has resulted in an excessive reliance on administrative data from means tested retirement income benefits, despite 1.3 million pensioners in poverty in the UK failing to receive these benefits, and the limited overlap with pensioners with a long-term health condition at risk from the cold.

For the problems of excess winter deaths and cold-related illness to be properly addressed, this must change.

**The importance of behaviour**

A further important theme is the extent to which fuel-poverty and home energy efficiency has dominated the thinking of policymakers, even though excess winter deaths and cold-related illness have strong behavioural drivers.

In particular, even if every home in the UK were insulated to the level of ‘Category E’ under the government’s classification, winter deaths would still occur because they relate to behaviour outside of the home, and – more pertinently – to decisions about heating inside the home. Even a well insulated home needs heating in the coldest weather, but may not be if households “fear the heating switch”. That is why a behavioural aspect to the government’s policy response to the problem of excess winter deaths is essential.

To illustrate this behavioural aspect of the challenge to public policy, it is useful to note the experience of researchers piloting information booklets on staying warm with older people in a field trial. The researchers note:

“While there was abundant evidence of behaviour change by the field trial participants, the majority of these changes were subtle (e.g. slipping a coat on when going outdoors to peg out washing; putting on a dressing gown and slippers to make a cup of tea in the morning). Nevertheless even these small changes could have potentially significant benefits in terms of health outcomes if...”
they were widely practised.”

The researchers go on to quote a participant to illustrate this point:

“I don’t normally have the radiator on, you know in the bedroom, because I’d rather have a hot-water bottle and breathe in the cooler air but ... no I took on board what you said and I... just put my radiator on half – you know – so the temperature was quite ... pleasant. (F, 72 years old)”


Put simply, even if every home in the UK were insulated to an adequate standard and fuel poverty was eliminated, excess winter deaths and cold-related illness would still occur because of human behaviour.

In this context, there is a striking contrast between the relatively superficial nature of public health interventions with the potential to change cold-related behaviour – such as information in the Cold Weather Plan – with the much harder targets and interventions represented by the Energy Company Obligation and the Green Deal.

**Must do better**

With the rate of preventable excess winter deaths each year still representing a national scandal, and with the NHS confronting the tightest budgetary pressures since its creation in 1948, the problems presented by excess winter deaths and the cost of cold to the NHS can no longer be tolerated.

As such, the key question for the government is: what is the most effective way of spending the totality of public expenditure directed at excess winter deaths and cold-related illnesses?

The next chapter therefore develop some potential answers to this question.
The previous chapter highlighted the diverse and overlapping policy interventions relevant to excess winter deaths and cold-related illness.

Key conclusions from this analysis were the fragmented nature of related public policy interventions, the domination of fuel poverty and energy efficiency over the issue of excess winter deaths, the importance of human behaviour and the need to do better.

This chapter therefore looks to the future and explores reform options that may provide a better response to these problems. The chapter addresses:

- Who are the target groups for policy intervention?
- How can policy interventions reach these target groups?
- What are the different categories of potential new interventions?
- What are the reform options?

WHO ARE THE TARGET GROUPS FOR POLICY INTERVENTION?

The government has already identified in its Cold Weather Plan those groups most at risk of experiencing excess winter deaths or cold-related illnesses, which comprises those who are:

- Over 75 years old;
- Otherwise ‘frail’ older people;
- Have pre-existing chronic medical conditions such as heart disease, stroke or transient ischaemic attack (TIA), asthma, chronic obstructive pulmonary disease (COPD) or diabetes; mental ill-health that reduces individual’s ability to self-care; dementia;
- Assessed as being at risk of, or has had, recurrent falls;
- Housebound or otherwise low mobility;
- Living in deprived circumstances;
- Living in houses with mould;
- Fuel-poor (needing to spend 10% or more of household income on heating the home);
- Older people who live alone and do not have additional social services support.

However, while these characteristics can be considered ‘risk factors’, this list excludes another important target group:

- Individuals who do not keep themselves warm.

As described in the previous chapter, human behaviour represents a significant potential explanatory factor in the persistent prevalence of excess winter deaths and cold-related illness. Any effective policy response to these problems will arguably have to include a component focused on influencing behaviour and achieving behaviour change.

HOW CAN POLICY INTERVENTIONS REACH THE TARGET GROUPS?

The target group for policy interventions directed at reducing cold-related illness are diverse, encompassing age, health characteristics, housing characteristics and behaviour. What then are the routes for
policymakers to target this diverse group? Potential channels include:

- GPs and individual GP practices

Frontline NHS professionals, especially GPs, are in frequent contact with high-risk individuals with pre-existing medical conditions.

- Clinical commissioning groups (CCGs)

Networks of local GP practices are well positioned to be able to use patient data to build up a picture of their local at-risk groups.

- Local authorities, especially social services departments

Local authorities may be particularly well placed to identify vulnerable households, for example, those living in poor quality housing or deprivation.

- Health and Wellbeing Boards

As described below, Health and Wellbeing Boards have been created with the specific aim of bringing together and integrating NHS and local authority data on local populations for the purpose of jointly commissioning targeted services.

- Government departments, such as the Department of Health and Department for Work and Pensions

The Department of Health already undertakes public health campaigns targeted at specific sections of the population, and produces the Cold Weather Plan.

The Department for Work and Pensions has data that can be used to identify around two-thirds of pensioners living in poverty, which has already been used to identify ‘Core Group’ eligible households under the Warm Home Discount Scheme.

- Charities working with at-risk groups, such as older people’s charities running day centres and outreach services

Like NHS professionals, those working in community-based support services may have relatively high levels of contact with at-risk groups.

- Energy companies

Energy companies possess significant quantities of data on their customers, including their energy usage throughout the year. Some companies may also possess demographic information (age, gender, etc.), which may be used under the Warm Home Discount Scheme to identify individuals for the so-called ‘Broader Group’.

How should interventions be targeted?

To answer this question, it is first important to highlight the fact that some risk factors may be ‘clustered’, i.e. individuals with certain risk characteristics may be more likely to have other risk characteristics. For example, someone aged over-75 may be more likely to live on a low-income and have a long-term
health condition.

Risk factors may also be clustered at a community or geographical level. For example, the Institute for Public Policy Research has proposed ‘Low-Income, Low-Efficiency Area (LILEA)’ targeting of subsidised home insulation, which would involve insulation measures being directed to all houses in certain geographical locations determined using property and income-based proxies. The Institute has highlighted research from the Department of Energy & Climate Change that suggests in some postcode areas almost 50% of households are in fuel poverty. Building on such an approach, the use of age as an identifying risk factor may allow this approach to involve further targeting, and direct insulation measures based on those most at risk of excess winter deaths.

However, it is also important to underline that no method for targeting is perfect, and it is always likely that some individuals may receive support through targeting that may not in fact be ‘at-risk’. As the Hills Review notes in relation to fuel poverty, it would be naïve to think that only those households defined as the target group of policy could be targeted, without also providing interventions toward lower risks groups.

Clinical Commissioning Groups and Health and Wellbeing Boards

Given their duty to prepare Joint Strategic Needs Assessments to identify key health issues for their local community and set the health priorities for the area, the charity Age UK has proposed that Health and Wellbeing Boards could commission services directly to address excess winter deaths and cold-related illness.

More widely, the creation of both clinical commissioning groups and Health and Wellbeing Boards do provide new opportunities to target groups at risk of excess winter deaths and cold-related illness. These opportunities have already been flagged by the Health Protection Agency in its evaluation of the Cold Weather Plan, as the preceding chapter identified.

Clinical commissioning groups (CCGs) were set up by the Health and Social Care Act (2012), and from April 2013 onward replaced the 152 primary care trusts that previously commissioned healthcare services. CCGs are independent statutory bodies, led by their members: the GP practices in their area. Broadly speaking, CCGs will be responsible for commissioning health services to meet all the reasonable requirements of patients.

Health and Wellbeing Boards (HWBs) have been created as part of the government’s reorganisation of the NHS. Each top tier and unitary authority will have its own HWB. Boards will bring together CCGs and councils to develop a shared understanding of the health and wellbeing needs of the community. HWBs will have strategic influence over
commissioning decisions across health, public health and social care. Board members will be tasked to collaborate to understand their local community’s needs, agree priorities and encourage commissioners to work in a more joined up way.⁵²

A principal activity of HWBs will be to undertake Joint Strategic Needs Assessments (JSNAs) and develop a joint strategy for how these needs can be best addressed. This will include recommendations for joint commissioning and integrating services across health and care. Ultimately, it is hoped that new relationships between councillors, directors of public health and clinicians will be key to rejuvenating local approaches to improving the health and wellbeing of their populations. A particular aim in the context of HWBs is for JSNAs to be comprehensive and holistic in their definition of need, covering health, social care and public health across the full life course, including children, young people and adults, and involving an analysis of the wider determinants of health.

**How should policy interventions be targeted?**

Two targeting mechanisms are already in use by policymakers:

- Data-matching and integration of DWP and energy company data on older households likely to be in fuel poverty;
- The joining up of NHS and local government data under the Cold Weather Plan to target locally developed interventions.

In this context, the single biggest opportunity for targeting interventions in future would appear to lie in joining up the ‘Core Group’ and ‘Broader Group’ targeting mechanisms deployed under the Warm Home Discount Scheme on the one hand (DWP and energy companies), with evolving HWBs and CCG targeting mechanisms drawing on NHS and local government data, on the other.

Bringing together these two approaches to integrating targeting suggests a two-way transfer:

- GPs, CCGs and HWBs referring individuals to the ‘Core Group’ and ‘Broader Group’ databases operated by DWP and energy companies as part of the Warm Home Discount Scheme;
- The DWP and energy companies making available data from their ‘Core Group’ and ‘Broader Group’ databases to CCGs and HWB in order to match data and identify at-risk households, who may otherwise be difficult to locate.

In addition to data management and administration, the most significant barrier to exploiting such opportunities lies in data confidentiality, particularly in relation to the potential flow of data on at-risk households from the NHS to the DWP, and – potentially - energy companies. However, where such referrals merely involved ‘flagging’ certain individuals, potentially with their permission, such issues may not be insuperable. In fact,
pilot schemes such as the ‘Make Every Contact Count’ programme in Yorkshire – described in the Appendix – are already deploying multi-partnership referral schemes involving the NHS, where the front-line worker completes a simple referral card on behalf of the client, then posts it into a central ‘hub’ from where the client is approached by the required agency to offer advice and/or support.

Importantly, bringing together such different data sources from DWP, the NHS, local government and energy companies would in future enable much more sophisticated approaches to targeting. For example, ‘small-area estimation’ techniques applied in less developed counties for the purposes of poverty reduction, use a range of highly differentiated data to identify the prevalence of households at risk of poverty, at a very local level.

WHAT ARE THE DIFFERENT CATEGORIES OF POTENTIAL INTERVENTION?

The preceding chapter evaluated existing policy measures relevant to excess winter deaths. These interventions fall under one of several broad categories:

1. **Behaviour change** – measures to improve the knowledge and understanding of households regarding how to stay warm, i.e. their ‘cold-related behaviour’, through information, awareness and other types of campaigns;

2. **Cold weather responses** – measures to keep individuals warm in response to a specific period of cold weather – including changing household behaviour - triggered, for example, by Cold Weather alerts;

3. **Cost of heating** – measures to reduce the relative cost of staying warm in the home, whether through income supplements such as Winter Fuel Payments, or energy market interventions to encourage energy companies to put over-75s on to the lowest available tariff;

4. **Home insulation** – measures that focus on the availability of advice and assessments relating to home insulation, as well as subsidies for the cost of this insulation occurring.

The remainder of this chapter develops and evaluates multiple ideas for policy reform that fall within and across these different categories.

Representing a cold weather response, a cost of heating intervention and a behaviour change tool, but costing the Exchequer over £2 billion each year, the analysis begins with a detailed look at reform options for Winter Fuel Payments.

**REFORM OPTIONS FOR WINTER FUEL PAYMENTS**

As the previous chapter identified, Winter Fuel Payments appear to be highly effective in raising household expenditure on fuel. In this context, it is likely that any significant cuts to Winter Fuel Payments, such as scrapping
or means testing, would be likely to have severely negative public health effects, up to and including a higher prevalence of winter deaths, and an increased cost of cold-related illness to the NHS.

It is therefore vital to explore the full range of potential reform options for Winter Fuel Payments. Two broad approaches can be identified:

- Reconfiguring Winter Fuel Payments – for example, raising the age-threshold or lowering the value of the payments to improve targeting;
- Achieving better value-for-money from Winter Fuel Payments – for example, exploiting Winter Fuel Payments as a ‘transaction point’ with older households to further influence household cold-related behaviours, as well as gather information.

**What could be done to reconfigure Winter Fuel Payments?**

**4.1 Summary:** Given universal Winter Fuel Payments have been criticised as poorly targeted for addressing the effects of the cold, one option would be to scrap the Payments and reinvest the money saved into other types of cold-related interventions.

**Pros:**
- Public spending – scrapping Winter Fuel Payments would save the Exchequer £2.1 billion a year, which could be used to fund other interventions.

**Cons:**
- Excess winter deaths – spending on fuel by older households would be up to £817 million lower each year, which would inevitably have consequences for the number of excess winter deaths among the older population;
- Cost of cold-related illness to NHS – as with excess winter deaths, significantly lower expenditure on fuel by the older population would inevitably have consequences for the prevalence and cost of cold-related illness to the NHS, previously estimated at £1.36 billion a year in England;
- Opportunity cost – as explored below, both the behavioural impact of Winter Fuel Payments and the ‘transaction point’ they provide, create other potential other interventions to address the effect of the cold;
- Public hostility – scrapping Winter Fuel Payments would be very unpopular with substantial sections of the older population.

**4.2 Summary:** Means test Winter Fuel Payments, by making it conditional on receipt of means tested Pension Credit. How much would be saved? The IFS has estimated that restricting both Winter Fuel Payments and free TV licences to those on Pension Credit would save around £1.4 billion a year. Some or all of this revenue could then be reinvested in tackling the effects of the cold.
Pros:
- Public spending – releases revenue that could be spent on other cold-weather policies.

Cons:
- Excess winter deaths – these are not clearly associated with income – indeed, the poorest pensioners tend to live in relatively well insulated social housing – so means testing Winter Fuel Payments would still have negative consequences for the prevalence of excess winter deaths;
- Cost of cold-related illness to NHS – this problem would be exacerbated by means testing Winter Fuel Payments;
- Opportunity cost – Payments could be exploited further to change behaviour – see below;
- Problems with means testing – around 1.3 million older people who should receive Pension Credit fail to do so. As such, means testing Winter Fuel Payments would see £100-200 taken off 1.3 million pensioners living on less than £140 per week;
- Single-Tier State Pension – the Coalition Government has announced that from April 2017 at the earliest, the current State Pension and means tested Pension Credit will be replaced by a new Single-Tier State Pension of around £144 per week, for those reaching State Pension Age. As such, from this point on, the means testing infrastructure used to allocate Pension Credit will be shrinking, undermining its potential use in means testing other benefits.

4.3 Summary: Raise the age threshold for Winter Fuel Payments - for example, to 70 - thereby releasing revenue to spend on other cold-related policies for targeted groups, such as home insulation.

Pros:
- Public spending savings – raising the age threshold to 70 would save around £350-600 million each year;
- Limited opposition – since the payments would be preserved and on a universal basis, public opposition to such a move would likely be lower, comparable to some other options;
- Targeting – this is a targeted reconfiguration, reducing spending on those at lowest-risk from the effects of cold among pensioner groups.

Cons:
- Under-70s expenditure on fuel – those under the age of 70 would be very likely to spend less on fuel, which may have public health effects nevertheless.

4.4 Summary: Reclassify Winter Fuel Payments for the purposes of income tax, so that payments represent taxable income for the 15% of older people pay who pay income tax, with the money saved reinvested in other cold-related policies. Alternatively, stop paying Winter Fuel Payments altogether to older income tax payers.

Pros:
- Public expenditure - reduces expenditure on the highest-income older households. The IFS has estimated that making Winter
Fuel Payments liable for income tax would save around £250 million per year.\(^5\)

- Retention of labelling effect – although ‘handing back’ some of the value of Winter Fuel Payments, older taxpayers would still likely respond positively to the labelling effect of Winter Fuel Payments.

**Cons:**
- Complexity – introduce new complexity into income tax system for older people;
- Administration – may pay tip more individuals into income tax system, with associated costs to HMRC.

4.5 Summary: Increase the value of Winter Fuel Payments, for example by 100%. Given Winter Fuel Payments are successful in nudging households to spend more on fuel in the context of 25,000 excess winter deaths each year, increasing the value of Winter Fuel Payments may encourage households to spend even more on fuel, potentially reducing further the public health impact of cold weather.

**Pros:**
- Public health – if older households spend more on fuel, this would likely have a positive effect on excess winter deaths and the cost of cold-related illness to the NHS.

**Cons:**
- Cost;
- Marginal effectiveness – in the absence of relevant evidence, it would be difficult for policymakers to evaluate marginal changes in value.

4.6 Summary: Reduce the value of Winter Fuel Payments, e.g. by cutting value by 25% or not uprating for inflation. Or change the value of Winter Fuel Payments for some groups, but not others, such as cutting the value of payments to those under 75 but preserving it for those over this threshold.

**Pros:**
- Public spending – halving the value of all Winter Fuel Payments would save around £1.05 billion each year;
- Preserves a ‘labelling effect’ on behaviour - as a behavioural intervention, the receipt of any cash payment labelled ‘Winter Fuel Payment’ is important independently of the value of the payment. As such, it may be that reductions in the value of Winter Fuel Payments would not result in an equal and proportionate reduction in household expenditure on fuel.

**Cons:**
- Effect on fuel expenditure – any reduction in household expenditure on fuel would have negative public health consequences.

4.7 Summary: Formally reclassify Winter Fuel Payments as part of the State Pension, such that they count towards the government’s ‘triple-lock’ guarantee to uprate the value of the State Pension, and in future, toward implementation of the Single-Tier State Pension from 2016.

**Pros:**
- Reduce the cost of the ‘triple-lock’ and the Single-Tier State Pension to the Exchequer.
4.8 Summary: Target Winter Fuel Payments at high-risk individuals by restricting it to those with a long-term health condition such as respiratory or circulatory diseases. This could be undertaken via GPs and the NHS, with receipt of Winter Fuel Payments triggered by patient records showing certain conditions.

Pros:
- Targeting – receipt limited to those at highest risk of cold-related illness or death;
- Public expenditure savings.

Cons:
- Effectiveness of targeting – GPs may not be best positioned to identify the entirety of individuals at risk from the cold, particularly given poor home insulation and household behaviour can be key risk factors;
- GP hostility – GPs may resist additional responsibilities as ‘gatekeepers’ to segments of the benefits system;
- Effect on household behaviour – the existing positive effect of Winter Fuel Payments on household behaviour – and any extra impacts that could be achieved - would be lost.

4.9 Summary: Distribute Winter Fuel Payments as vouchers that can only be redeemed against household energy bills.

Pros:
- Use of resources – the full value of Winter Fuel Payments would be used for the purposes of paying for fuel.

Cons:
- Incompatible with different sources of heat – households heat their homes in a variety of ways, and not all involve convention gas or electricity-based heating systems;
- Prevents alternative positive uses of payments – as described above, it is reasonable to surmise that pensioners use some of the value of Winter Fuel Payments to keep warm in alternative ways, besides heating, such as buying warm clothes. Vouchers would prevent this;
- Take-up – having received the Winter Fuel Payment as a voucher, some households may fail to then use it to pay their fuel bill, e.g. by not sending it to their energy supplier.

How can Winter Fuel Payments be exploited as a ‘transaction point’?

Winter Fuel Payments are not treated as cash by households, and do influence behaviour. As such, they represent a potential ‘transaction point’ between households and government policy that could be further exploited to address problems of excess winter deaths and the cost of cold-related illness to the NHS.

In particular, Winter Fuel Payments could be exploited as a transaction point to:

- Further change cold-related behaviour among households through additional forms of nudging or soft-conditionality;
- Gather information for targeting of additional support, such as the condition of someone’s home.
4.10 Summary: Annual information and awareness campaign to enhance the ‘event impact’ of the receipt of Winter Fuel Payments through educating the population about positive ‘cold-related behaviours’.

How? A public health information and awareness campaign explicitly linked to and coinciding with payment of Winter Fuel Payments could include:

- Leaflets through the post to tell households the Winter Fuel Payment has been made, and suggesting ways of keeping warm, or finding ways to improve the insulation of their home, such as requesting a visit from a Green Deal assessor.
- TV adverts raising awareness of the risks posed by the cold to individuals aged 70 and over, and those with certain medical conditions.

This campaign could build on the key messages to individuals that already feature as part of the Department of Health’s Cold Weather Plan.57

Pros:
- Behaviour change – successfully encouraging positive cold-related behaviours through linking to receipt of Winter Fuel Payments would increase value-for-money;
- Household expenditure on fuel – information and awareness campaigns may increase the proportion of Winter Fuel Payments on fuel, which in turn would enable the value of payments to be cut in real terms, without limited consequences for household fuel expenditure.

Cons:
- Cost – information and awareness campaigns would cost the Exchequer.

4.11 Summary: Change the name to ‘Winter Warmth Payments’ to encourage households to spend the money on keeping warm in the way they see fit.

Why? Research cited in the previous chapter has highlighted the positive behavioural influence of using the label ‘Winter Fuel Payment’. Modifying this label – for example, to ‘Winter Warmth Allowance’ or ‘Keeping Warm Allowance’ – may increase the proportion of its value spent on fuel or spent on keeping warm in other ways, such as insulating window frames, or taking taxis to community centres.

Pros:
- Behaviour – recipients may be more likely to spend the money on keeping warm in the best way possible, rather than just spending the money on fuel.

Cons:
- Confusion – households may be confused by any name change.

4.12 Summary: ‘Opt-in Winter Fuel Payments’ to change behaviour – while remaining a universal, non-means tested entitlement, individuals could be required to make a claim for Winter Fuel Payments via post, telephone or Internet. As form of ‘soft-
conditionality’ in order to influence behaviour, the claims process for an opt-in Winter Fuel Payment – in addition to asking for a National Insurance number to trigger payment - could ask claimants to confirm whether they are aware of the health risks posed by cold weather, whether they know they can contact a Green Deal assessor, or could invite claimants to sign-up to Cold Weather Alerts.

How? Since handling over 12 million individuals claims for Winter Fuel Payments annually would pose a considerable administrative challenge, a ‘rolling opt-in’ programme could be adopted in which 6% of randomly selected households – similar to the annual number of new eligible individuals - would receive a letter to inform them that for that year only, they would have to make a claim for their Winter Fuel Payment rather than receive it automatically. Alternatively, ‘opt-in’ claims for Winter Fuel Payments could be required for the first payment that individuals become entitled to upon reaching the age-threshold, and be repeated every five years.

Pros:

› Behaviour change – using ‘soft-conditionality’ to prompt households to think about the risks from the cold, seek advice or home insulation assessments would all reduce the prevalence of excess winter deaths and the cost of cold-related illnesses to the NHS;

› Expenditure – since some households would be likely to fail to make a claim, this would reduce public expenditure on Winter Fuel Payments;

› Public opposition – retaining Winter Fuel Payments on a full or semi opt-in basis would be unlikely to provoke strong public opposition, while reducing expenditure and improving effectiveness;

› ‘Transaction point’ – even if individuals do not subsequently go on to make a claim, the point when individuals can opt-in would nevertheless provide an opportunity to send households information about staying warm, etc.

Cons:

› Administration – even if a partial, rolling programme of ‘opting in’ were adopted, this would nevertheless increase the cost of administering Winter Fuel Payments significantly;

› Take-up – some households that failed to claim an opt-in Winter Fuel Payment may reduce their household expenditure on fuel accordingly, with potential health consequences.

4.13 Summary: As a ‘transaction point’ between the welfare state and households, policymakers could use receipt of Winter Fuel Payments to gather information on those households most at risk of cold-related ill-health. This could be built around the ‘soft-conditionality’ described above, or make use of the moment that Winter Fuel Payments are paid to distribute surveys to older households via the post or telephone.

For example, the Hills review notes that among ‘low-income, high-cost’ households at higher risk of fuel poverty, a small set of physical characteristics, which can be
ascertained without an in-depth physical survey, can identify homes accounting for more than half the total fuel poverty gap in England. The Hills Review notes these characteristics as: having oil, solid fuel or portable heating, living in a rural property off the gas grid, having solid walls, or being built before 1945.

Once collected, such data could be used to plan or commission a range of interventions by CCGs, HWBs or energy companies.

Pros:
- Targeting interventions – information on households most at-risk of being vulnerable to the effect of cold weather could be used by local authorities, clinical commissioning groups and Health and Wellbeing Boards to commission services and target interventions.

Cons:
- Administration.

HOW CAN POLICYMAKERS CHANGE BEHAVIOR?

The previous chapters explored how human behaviour, or what could be termed ‘cold-related behaviour’, may have an important causal role in excess winter deaths.

What cold-related behaviours do policymakers want to encourage? The government’s Cold Weather Plan already contains ‘year round’ advice to individuals, including:

- Access appropriate energy advice about improving the energy efficiency of your home and staying warm in winter.
- Protect water pipes from freezing if possible
- Undertake energy efficiency improvements to your home
- Have all gas, solid fuel and oil burning appliances (i.e. boilers, heaters, cookers) serviced by an appropriately registered engineer to prevent breakdown

The Cold Weather Plan also contains advice on how individuals should respond to cold weather:

- Maintain regular contact with vulnerable people and neighbours you know to be at risk in cold weather;
- Stay tuned into the weather forecast and ensure you are stocked with food and medications in advance (have deliveries or ask a friend to help);
- Take the weather into account when planning your activity over the following days;
- Avoid exposing yourself to cold or icy outdoor conditions if you are at a higher risk of cold-related illness or falls;
- If you or someone else is likely to be restricted to one room during the winter period or during a cold spell, make sure that it can be kept at or above recommended temperatures;
- Check ambient room temperatures – especially those rooms where disabled or vulnerable people spend most of their time;
- Discuss with friends and neighbours about clearing snow and ice from in front of your
house and public walkways nearby, if you are unable to do this yourself;
- Keep active;
- Dress warmly, eat warm food and take warm drinks regularly.

Policymakers have therefore already defined a comprehensive list of positive cold-related behaviours: the challenge is both educating individuals about these behaviours, and encouraging them to change their behaviour.

4.14 Summary: CCGs commission information, advice and awareness services targeted at high risk individuals in their area, or as an ‘add-on’ to services already commissioned for certain at risk groups, potentially including those included in the Warm Home Discount Scheme ‘Core Group’ and ‘Broader Group’. Alternatively, such services could be commissioned under the aegis of Health and Wellbeing Boards in the context of Joint Strategic Needs Strategies.

In this context, ongoing work by relevant agencies is seeking to improve policy design. For example, Gascoigne et al. (2010) described an advice booklet, deployed in combination with a Met Office ‘early warning system’, that produced behavioural change among older people consistent with risk reduction, while also identifying behavioural issues around long-held convictions about ‘healthy environments ’ and anxieties about fuel costs.59

Alternatively, interventions could be based around measures to train people in effective use of home thermometers or thermostats that alert them when the temperature in their home drops below a defined level.

Pros:
- Targeting – given the importance of health conditions to being at risk of an excess winter death, CCGs are well positioned to identify and commission services to improve cold-related behaviour among at risk groups.

Cons:
- Efficacy – any scheme seeking to influence behaviour may struggle for impact, particularly among older groups potentially more resistant to changing their behaviour.
- Conflicting messages – it has been noted that public health messages concerned with the effects of the cold (“put the heating on and stay warm”) contradicts environmental education (“don’t waste energy by putting the heating on unnecessarily”).

4.15 Summary: Government departments (DH, DECC, Ofgem etc.) and the energy industry establish an ‘innovation fund’ to develop, pilot and evaluate potential interventions, built around cutting-edge behaviour change techniques such as those derived from behavioural economics, to encourage households to engage in positive cold-related behaviours that will reduce the prevalence of excess winter deaths and cold-related illness.

What sort of approaches could be piloted? These might include:
Norm-based approaches – informing at risk groups via their GP, electricity bill or other ‘transaction point’ of the positive cold-preparedness actions of peer groups;

‘Affect’-based approaches – public health campaigns that target the emotional sense of obligation of family members to engage them in campaigns to change cold-related behaviour.

COLD WEATHER RESPONSES

How can public policy ensure individuals stay warm in response to specific periods of cold weather?

The government’s Cold Weather Plan introduced by DH established the idea that individuals, local professionals (GPs, social workers) and local agencies (councils) need to undertake specific actions in response to specific periods of cold weather, which are proportional to temperature.

Within this framework, are there other potential interventions that could be deployed? Two approaches deserve flagging:

4.16 Summary: Telecare and remote monitoring of indoor temperature.

Technological advances mean it is now possible to remotely monitor the indoor temperature and thermostat of potentially at-risk households. Indeed, in the context of telecare, remote monitoring services for individuals with dementia - such as ‘temperature sensors’ - represent a longstanding, ‘tried and tested’, intervention. As such, there may be scope for extending remote monitoring of indoor temperatures and thermostat settings to individuals with other risk characteristics for excess winter deaths and cold-related illness, besides dementia.

Pros:

Pros:

4.18 Summary: Free (or highly subsidised) energy for at-risk groups during cold spells. For at-risk individuals identified by GPs and CCGs – e.g. those over 75, living with a long-term condition – or for those on the government’s ‘Core Group’ under the Warm Home Discount, energy would become free when the government issues Level 3 or Level 4 cold weather alerts.

Pros:

Pros:

Cons:

Cons:

Set-up costs – indoor sensors cost money to install, particularly if a thermostat needs updating;

Privacy and take-up – some households may be uncomfortable with the idea of their home being remotely monitored.

Cons:

Cons:

Efficacy – remote monitoring can trigger a response by local public health professionals, family members, etc.

Efficacy – informed of a Level 3 or 4 alert, at risk individuals would know that all the energy they required to stay warm during this period would be free, such that they would have no motivation to ration their consumption in a way that may threaten their health.
Cons:

- Cost – the cost of such a measure would have to be borne by either the NHS, the Exchequer or via a levy on the energy industry.

**COST OF HEATING**

To address the cost of heating, policymakers have several broad options to reduce costs to households:

- Tariffs – nudging or automatically transferring individuals to cheaper energy tariffs;
- Subsidy – income subsidies (such as the Winter Fuel Payment) or consumption subsidies (subsidised or free energy).

4.19 Summary: Tariff switching services for at risk individuals. CCGs and HWBs commission local private and third-sector groups to contact at-risk individuals and help them switch their energy supplier to the cheapest provider, or to move on to the best value tariff. In some areas, such schemes have already been piloted and rolled out.

Pros:

- Competition – uses competition as a way of reducing household fuel costs.

Cons:

- Efficacy – merely being on a cheaper energy tariff may not address ingrained ‘fear of the heating switch’ among those on lower incomes;
- Energy inflation – consistent above-inflation increases in unit energy costs may still see households paying more for energy year-on-year.

4.20 Summary: Automated switching for at risk individuals. For example, the Labour Party has proposed that energy companies should be required by law to put all individuals aged over 75 on to their lowest tariff. In addition to an age-threshold, various other criteria could be applied which would see energy companies required to automatically switch people. In particular, GPs and CCGs could refer people to be automatically placed on the cheapest tariffs.

Pros:

- Cost – at little cost to the Exchequer, all individuals at risk of an excess winter death or cold related illness could be automatically given the cheapest possible energy tariffs.

Cons:

- Efficacy – merely being on a cheaper energy tariff may not address ingrained ‘fear of the heating switch’;
- Energy cost inflation.

**HOME INSULATION**

Improved home insulation, particularly for at-risk groups living in poorly insulated homes, is likely to be highly effective at reducing excess winter deaths and the cost of cold-related illness. In this context, policymakers have several broad options:
Nudge individuals into insulating their home, for example, through promoting Green Deal assessments;
Subsidising the cost of home insulation, for example, through grants or Green Deal loans;
Insulating homes for free.

Deploying these broad approaches for at-risk groups and making use of the targeting capabilities of CCGs and HWBs suggests a number of potential approaches.

4.21 Summary: Health and Wellbeing Boards commission Green Deal assessments for at-risk individuals.

Pros:
- Targeting - HWBs can target assessments for those at risk.

Cons:
- Take-up - many households at risk, particularly if on a low income, may not take up the option of a Green Deal assessment or Green Deal loan.

4.22 Summary: Health and Wellbeing Boards commission energy companies to insulate the homes of people in their area, under the Energy Company Obligation, using information and data gathered by CCGs and HWBs.

Pros:
- Targeting – energy companies have already found it difficult to meet their Energy Company Obligations in relation to insulating those homes that are particularly poorly insulated, because of the challenges of identifying those households;
- Funding – home insulation of at-risk groups would be paid for by energy companies.

4.23 Summary: Free home insulation up to Category E for all individuals identified as being at risk, living in poorly insulated homes, following identification by CCGs or HWBs.

How much would insulation cost? Energy Performance Certificates classify homes using a banding system of A-G, based on their energy efficiency. The Energy Savings Trust analysed data from the 2005 English House Condition Survey to explore how many homes are Band F or G, which is generally considered to be below acceptable. The EST research found that:

- For more modern F&G banded homes (particularly those built in the mid 20th century) basic insulation measures are key to moving into the E band - full loft and cavity wall insulation cost less than £1,000;
- Many homes are in the F&G banding because they have an old, inefficient central heating boiler. Changing to a modern condensing boiler usually costs less than £3,000;
- A minority of F&G banded homes cost over £5,000 - up to a maximum of £9,500 in the analysis - to bring up to an E standard. 15% of homes fell into this "hard to make decent" category in 2005.

Energy Savings Trust (2010) F & G banded homes in Great Britain

What does this mean? For those older groups who are at higher risk of experiencing excess winter deaths or imposing costs on the NHS through cold-related illness, the cost of insulating their home up to Band E is likely to
be between £1,000 and £3,000, i.e. broadly the cost of one week in hospital.

Pros:
- Efficacy – free home insulation for at risk groups living in poorly insulated homes may be the single most effective measure against excess winter deaths and cold-related illness.

Cons:
- Cost.

Key points
- In improving its policy response, the government needs to address who are the target groups for policy intervention, and how can policy measures reach these target groups?
- Multiple alternative policy approaches could be deployed, variously focused on behaviour change, cold weather responses, the cost of heating and home insulation.
This report has provided an overview and evaluation of the complex, diverse range of policy interventions directed at excess winter deaths and the effect of cold on the population.

In many respects, public policy interventions have made admirable progress:

- The Cold Weather Plan has provided a framework for all stakeholders in health and social care delivery to plan their cold-related interventions, and respond to weather warnings from the Met Office;
- The Winter Fuel Payment succeeds in directly increasing household expenditure on fuel in the age group most at risk of cold-related illness;
- The Warm Home Discount Scheme represents a bold attempt to tie private sector companies into delivering social policy goals around fuel poverty.

Nevertheless, the problems of excess winter deaths and cold-related illness remain significant and persistent.

This report has therefore developed a range of new potential ideas for addressing these problems, and achieving the objectives for policy of:

- In the short-to-medium term - reducing rates of excess winter deaths to the lowest levels found overseas;
- In the long-term - eliminating excess winter mortality in the UK; and,
- Eliminating the multi-billion pound cost of cold-related illness to the NHS.

Bringing together the analysis in this report, this final chapter concludes with specific recommendations to policymakers.

The Future of Winter Fuel Payments

In recent years, Winter Fuel Payments have been attacked from multiple sources. However, such attacks consistently ignore both the problem of excess winter deaths, evidence demonstrating that the payments are spent on fuel and the negative public health consequences that would result from scrapping them.

The result has been a remarkably diverse range of stakeholders demanding a policy – scrapping or means testing the Payments – that would inevitably result in death, illness and extra costs to the NHS.

To a significant extent, excess winter deaths and cold-related illness represent behavioural policy problems, and evidence on the Winter Fuel Payment and the power of labelling suggest it is an effective behavioural intervention that was implemented before behavioural economics became popular in UK policymaking: a ‘nudge’ before Nudge.62

Ultimately, debate on the future of Winter Fuel Payments must centre on value-for-money in public expenditure. Policymakers already confront a major challenge in encouraging older households to spend the State Pension in ways that reduce their demands on the health and care system. Renaming a segment of the State Pension as Winter Fuel Payment and paying it November
has proved excellent value-for-money, compared to the rest of public expenditure on the State Pension. For this reason, if the government wants to cut £100-£200 of support each year to pensioners, extracting this money from State Pension or via the tax system would represent much better value-for-money - and one that is less likely to result in people dying – when compared to scrapping or means testing the Winter Fuel Payment.

On this basis, a number of recommendations can be made for reforming the Winter Fuel Payment:

5.1 Make Winter Fuel Payments liable for income tax

This will enable HM Treasury to recoup some expenditure on Winter Fuel Payments from the 15% of pensioners that pay income tax, while nevertheless retaining the positive behavioural effects it has on fuel expenditure. Savings from this measure should be reinvested in other policy measures to tackle the cold.

5.2 Raise the age-threshold of Winter Fuel Payments to 70

This will trim expenditure on the Winter Fuel Payment, while minimising the negative public health consequences.

5.3 Introduce an annual public health campaign linked to the Winter Fuel Payment to further influence cold-related behaviour

Given it already influences behaviour, the government could do far more to extract positive behavioural responses from receipt of the Winter Fuel Payment by explicitly linking it to an annual public health and awareness campaign.

This campaign – focusing on all older people and their families - should connect the payment to the health risks posed by the cold, to the range of positive cold-related behaviours identified for households in the Cold Weather Plan, as well as to the availability of other types of support, such as the Energy Company Obligation.

5.4 Formally reclassify Winter Fuel Payments as part of the State Pension for public accounting purposes

This will ensure the payments count towards the government’s ‘triple-lock’ guarantee to uprate the value of the State Pension, and in future, toward implementation of the Single-Tier State Pension from 2016.

5.5 Consider renaming Winter Fuel Payments as ‘Winter Warmth Payments’

If a public health campaign connected to Winter Fuel Payments is successful in improving cold-related behaviour in the older population, this may be helped further by renaming the Payment.

Beside changes to Winter Fuel Payments, a number of other key recommendations can be made:
5.6 Create a single national ‘at-risk’ register for the cold

The proliferation of different targeting regimes under clinical commissioning groups, Health and Wellbeing Boards, DWP, DECC and DH should be consolidated into a single national database coordinated by Public Health England, containing at-risk individuals referred from DWP, energy companies, CCGs and local authorities. This at-risk register should differentiate individuals - e.g. High, Medium, Low – in order that the most direct interventions can be targeted at those most vulnerable.

5.7 Build a national, differentiated risk register into the Cold Weather Plan

The Cold Weather Plan should in future specify different activities and interventions for households identified as being at High, Medium or Low risk on the national register.

5.8 Local performance measurement for excess winter deaths

Public Health England should monitor and publish data on how many individuals on the ‘at-risk’ register die each year, broken down by local authority area to increase public accountability in relation to councils, Health and Wellbeing Boards and clinical commissioning groups.

5.9 Build on the Cold Weather Plan by integrating it more closely with the work of CCGs and Health and Wellbeing Boards

The government should implement the recommendations of the Health Protection Agency, including:

- The profile of the Cold Weather Plan should be raised and prevention of excess winter deaths should be put on the agenda of Health and Well Being Boards and Local Health Resilience Partnerships;
- The Cold Weather Plan should be embedded in the Joint Strategic Needs Assessments of every local authority and should also engage GPs and CCGs;

5.10 Give clinical commissioning groups responsibilities for excess winter deaths

Even though GPs have more contact than any other professional with some individuals at risk of cold-related illness or excess winter deaths, CCGs have no responsibility for commissioning related services. This decision should be revisited, and CCGs should be given direct responsibility for commissioning services to address excess winter deaths and cold-related illness.

5.11 Enable clinical commissioning groups and Health and Wellbeing Boards to refer households for free home insulation under the Energy Company Obligation (ECO)

The Energy Company Obligation (ECO) seeks to provide free home insulation to those households at highest risk of fuel poverty, i.e. those with a low income and poorly insulated home. However, a key
problem for the scheme has been the difficulty of energy companies in identifying potentially eligible households.

In future, CCGs and HWBs should be able to refer individual households and communities to the ECO for free home insulation measures.

5.12 CCGs and Health and Wellbeing Boards should pilot more telecare remote monitoring of indoor temperature

Although telecare has traditionally been the domain of local authorities, CCGs should pilot the use of remote monitoring of indoor temperatures for at-risk individuals with long-term conditions.

5.13 Free energy for High-risk households at Level 2 and above Cold Weather Alerts

Although there have been a range of measures to reduce the cost of cold for the poorest households, tariff-switching schemes and similar interventions are wholly inadequate in relation to individuals at the highest risk of cold-related illness or death.

As such, those individuals identified as being at High risk on the national at-risk register should be automatically entitled to free energy – and informed of this – when the Met Office triggers a Level 2 or above Cold Weather Alert.

If free energy for at-risk groups proves too expensive, energy companies should be required to automatically switch individuals on the national register identified as being at risk of cold-related illness on to the best-value tariff.

5.14 Make excess winter deaths and cold-related illness a Ministerial priority

The government should convene a cross-departmental working group to focus on the issue, and appoint a Ministerial lead within the Cabinet to ‘own’ the issue of excess winter deaths.
Appendix: Case Study – ‘Making Every Contact Count’

This case study was published in the Cold Weather Plan\textsuperscript{64} and is reproduced here to demonstrate the type of locally driven multi-agency approach that is possible for tackling excess winter deaths.

The Making Every Contact Count (MECC) programme was developed in the Yorkshire and Humber region. It provides front-line staff with training on behavioural change interventions. It focuses on providing an informed choice for individuals but with the understanding of the wider determinants of health approach, and recognises that behaviour change is not easy for anyone.

The MECC programme understands that ‘affordable warmth’ fits within the context of healthy lifestyles. Partnership referral schemes are strengthened by using this approach. Hence the entire NHS workforce (front-line staff) across the region is being trained to have ‘healthy chats’ with patients on affordable warmth as well as on the usual subjects such as alcohol, diet, exercise and smoking, tailored to each individual. The NHS is investing in e-learning resources and a mobile app for staff which will include affordable warmth.

The research pilot undertaken for MECC illustrated that empowering staff with the confidence and competence to have these conversations is especially important, as personalising the information and understanding an individual’s motivation is critical to bringing about behaviour change.

Another approach is to train front-line staff on locally available multi-partnership referral schemes where the front-line worker completes a simple referral card on behalf of the client, then posts it into a central ‘hub’ from where the client is approached by the required agency to offer advice and/or support.

NEA, the leading affordable warmth charity, has previously worked with other partnership referral schemes across the country with front-line staff. NEA advocates asking three key questions at contact assessment stage to identify those who are at risk of living in fuel poverty and in cold homes.

The following questions are currently being asked by a wide number of agencies:

1. **Is your whole house warm in winter?**
   This question helps to identify how people are heating their home and whether they are limiting heating to certain rooms.

2. **Can you afford to heat your home to a comfortable level?**
   This question helps to identify whether occupants are meeting ‘minimum’ recommended temperatures all the time.

3. **Can you afford to pay your fuel bills?**
   This question will flag whether someone has sufficient income to spend on the fuel they need for warmth and comfort.
ONS (2012) Excess Winter Mortality in England and Wales, 2011/12 (Provisional) and 2010/11 (Final), London

Ibid


RAC Foundation (2011) Mortality statistics and road traffic accidents in the UK

http://www.bbc.co.uk/news/health-20539830

www.gov.uk

Source: DWP

Source: DWP


Source: DWP


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42 McKay S et al. (2008) *Debt and Older People, Help the Aged*, London

43 Marmot Review Team (2011) *The Health Impacts of Cold Homes and Fuel Poverty*, University College London


50 Source: NHS Commissioning Board


53 Adam S et al. (2012) *Pensioners and the tax and benefit system*, IFS, London


55 Source: government response to a Freedom of Information request from Age UK

56 Adam S et al. (2012) *Pensioners and the tax and benefit system*, IFS, London


