FUEL POVERTY
HOW TO IMPROVE HEALTH AND WELLBEING THROUGH ACTION ON AFFORDABLE WARMTH

A guide to delivering action on fuel poverty for public health professionals, health and wellbeing boards, and local authorities in England
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The UK Health Forum is a charitable alliance of professional and public interest organisations working to reduce the risk of avoidable non-communicable diseases by developing evidence-based public health policy and supporting its implementation through advocacy and information provision.

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INTRODUCTION TO THIS GUIDE

What is this guide, and who is it aimed at?
This guide aims to improve health and wellbeing through warm and healthy housing and reducing energy costs for vulnerable households. It aims to support public health teams and others working locally, such as members of health and wellbeing boards, and individuals and agencies involved in Joint Strategic Needs Assessment (JSNA) processes.

It is aimed particularly at directors of public health, clinical and non-clinical staff in public health teams, and other members of health and wellbeing boards. This resource refers to clinical commissioning groups, and primary care and social care professionals, reflecting the need for joint commissioning and the role played by these agencies in delivering affordable warmth interventions in partnership with the public health service. In addition, the responsibilities of directors of public health and public health teams include provision of expert advice to local authorities, NHS providers and clinical commissioning groups in tackling health inequalities. Although this resource is not specifically targeted at clinical commissioning groups and primary and social care staff, the information provided will be relevant and useful to them. The UK Health Forum is planning a supplementary resource specifically for these professionals.

Voluntary and community sector organisations are key partners for health agencies to effectively address fuel poverty and cold homes and are therefore referred to throughout this guide. While this resource is not specifically aimed at voluntary and community sector organisations, such agencies may find this guide helpful in understanding local levers, and public health commissioning and delivery arrangements, and how they can best support strategic planning and delivery of affordable warmth interventions for their beneficiaries.

This resource is located within the UK Health Forum’s free online resource Healthy Places. Healthy Places is aimed at those tackling public health issues in communities including local authorities, planners and public health professionals. It provides up-to-date information and guidance on policy and regulatory options that can have an impact on public health but that may be new, not fully understood, and/or traditionally overlooked in local planning and decision making. This guide, along with supporting documents, relevant resources, and sources of advice and support can all be found on Healthy Places.

Fuel poverty is a new addition to the Healthy Places portfolio, building on the National Heart Forum’s 2003 fuel poverty and health toolkit. It is an important dimension because of the continued public health crisis associated with cold homes, rising numbers of households struggling to meet their energy bills, and the need for coordinated and systematic policy, planning and regulation to ensure that everyone has a warm and healthy home.

For more information, see Resources section (starting on page 37) and a range of appendices (starting on page 39). Visit the Healthy Places website – www.healthyplaces.org.uk – where we regularly update the Resources section.

This guide aims to improve health and wellbeing through warm and healthy housing and reducing energy costs for vulnerable households.
Dedication
This resource is dedicated to the memory of Dr Noel Olsen, former trustee of the UK Health Forum and long-standing member of the government’s Independent Fuel Poverty Advisory Group. Noel is warmly remembered as a committed and passionate advocate for individuals and families affected by fuel poverty and cold homes, and those working tirelessly to eradicate it.

"Health professionals have the most contact with vulnerable people, and are often the most trusted confidants and advisors of isolated, old people. They also have the added burden on their workload caused by the effects of bad housing and cold, damp homes. Involving the NHS therefore provides the opportunity to target programmes to those most in need and most likely to benefit, but who are unlikely to apply on their own....What are now needed are local initiatives to develop effective and simple local solutions to fuel poverty. In future, society should protect vulnerable people so that they are not forced to live in miserable, cold, damp, poorly ventilated houses that they cannot afford to heat adequately to protect their health."


In future, society should protect vulnerable people so that they are not forced to live in miserable, cold, damp, poorly ventilated houses that they cannot afford to heat adequately to protect their health.
Summary

• In 2013, the government introduced a new definition for measuring fuel poverty in England (the Low Income High Cost indicator), which finds 2.4 million households to be fuel poor using the latest official statistics. Using the previous fuel poverty measure (the 10% indicator), the latest statistics indicate that there are 4.5 million households in fuel poverty in the UK of which around 3 million are in England.

• Fuel poverty refers to a household that cannot afford to heat its home to an adequate standard of warmth and meet its other energy needs in order to maintain health and wellbeing.

• Whether a household is in fuel poverty is determined by the interplay across three factors: the energy efficiency of the property, energy costs and household income.

• Fuel poverty and cold homes are health and wellbeing inequalities issues that require a cross-sector and multi-disciplinary approach, including strong leadership and action from all levels of the health system.

• By taking action on fuel poverty and cold homes, the health system can improve health, save lives, deliver on indicators in the national public health, NHS and social care outcomes frameworks, reduce the burden on the health system, and support climate change mitigation and adaptation.

• While definitions are helpful to assess the scale of the problem, and who is affected, they are not the only way to understand fuel poverty. The human experience of those affected – including those who may feel they are in fuel poverty but are not identified under the government’s indicator – is important in shaping effective strategies and action.

• The Cold Weather Plan for England 2013 recommends a minimum indoor temperature of 21 degrees in living areas in the daytime and a minimum 18 degrees night-time temperature for bedrooms in order to safeguard health and wellbeing.

• Those most vulnerable to fuel poverty and cold homes include the elderly, lone parents with dependent children, families who are unemployed or on low incomes, children and young people, disabled people, people with existing illnesses (physical and mental) and long-term conditions, and single unemployed people.

• Fuel poor households are more likely to live in energy inefficient homes across all tenures compared to non-fuel poor households. However, private tenants are at the greatest risk of severe fuel poverty owing to having lower than average incomes compared to owner occupiers and living in the least energy efficient properties compared to social housing tenants. 

Fuel poverty refers to a household that cannot afford to heat its home to an adequate standard of warmth and meet its other energy needs in order to maintain health and wellbeing.
A WHAT IS FUEL POVERTY?

Fuel poverty refers to a household that cannot afford to heat its home to an adequate standard of warmth and meet its other energy needs, in order to maintain health and wellbeing.

Whether a household is in fuel poverty is determined by the interplay across three factors:
- the energy efficiency of the property
- energy costs
- household income.

It is also influenced by factors such as:
- heating-related health needs
- occupancy levels related to the size of property
- attitudes to heating-related expenditure
- cold-related behaviours in the home; for example, strategies to compensate for lack of warmth
- housing tenure
- access to mains gas
- the external environment.

Currently used definitions
- The Low Income High Cost (LIHC) indicator is now the official fuel poverty indicator and classes a household as being in fuel poverty if its energy costs are above the average (median) for its household type and this expenditure pushes it below the poverty line.
- The 10% indicator measures fuel poverty as a need to spend more than 10% of household income to fulfil reasonable heating and cooking fuel requirements.

The Cold Weather Plan for England 2013 recommends a minimum indoor temperature of 21 degrees in living areas in the daytime and a minimum 18 degrees night-time temperature for bedrooms. It is recognised that appropriate indoor temperatures vary depending on the individual’s age, mobility, and overall health and wellbeing. Wider evidence gathered over the last 40 years suggests that indoor temperatures that are too cold (below 18 degrees) and too hot (above 24 degrees) can damage physical and mental health, reinforcing the need for a year round ‘seasonal’ approach to health morbidity and mortality.

FIGURE 1: The effect on comfort and health of exposure to varying living room temperatures

<table>
<thead>
<tr>
<th>Indoor temperature</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>21°C</td>
<td>Comfortable temperature for all, including older people, in living rooms during the day.</td>
</tr>
<tr>
<td>18°C</td>
<td>Minimum recommended night-time temperature for those with no health risk, although older and sedentary people may feel cold.</td>
</tr>
<tr>
<td>Under 16°C</td>
<td>Resistance to respiratory diseases may be diminished.</td>
</tr>
<tr>
<td>9-12°C</td>
<td>Exposure to temperatures between 9°C and 12°C for more than two hours causes core body temperature to drop, blood pressure to rise and increased risk of cardiovascular disease.</td>
</tr>
<tr>
<td>5°C</td>
<td>Significant increase in the risk of hypothermia.</td>
</tr>
</tbody>
</table>
B WHY DOES FUEL POVERTY MATTER TO THE HEALTH SYSTEM?

The basic entitlement to live in a warm, dry and healthy home is not being upheld for millions of individuals and families in England and across the UK. They cannot afford the energy required to heat their home adequately and, consequently, many suffer in cold, damp conditions that blight their health and wellbeing and significantly diminish their quality of life and life chances.

The impact on health and wellbeing and health inequalities of wider determinants such as income, housing and employment are well established in research and policy. Greater alignment of health and environmental agendas, together with an increased focus on preventing ill-health, are critical for addressing health inequalities.

Public health can tackle the problem of fuel poverty and cold homes by working in partnership with housing, environmental and energy services, the voluntary and community sector, and local residents to:

• improve health and wellbeing and reduce health inequalities
• save lives
• deliver on cold-related mortality and morbidity and fuel poverty indicators across all three national outcomes frameworks for public health, the NHS and social care in England
• reduce pressure on the health system and, in turn, reduce health-related costs
• contribute towards meeting the government’s fuel poverty and climate change targets

• support climate change adaptation which is vital to protect current and future health and wellbeing.

For more information, see Appendix A (on page 40). This summarises the indicators related to fuel poverty and cold homes across all the national outcomes frameworks for public health, NHS and social care.

Action on fuel poverty and cold homes can help deliver a sustainable health and care service by providing interventions that simultaneously improve health and reduce the burden on the NHS, public health and social care services. Less pressure on the health service may also decrease subsequent demand for valuable materials and energy, thereby reducing carbon emissions, saving money and, in the long term, reducing health inequalities. During 2013, the NHS Sustainable Development Unit consulted on a new sustainable development strategy for the entire health and care system which was launched in 2014.

Recognising fuel poverty as a concept
Fuel poverty as a concept emerged over 40 years ago. In 1991, Professor Brenda Boardman’s landmark paper provided the first definition for measuring fuel poverty as a need to spend more than 10% of household income to fulfil reasonable heating and cooking fuel requirements. This was later adopted by government in its first fuel poverty strategy in 2001, preceded by The Warm Homes Energy and Conservation Act (WHECA) in 2000 which gave England and Wales their first fuel poverty target. The government’s recent independent review of fuel poverty reasserted that it is a distinct and serious national problem.
While there are links to wider poverty issues that have an impact on broader health and wellbeing, fuel poverty requires a special focus because:
• not everyone on a low income is fuel poor – for example, low income households living in energy efficient properties that are easier and therefore cheaper to heat
• approaches to address fuel poverty are not just income-related – home energy efficiency improvements are a mainstay of affordable warmth strategies
• it is associated with specific illnesses and health conditions that have a more immediate impact on health outcomes than outcomes associated with poverty more generally
• it is possible to effect change on fuel poverty more quickly than with approaches to tackle income poverty
• capital expenditure, such as that needed to improve homes, can have a major impact on reducing fuel poverty; general poverty, on the other hand, mainly requires revenue expenditure.

For more information, see Appendix B (on page 41). This gives a short history of fuel poverty.

A new approach to tackling fuel poverty
In 2013, the UK government announced proposals that indicate a significant departure from the existing approach to tackling fuel poverty in England. Underpinning this change is the adoption by government of a new definition for fuel poverty – this is intended to provide a better measure of the extent and depth of fuel poverty compared to the original 10% indicator, and is an outcome of its independent review of fuel poverty. Devolved governments in Scotland, Wales and Northern Ireland intend to keep the 10% indicator (each use different assumptions as part of their calculations, for example occupancy and temperature standards). This may have implications for the delivery of policies in the devolved nations.

A new definition for fuel poverty
In his 2012 review of fuel poverty, Professor Sir John Hills recommended a new Low Income High Cost indicator to define fuel poverty whereby a household is classed as being in fuel poverty if its energy costs are above the average (median) for its household type and this expenditure pushes it below the poverty line. A fuel poverty gap formula is also used to estimate what a household’s energy bill would need to be (or how much its income would need to be) for the household to no longer be in fuel poverty. From 2014, national government policy, strategy and programmes will be based on the LIHC measure.

The experience of fuel poverty
It is important to remember that some households may ‘feel’ that they are in fuel poverty even if they are not categorised as such by the new Low Income High Cost measure. Evidence shows that whether a household feels able to afford to keep its home warm significantly affects health and wellbeing status, with considerable social and emotional burdens experienced by those struggling to pay their fuel bills. A health impact evaluation of the Warm Front scheme showed that the ‘psychosocial’ effects arising from not being able to afford fuel bills can have a greater impact on health than cold temperatures alone, and evidence suggests a strong link between fuel poverty and mental wellbeing.
The subjective dimension of fuel poverty is important, but often neglected. Whether a household is in fuel poverty is not decided solely by modelling or calculating income and expenditure in relation to energy costs. Equally relevant are people’s perceptions of affordability and whether they feel they are struggling to meet their energy bills each month. The stories and experiences of those in fuel poverty and cold homes help to build understanding of the issues and thereby develop effective policy and practice responses. Public health professionals working in communities are well placed to gather the everyday experiences of people in fuel poverty and, working with colleagues, ensure that these inform local strategic planning such as Joint Strategic Needs Assessment (JSNA) and health and wellbeing strategy development.

“Without engagement with fuel poverty stakeholder groups, particularly those living with fuel poverty on a daily basis, it is unlikely that an accurate picture of the extent, depth and experience of fuel poverty will be captured. Inevitably policies are designed to reduce reported fuel poverty figures, but measures based on expert opinions and objective data are unlikely to tackle the root causes of fuel poverty.

By exposing the subjective experiences of fuel poverty, engaging with those involved with tackling fuel poverty at all levels of intervention from practical to strategic policy and combining this with objective measures of fuel poverty, a more accurate and meaningful measure of fuel poverty can be created.”


C WHO IS IN FUEL POVERTY?

Large numbers of people in the UK are living in conditions which are perilously cold in winter. The latest official estimates for 2011 show that there are 4.5 million households in fuel poverty in the UK of which around 3 million are in England (3.2 million based on the 10% indicator and 2.4 million based on the Low Income High Cost indicator). Other statistical sources on the numbers of people in fuel poverty, such as those provided by the Association for the Conservation of Energy and Energy Bill Revolution, estimate that at the start of 2014 there were 6.59 million households in fuel poverty as originally defined under the 10% indicator, almost exactly one in four UK households, and up from 5.86 million at the start of 2013. They also indicate that there are 2.57 million children living in fuel poverty in the UK, of which 1.94 million are in England.

It is estimated that the number of households struggling with their fuel bills will increase further as a result of rising household energy bills, and falling income and welfare support, compared to the pace of energy price rises and a reduction in energy efficiency funding for the fuel poor. Under the 10% indicator, the unprecedented rise in energy prices over the last decade has tipped many more people into fuel poverty, including those who would not normally be classed as income poor.

Fuel poor households adopt a variety of coping strategies – some ration their consumption (spend less than 10% or more of their income on fuel, and
then suffer cold and damp homes). Some may spend 10% or more but go without other essential goods and services, or go into debt, and some adopt a mix of strategies. The preservation of self-esteem and dignity are principal concerns for people coping on low incomes who show huge determination and resilience in the face of hardship.20

Figure 2 shows the significant rise in the percentage of households in fuel poverty across England since 2004. Figure 3 illustrates how these percentages look after the Low Income High Cost indicator has been applied; it shows how, for 2011, the LIHC indicator depresses the apparent number of fuel poor households compared to the 10% indicator across every region. The LIHC indicator shows a smaller number of households in fuel poverty than the 10% indicator, but a larger number of people, because it includes a larger proportion of families, as described in Appendix C (starting on page 42).

### Those most at risk

Those most vulnerable to fuel poverty and the impacts of cold, damp homes are:

- older people – particularly those living on their own and/or in larger family homes
- lone parents with dependent children
- families who are unemployed or on low incomes
- children and young people
- disabled people
- people with existing illnesses and long-term conditions (physical and mental)
- single unemployed people.21
Housing tenure

Although they are not on the lowest incomes, fuel poor households occupying private dwellings need to allocate a greater proportion of their income to heating their home to an adequate standard and meeting their other energy needs, as illustrated in Figure 4. Private tenants are at the greatest risk of severe fuel poverty than owner occupiers and social housing tenants. This is because they have lower than average incomes compared to owner occupiers and live in the least energy efficient properties compared to social housing tenants.22

Energy efficiency across housing tenure

Fuel poor households are more likely to live in energy inefficient homes across all tenures compared to non-fuel poor households.

The energy efficiency of a property is measured using a Standard Assessment Procedure (SAP) rating, with a scale from 1 to 100 (the higher the rating, the more energy efficient a property). SAP values translate into band letters A–G on the Energy Performance Certificate. The most energy efficient homes are represented in band A (high SAP rating) and the least energy efficient in band G (low SAP rating).

For more information, see Appendix F (starting on page 53). This gives further explanation about energy efficiency.
AN INTRODUCTION TO FUEL POVERTY

Notes

"Meena is a 70 year old immobile widow. She solely relies on her 53 year old son to care for her. She has few social connections and she hardly has any friends visiting...Neither Meena or her son have any knowledge of how central heating controls in their home work. In addition they do not understand how tariffs work. Bills are paid by cash at the post office by Meena’s son. As a family they tend not to trust any information from outside of the local community apart from Meena’s GP.

As you approach Meena’s large terraced house it is clear that the doors and windows are old and it has a partially broken door lock. The house is damp and cold with patches of mould on the windows and doors. The kitchen is next to the lounge. The boiler is located above the kitchen shelves, which means you would need a ladder to reach the controls in order to change the settings.

Meena wakes in a cold bedroom, in a cold house...At 9am her son helps her get out of bed after which she sits in the chair by the bed. The temperature outside is very cold and there seems to be no difference between outside and inside temperatures."


This pen portrait documented as part of the Keep Warm in Later Life (Kwillt) project highlights the everyday experiences of and challenges facing older people living in fuel poverty and cold homes.23

There is a substantial and growing body of evidence that shows a close association linking cold homes, fuel poverty and poor health including the detrimental impacts on the physical and mental health and wellbeing of young and older people.24 Evidence relates to morbidity (illnesses/diseases) and mortality (vulnerability of death).

Public health, NHS and social care services working alongside other statutory and voluntary sector agencies and community groups can make a significant contribution to improving the lives of and outcomes for people like Meena who struggle every day with their physical and mental health and wellbeing as a result of fuel poverty and cold homes.

**A COLD-RELATED ILLNESSES**

**Summary**

- There is a substantial and growing body of evidence on the detrimental impact of fuel poverty and cold homes on the physical and mental health and wellbeing of young and older people.
- The physical health impacts most commonly experienced across the age range by those living in cold homes are circulatory diseases and respiratory illnesses.

There is a substantial and growing body of evidence that shows a close association linking cold homes, fuel poverty and poor health.
• The health and wellbeing impacts for children living in cold, damp homes can be seen across the age range and mainly relate to respiratory illness and mental wellbeing, as well as low infant weight gain.

• There is strong and growing evidence on the mental health and wellbeing impacts of fuel poverty and cold homes, and the significant benefits to mental wellbeing from tackling fuel poverty across the entire age range.

• Emerging analysis suggests that breaking the link between fuel poverty and stress can reduce risks such as those related to physical health.

Health effects on all age groups

Impacts on physical health and illness
The physical health impacts most commonly experienced by those living in cold homes are circulatory diseases and respiratory illnesses. Blood pressure rises in older people when they are exposed to temperatures below 12 degrees, increasing their risk of heart attack and strokes. Cold homes are more likely to be damp: this encourages the growth of mould which can cause and aggravate respiratory illnesses. Evidence has linked damp and mouldy homes with direct adverse effects on the physical and mental health and wellbeing of adults and children.25

The cold also reduces lung function which is a risk factor in triggering asthma attacks and chronic obstructive pulmonary disease (COPD), such as emphysema and chronic bronchitis.24 It was estimated in 2004 that the direct healthcare costs related to asthma were around £1 billion per annum. In 2002, the costs of GP prescriptions on their own were estimated to be £600 million a year.27

Cold indoor temperatures affect and worsen other conditions such as the common cold, flu, pneumonia, arthritis, rheumatism, and chronic and/or long-term conditions, and can also delay recovery from illness. Individuals in cold homes may also be more vulnerable to accidental injury in the home as a result of reduced strength and dexterity.29 The elderly are particularly vulnerable to injuries from falls.

Impact on mental health and wellbeing
There is strong evidence on the mental health and wellbeing impacts of fuel poverty and cold homes and the significant benefits to mental wellbeing from tackling fuel poverty, across the age range.29 There is increasing evidence to show that improving mental health has a positive effect on physical health and vice versa.30

Nearly all scientific studies that have monitored mental health have recorded significant and immediate improvements in mental health and wellbeing, with benefits maintained for at least one year, if fuel poverty is eliminated from the equation.31
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Figure 5: Circle of risk linking fuel poverty and mental health


Fuel poverty

Less disposable income

Increase in health-risk behaviours, eg. alcohol and/or tobacco consumption, overeating, etc.

Escalating levels of stress

Deterioration in physical health

Impaired immune, cardiovascular and hormonal functions

Stress associated with:
- Low income
- Cold home
- Damp and mould
- Stigma
- Worry about debt
- Worry about damage to health
- Lack of control
- Spatial shrink

Impaired mental wellbeing:
- Mood disturbance
- Anxiety
- Sleep disturbance
- Depression
- Inability to cope etc.
Early investigation in connection with a causal pathway associated with mental health, risk and resilience that links fuel poverty with human health (as shown in Figure 5), suggests that by breaking the link between fuel poverty and stress it is possible to reduce risks such as those to physical health. This seems to be backed up by data such as the health impact assessment of the Warm Front Evaluation.  

Research also points to positive social impacts from housing energy efficiency programmes such as increased community pride in the places where people live and social cohesion.

Health conditions as they relate to the life cycle

Infants, children and young people

The impacts on the physical and mental health and wellbeing of children and young people are still relatively neglected in public health policy. However, awareness is increasing as a result of dedicated research into their needs by advocates such as national children’s charities.

The health and wellbeing impacts for children living in cold, damp homes can be seen across the age range and include:

- Low weight gain in infants under three years old who are born into families who struggle to meet their energy bills. Infants and children in cold homes need to burn more calories to keep warm and maintain normal growth and development, but studies have shown that they are in fact consuming fewer calories in winter months as families ration food.
- 30% more likelihood of low income families not in receipt of winter fuel subsidies presenting to health services and hospitals in the child’s first three years of life, compared to families receiving fuel subsidies. These children are also 29% more likely to be underweight.
- 1.5 to 3 times more likelihood of children experiencing coughing and wheezing (symptoms of respiratory problems) and double the risk of asthma in children who have lived in a cold home for three years or more, compared to those living in warm homes. When children develop asthma they are likely to have it for a long time, if not for life. The UK has one of the highest incidences of childhood asthma symptoms in the world and a child is admitted to hospital every 18 minutes because of their asthma.
- A range of associated emotional and mental health and wellbeing issues, including quadruple the risk of multiple mental health problems in young people compared to those who have always lived in a warm home. This has been associated with the influence of fuel poverty on risk taking, for example early alcohol and tobacco use and truancy among adolescents as a consequence of seeking privacy outside the home. A systematic assessment of the mental health risks for children and young people living in cold homes is needed in order to understand the full impact on their mental health and wellbeing.

The health and wellbeing of children and young people is also affected by the difficult choices that they and their families face about whether to ‘eat or heat’ their home or risk falling into debt. A survey by Save the Children in 2011 found that nearly half of the 1,000 families that responded were considering rationing food so they could pay their winter energy bills, and around a third of parents on the lowest incomes said they couldn’t afford their
winter energy bills even if they went without other essentials. Over half the respondents were worried that living in a cold home would impair their children’s health.41

Children and young people’s learning could also be affected if they have no warm and quiet place to study or they need time off school due to cold-related illness.42 Studies measuring the effects of improved heating43 and ventilation44 systems in the homes of children with asthma have shown a reduction in school absence in winter because of their asthma and improvements in their asthma symptoms respectively.

These extensive health and social impacts demonstrate the potential long-term impact of fuel poverty and cold homes on children and young people’s wider outcomes and life chances and why a preventative approach is essential. The cost of making homes energy efficient is “small relative to lifetime savings made to the [health and] wellbeing of children and their families.”45

Older people
The main physical health and wellbeing risks for older people living in cold homes are cardiovascular and respiratory illnesses, both of which are associated with the majority of excess winter deaths each year. As noted, mental health and wellbeing is affected across all age groups and is an important aspect of health and wellbeing for older people living in fuel poverty and cold homes. Physical and mental health and wellbeing can be made worse by increased social isolation arising from a reluctance to invite friends and family into their home or because their family do not live nearby.46 In addition, the cold reduces strength and dexterity, and therefore increases the risk of accidents and injuries among the elderly, particularly falls. Living alone is also a risk factor in excess winter deaths.47

B COLD-RELATED DEATHS
Summary

• Excess winter deaths relate to the number of deaths observed in the winter months between December and March over the average for the rest of the year.

• The UK has one of the highest excess winter death rates in Europe with thousands of people dying needlessly every year because of excessive cold temperatures in their home during the winter months.

• Excess winter deaths are preventable. Other European countries see far fewer deaths each year because their homes are more energy efficient.

• Evidence points to a strong link between cold-related deaths and lower temperatures indoors. People living in the coldest quarter of homes have a 20% greater risk of dying than those in warm homes.

• In 2012–13, there were 31,100 excess winter deaths in England and Wales. Conservative estimates from the World Health Organization indicate that around 30% of excess winter deaths can be attributed to cold indoor temperatures; this means that around 9,330 people died in 2012–13 due to cold housing in the winter months.
• Excess winter deaths are highest among the elderly. In 2011–12, respiratory and circulatory problems were the most common causes of death in this age group.

• Alzheimer’s disease and dementia were also associated with a large number of excess winter deaths in 2011–12.

Excess winter deaths are the number of deaths observed in the winter months between December and March over the average for the rest of the year. The number of excess winter deaths each year is calculated from the number of deaths in the winter period (December to March) less the average number of deaths in the four months before (August to November) and the four months afterwards (April to July). Annual data on excess winter deaths fluctuates year on year but the trend is always that there are more deaths in the winter period.

The UK has one of the highest excess winter death rates in Europe with thousands of people dying every year because of excess cold temperatures in their home during the winter months. EU countries also see an increase in deaths in the winter period each year. However, the difference in the UK is much larger compared to colder European countries such as Sweden, in part because Swedish homes are energy efficient and therefore much easier to keep warm. Cultural, institutional and individual behaviours also play a role. Additionally, the proportion of people who cannot afford to keep their home warm is four times higher in the UK than in Sweden despite relatively low energy prices compared to other European countries.

Evidence points to a strong link between cold-related deaths and lower temperatures indoors with people living in the coldest quarter of homes having a 20% greater risk of dying than those in warm homes. These deaths can on the whole be prevented by ensuring people can keep warm and well indoors and outside, and encouraging them to take up preventative health treatment such as flu vaccines. It has been estimated that for every excess winter death there are eight hospital admissions and 100 GP consultations.

Older people living on their own, with existing illnesses and chronic conditions, poor mobility and in poor quality, harder to heat housing are most vulnerable to dying in winter.

In 2012–13, there were 31,100 excess winter deaths in England and Wales. A conservative estimate from the World Health Organization indicates that around 30% of excess winter deaths can be attributed to cold indoor temperatures, based on current figures, this means that around 9,330 people died in 2012–13 due to cold housing in the winter months. Mortality data for 2012–13 show a significant rise (29%) in excess deaths in this period compared to the previous winter, and deaths among the over-65s are greater than in the previous two

"More people die each year in the UK from the cold weather than die from traffic accidents."

years. Reasons given for this increase are a combination of cold weather and an extended period of influenza circulating.\textsuperscript{55}

Older people aged 75 and over are disproportionately represented in excess winter deaths each year, with deaths highest in those aged 85 and over. In 2011–12, respiratory and circulatory problems were the most common causes of death in this age group, accounting for 39.7% and 30% of all excess winter deaths respectively. This is attributed to cold temperatures affecting blood pressure and heart and lung health.\textsuperscript{56}

Alzheimer’s disease and dementia is shown as the third highest cause of excess deaths in 2011–12, accounting for 29.4% of all deaths. Deaths from this cause were highest in people aged 75 and over and more likely in this age group in winter than during the rest of the year. Possible reasons could be the greater risk among those with Alzheimer’s disease and dementia to respiratory illnesses and issues relating to self-care, particularly for those newly diagnosed.\textsuperscript{57}

Unlike fuel poverty, where the association with low income is implicit, there is limited evidence on the links between excess winter deaths and socio-economic status. The causal factors are not well understood but it has been speculated that one of the reasons may be that single pensioners on the lowest incomes are more likely to live in social housing which is, on the whole, more energy efficient than private housing.\textsuperscript{58} However, greater understanding is needed about how the impacts of wider inequalities on life expectancy might influence the representation of socio-economic status in population data on excess winter deaths in the oldest age group. Recent evidence relating to chronic obstructive pulmonary disease (COPD) found that factors associated with socio-economic deprivation, combined with cold weather in winter, contributed to an increased rate of COPD admissions to hospital among people in deprived circumstances compared to affluent people in winter than in summer.\textsuperscript{59}

\section{C THE HEALTH ECONOMIC CASE}

\textbf{Summary}

\begin{itemize}
  \item Costs to the NHS of treating the illnesses caused and exacerbated by cold homes are in the region of £1.36 billion per year.
  \item Economic analyses of both the costs incurred by the NHS, and the cost savings to the NHS in connection with fuel poverty and cold homes are less well developed. However, new research is underway and will increase the evidence base.
  \item Savings beyond those directly related to the NHS are also relevant, particularly to the public health service, such as those arising from improved mental wellbeing, increased mobility within the home, healthier lifestyles and greater social connection.
\end{itemize}

Costs to the NHS (primary care and hospital) of treating the illnesses caused and exacerbated by cold homes are in the region of £1.36 billion per year.\textsuperscript{60} A cost-benefit analysis by Professor Christine Liddell identified that investing £1 in improving affordable warmth delivered a
42 pence saving in health costs for the NHS.\(^6^1\) It has also been estimated that reducing hazards in poor housing could deliver £600 million of savings a year for the NHS.\(^6^2\)

Savings beyond those directly related to the NHS are also relevant, particularly to the public health service, such as those arising from improved mental wellbeing, increased mobility within the home, healthier lifestyles such as improved nutrition or physical activity, and greater social connection. It is important that these broader public health and social impacts are included within economic evaluations.\(^6^3\)

Economic analyses of both the costs incurred by the NHS as a result of health problems associated with cold homes, and the cost savings to the NHS from alleviating fuel poverty and cold homes, are less well developed largely because of the complexities associated with economic modelling and data collection.\(^6^4\) Professor Sir John Hills recommended that government should prioritise research to quantify these costs.\(^6^5\) However, new research in this area is growing. For example, the University of Central London and the London School of Hygiene and Tropical Medicine have been working with the Department of Energy and Climate Change to develop a new Health Impact of Domestic Energy Efficiency Measures (HIDEEM) model to quantify the health impacts from improved energy efficiency of properties.\(^6^6\) In the future, it may be possible to use these types of tools at a local level. The Building Research Establishment (BRE) has illustrated through cost-benefit analysis how local authorities can improve the return on their investment in making improvements to existing homes by mapping health risk hot spots.\(^6^7\)
Notes

29 Ibid.
32 Liddell. Ibid.
THE EFFECTS OF FUEL POVERTY AND COLD HOMES ON HEALTH AND WELLBEING


Ibid.


Ibid.

Ibid.


McAllister D et al [2013] Socioeconomic deprivation increases the effect of winter on admissions to hospital with COPD: retrospective analysis of 10 years of national hospitalisation data. Primary Care Respiratory Journal, 22(3), pp.296–299.


IV THE ROLE OF PUBLIC HEALTH PROFESSIONALS IN ADDRESSING FUEL POVERTY AND COLD HOMES

Summary

• Local authorities – through directors of public health, health and wellbeing boards and public health teams – are well placed to lead effective strategic planning and deliver action on fuel poverty and cold homes. Such groups carry responsibility for many of the areas that impact on health and wellbeing including public health, social care, planning, housing, energy efficiency and welfare.

• There is a range of relevant policy, planning and regulatory levers to support action on fuel poverty and cold homes for local authorities, health and wellbeing boards, and public health, social care and primary care teams.

• Local authorities have an important role as providers or partners in implementing energy efficiency programmes and providing energy advice for households.

• Membership of health and wellbeing boards should include a senior representative from the local housing sector.

“Oh my god, I can’t believe somebody is going to help me financially with my heating costs, it will make all the difference with being able to buy food or just have sandwiches for tea. It was so simple and they might be able to help with my boiler too. They are sending somebody round to check the house to see if they can make it more energy efficient. I still just can’t believe it, I feel shaky and like I’m going to cry any minute. Thank you all so much again.”

Single mother with three children aged under 6, privately owned property


A THE LOCAL POLICY FRAMEWORK TO TACKLE AND PREVENT FUEL POVERTY AND COLD HOMES

There is a range of health, environmental and social policies that support action on fuel poverty and cold homes. This section summarises the most relevant policy, planning and regulatory levers for local authorities, health and wellbeing boards, public health, primary care and social care teams.

For more information, see Appendix D (starting on page 46). This gives further details on the national policy framework.

Local authorities – through directors of public health, health and wellbeing boards and public health teams – are well placed to lead effective strategic planning and deliver action on fuel poverty and cold homes.
Public health
The transfer of responsibility for public health back to local authorities (upper tier and unitary) is an important opportunity for strategic coordination of council activities that determine people’s health and wellbeing. Action on fuel poverty spans a range of council responsibilities and is a good place for councils to start in meeting their health and environmental priorities. District councils are also brokering action on health and fuel poverty.

The Health and Social Care Act 2012 establishes health and wellbeing boards as the accountable body to improve the health of the local population and reduce health inequalities. They have strategic influence over commissioning decisions across healthcare, public health and social care, thereby supporting integrated commissioning. In addition to the prescribed membership for the health and wellbeing board, it is important to have representation from housing strategy to ensure housing and health impacts are reflected in local strategic planning and commissioning.

Ring-fenced funding of £5.45 billion for 2013–15 was made available to local authorities to address public health priorities, determined at the local level. In setting their priorities, local authorities must take into account the Public Health Outcomes Framework which has excess winter deaths and fuel poverty as indicators.

The Cold Weather Plan for England is produced annually by the Department of Health, Public Health England and NHS England. It recommends a series of steps for the NHS, local authorities, social care and other public agencies, professionals working with those at risk, and individuals, local communities and voluntary groups to ensure they are protecting the population from harm to health from the cold weather.

In 2011, and again in 2012, the Department of Health provided £20 million of Warm Homes Healthy People funding to local authorities to support the implementation of the Cold Weather Plan. Evaluations of the impact of this funding demonstrate how the distribution of relatively modest amounts of funding for local voluntary, community and caring agencies can have a substantial effect on tackling fuel poverty. The Department of Health, which ran the Warm Homes Healthy People fund in 2011 and 2012, stated that the fund would not be made available in 2013.

Clinical commissioning groups
Clinical commissioning groups are responsible for commissioning local healthcare services and their plans should align with local health and wellbeing strategies. Clinical commissioning groups will benefit from fuel poverty interventions through improved patient health and reduced demand for surgery appointments and hospital admissions. It is estimated that for every £1 spent on affordable warmth, a saving of 42p is delivered for the NHS. Further research is underway to better quantify the cost savings of fuel poverty interventions for the health service.

Social care
Preventative action on fuel poverty can also deliver on adult social care outcomes in The Care and Support White Paper and Adult Social Care Outcomes Framework. Such action will improve the lives of those with care and support needs by keeping them safe and well in their home (and out of hospital), delay and reduce...
the need for support, improve people’s experience of care, reduce social isolation and safeguard those who are most at risk, for example people with dementia.\textsuperscript{72} Local authorities can also help to reduce social care costs, which are currently putting considerable strain on their budgets, by delivering on these and other outcomes.

**Housing**

Upper tier local authorities have responsibility for housing strategy across all tenures, and affordable warmth should be a key component. Housing teams need to ensure they are connected into health and wellbeing boards, and wider planning and delivery on health, social care, welfare and household energy efficiency. The Housing, Health and Safety Rating System and Home Energy Conservation Act 1995 represent important powers that local authorities can use to deliver improved health and wellbeing for some of its most vulnerable households.

**Housing, Health and Safety Rating System (HHSRS)**

Introduced under the 2004 Housing Act, the Housing, Health and Safety Rating System enables local authorities to identify and address risks and hazards arising from problems in residential properties including category 1 hazards for excess cold.\textsuperscript{73} Challenges have been identified in connection with resourcing the enforcement of the standard by local authorities, as well as limitations on the energy efficiency standards in the HHSRS. However, recent examples of action by local authorities – such as the landmark tribunal decision in support of Liverpool Council that any home that cannot provide affordable warmth must be regarded as a category 1 hazard – demonstrate the opportunities for local authorities to use this power to tackle cold, damp homes in the private housing sector.\textsuperscript{74}

**Home Energy Conservation Act 1995 (HECA)**

In addition to their new public health responsibilities under the Home Energy Conservation Act 1995, local authorities are required to identify activities they can undertake to dramatically improve the energy efficiency of housing in their area. Such activities include helping to address fuel poverty and promote health through lowering bills and improving thermal comfort for households, as well as stimulating economic development and contributing to carbon emissions reduction targets.\textsuperscript{75}

For examples and case studies, visit the Healthy Places website – [www.healthyplaces.org.uk](http://www.healthyplaces.org.uk)

**Energy efficiency programmes**

Improving the energy efficiency of properties, and therefore reducing energy need among fuel poor households, is the best long-term and sustainable solution to eradicate fuel poverty and cold homes.\textsuperscript{76} Investment in energy efficiency can also deliver substantial environmental and economic benefits for communities.\textsuperscript{77} Warm Front, government’s energy efficiency programme, closed in 2013. However, local authorities have an important role as providers or partners in implementing energy efficiency programmes such as the Energy Company Obligation (ECO).

The Energy Company Obligation is an obligation that government has placed on energy suppliers to reduce
the UK’s energy consumption and support those living in fuel poverty by requiring energy suppliers to provide households with energy efficiency improvements. ECO is made up of three obligations: the Carbon Emissions Reduction Obligation, which will provide energy efficiency measures in harder to treat homes, such as those requiring solid wall or hard to treat cavity wall insulation; and the Carbon Saving Community Obligation and the Affordable Warmth Obligation, which together will deliver support to 270,000 low income and vulnerable households each year. Obligated energy suppliers have carbon savings and heating bill savings targets which they are legally required to meet by March 2015. New targets for March 2017 will be subject to consultation. For Affordable Warmth and Carbon Saving Community Obligation, it is the intention of the Department of Energy and Climate Change to ensure that current activity and ambition continue into the future.

For more information, see Appendix F (starting on page 53). This provides further details on energy efficiency measures, including the focus and eligibility of the Energy Company Obligation.

The Warm Home Discount Scheme is a fuel poverty policy under which energy suppliers are required to provide financial support with energy bills to vulnerable and low income households. The scheme provides assistance to over 2 million low income and vulnerable households annually, mostly as direct discounts off electricity bills.

For more information, see Resources section (starting on page 37). This gives details about how to access support from the Warm Home Discount Scheme.

In the absence of a large scale centrally government funded energy efficiency programme for vulnerable households, local authorities and the health sector play an important role in ensuring that available resources reach those who need them the most as well as making provision for additional support to meet the health and fuel poverty needs of their local population.

Many local authorities fund local energy advice services which can play an important complementary role to the national Energy Savings Advice Service, for example by providing advice on local schemes. Local authorities also have the ability to provide face-to-face advice in local centres or through home visits.

Delivery of welfare benefits

It is important that local authorities deliver the benefits for which they are responsible in an efficient and timely manner to ensure individuals and families in fuel poverty receive the financial help and support to which they are entitled. Local authorities can ensure that households have access to good quality advice on their entitlement to all benefits, grants and tax credits – whether delivered by the local authority, the Department of Work and Pensions, or the HMRC – such as the Cold Weather and Winter Fuel Payments which are intended to provide help with fuel costs, as well as providing advice and support on debt.
Planning

**Town and Country Planning Act 1990 – Section 106 (S106)**

Local authorities can use S106 to fund or co-fund improvements to housing. A local planning authority can use S106 to enter into a legally binding agreement or planning obligation with a landowner or developer over a related planning issue, which may include funding. For example, Waveney District Council has used the S106 agreement to secure funds to bring empty properties back into use by removing all category 1 hazards under the Housing, Health and Safety Rating System and undertaking energy efficiency improvements to the fabric of the buildings. From April 2014, S106 agreements can only be used to fund infrastructure directly related to the site for development and affordable housing.

**The Planning Act 2008 – Community Infrastructure Levy (CIL)**

The Planning Act 2008 introduced powers for local authorities to charge a community infrastructure levy on all development over 100 square metres, or one or more dwellings. The levy can be used to finance a range of physical, social or green infrastructure arising from increased development in an area. This is different to an S106 agreement which is specific to the site for development, its purpose being to ensure a development does not impact negatively on the local community.

**B THE MAIN INTERVENTIONS TO ADDRESS FUEL POVERTY AND COLD HOMES**

Interventions to tackle fuel poverty and cold homes span four main areas:

- Energy efficiency measures – increasing the energy efficiency of homes through loft and cavity insulation and efficient heating thereby improving thermal comfort and affordability of energy bills as well as future proofing homes against fuel poverty.
- Energy price support and switching – to ease the burden of high energy costs, for example through the Warm Home Discount, and to facilitate access to cheaper energy tariffs where possible.
- Providing advice and support that help people to overcome personal and structural barriers to keeping warm in their home such as problems with using heating controls.
- Maximising income – enabling access to welfare benefits to which individuals and families are entitled, such as benefits and tax credits, and providing advice on debt.

Strategic and delivery health professionals can support activity across all four of the above domains. Because of the complex and multi-faceted nature of fuel poverty, health professionals will need to feel confident and able to support commissioning and delivery of these interventions in an integrated way and through systematic partnership working in order to meet the needs of vulnerable households effectively.
C GUIDANCE FOR DIRECTORS OF PUBLIC HEALTH AND HEALTH AND WELLBEING BOARDS

This section sets out five key steps that directors of public health and health and wellbeing boards can take to start the journey towards a proactive and systematic approach to achieving affordable warmth for their local population.

1. Effective strategic leadership underpinned by cross-sector and interdisciplinary partnerships.
2. Develop a shared understanding of the problem and local need and a robust Joint Strategic Needs Assessment which can be translated into a deliverable and affordable warmth strategy included as part of the overall local health and wellbeing strategy and/or a stand-alone document.
3. Identify and prioritise those most at risk in the local population.
4. Integrate fuel poverty within health improvement programme planning and evaluate effectively.
5. Enable frontline staff to integrate affordable warmth within their everyday practice.

1. Effective strategic leadership underpinned by cross-sector and interdisciplinary partnerships

Effective action on fuel poverty and cold homes requires commitment at all levels of health service strategic planning and delivery underpinned by cross-sector and interdisciplinary partnerships. As authoritative public health experts, directors of public health with other members of health and wellbeing boards, play a critical role to champion and lead the development and delivery of affordable warmth and fuel poverty strategies. Collectively, they help to embed a preventative and social determinants approach to improving health within the culture and working practices of the local authority, NHS, and social care commissioners and providers. This includes embracing energy efficiency as a non-medical intervention that can deliver public health and medical outcomes. It is important that health and fuel poverty strategies are jointly owned – and delivered – by health and wellbeing boards and clinical commissioning groups, working in partnership with other local authority and statutory bodies, private sector, the voluntary sector and community groups.

Directors of public health may find it helpful to appoint a health improvement specialist from the public health team as an affordable warmth champion/advocate to work with them to stimulate and support systematic action on fuel poverty. This action would be backed by senior colleagues across the health and wellbeing board and local authority such as elected members with responsibility for public health and environmental sustainability portfolios who are connected to key strategic partnerships in the council.

General practitioners and clinical commissioning groups are important partners from commissioning and delivery perspectives and should be engaged through their responsibilities on the health and wellbeing board and wider duties to provide timely, high quality and patient centred healthcare services for communities. Clinical commissioning groups can benefit substantially from
investment in fuel poverty strategies and interventions through improved health outcomes for their patients and subsequent reduced burden on primary care, community and hospital services.

Additionally, the NHS Sustainable Development Unit’s new sustainable development strategy for the health and care system highlights the importance of tackling fuel poverty and reducing winter deaths.

In order to achieve an adequate standard of warmth for health and wellbeing, programmes need to focus on both increasing thermal warmth and affordability for fuel poor households, recognising the financial difficulties faced by those on low incomes. Improving the energy efficiency of homes does not automatically result in improved indoor temperatures. For example, households operating on a very tight budget may decide to redirect the money saved from reduced energy costs to other areas, choosing to ‘underheat’ their homes. However “any heat they decide they can afford goes further and keeps them warmer for longer.”

It is important that health and wellbeing boards prioritise fuel poverty and cold homes within Joint Strategic Needs Assessment processes and when they are developing their local health and wellbeing strategy. Directors of public health will need to provide strong leadership to ensure this happens, and it may be helpful to appoint a dedicated Joint Strategic Needs Assessment coordinator and/or team to oversee the production, ongoing updates, and to share information about JSNA data and products. The process of undertaking a Joint Strategic Needs Assessment requires significant investment of time and resources in order to access data and expertise located across

2 Develop a shared understanding of the problem and local need through a robust Joint Strategic Needs Assessment (JSNA)

“"We would encourage all partners involved in developing JSNAs to look at the broad determinants of health, such as housing, education and employment, as well as the physical and mental well-being of communities. If the JSNA remains focused on health services, public and social care alone, it may require fewer resources but will provide a limited analysis of the needs and assets of the community and may not engage or inform key partners, which is surely one of the key benefits.”

health, housing and other local authority departments and in the voluntary and community sector. Effective information-sharing is an important part of building a collective understanding of local need which should in turn enable more effective targeting of resources.83

NHS Confederation guidance identifies the need for Joint Strategic Needs Assessment products to be based on reports and analysis across a wide range of themes, which include:

- population level demography
- social, economic and environmental determinants of health
- behavioural determinants of health
- epidemiology
- service access and utilisation
- evidence of effectiveness
- community, patient and service user perspectives.84

As part of the JSNA, health and wellbeing boards will need to work with other local organisations and the wider community to develop a robust picture of need in relation to fuel poverty and cold homes. This will require sophisticated and effective collection and use of data and intelligence (quantitative and qualitative) to identify immediate and emerging issues, establish trends over time and predict future need. It will be essential to establish partnerships with clinical commissioning groups, GP practices, housing strategy, environmental health, social services, environmental planning, neighbourhood strategy, and the voluntary and community sector. It is also likely that a data-sharing agreement and/or framework to manage the transfer of information will be needed.85

Data sets on health, housing, and other social, economic and demographic factors, energy efficiency and utilisation of health and social care services, alongside community and user perspectives, can enable assessment of local fuel poverty need and risk from cold homes.

For more information, see Appendix E (on page 52). This gives further details and links.

A recent study by Building Research Establishment describes the potential for health risk hot spots to be identified in local authorities through geographic information system (GIS) mapping of local data relating to the reduction of harm from housing hazards identified in the Housing Health and Safety Rating System. This enables interventions to be targeted at those who need them most.86

Voices of the community

Under the Health and Social Care Act 2012, health and wellbeing boards have a duty to involve the community in JSNA and health and wellbeing strategy development. Listening to the experiences and concerns of local residents and the wider community is an important part of needs analysis, and strategy development and delivery. This also helps to build relationships with the community and, consequently, leads to greater civic ownership and engagement in local health and wellbeing issues. It is important that public health teams and health and wellbeing boards do not just rely on available data but listen to the experience of community members, encouraging their meaningful and ongoing participation in strategic planning and delivery.
The voluntary and community sector can support health and wellbeing boards effectively here as they will often be working with the most vulnerable and marginalised members of communities, offering a voice to those who are often neglected in local planning and decision making. Public health teams need to ensure that the timetable for JSNA development is communicated clearly and accessibly for voluntary and community sector organisations to allow them to facilitate early engagement and intelligence-sharing.

**Effective communication about the JSNA process and outputs**

Directors of public health, public health teams, and health and wellbeing boards will need to develop and implement comprehensive communications and dissemination plans to facilitate involvement by the full range of partners in the Joint Strategic Needs Assessment. This includes using local networks and forums to communicate information on the process, providing opportunities for organisations and individuals to share and discuss qualitative and quantitative data and intelligence, and communicating results in an accessible way.

**Innovative collection and use of data**

Through assessing fuel poverty need and risk in the local population, public health teams and health and wellbeing boards may identify the need for specific projects and commissions to improve collection and use of data in the future. A robust, inclusive and transparent process for the JSNA will also go a long way to increasing the quality of data available and prevent duplication in the future.

The NHS Confederation has identified five principles that underpin a good JSNA that can support effective assessment of health and fuel poverty need.

1. **No need exists in isolation** – the health and wellbeing of all citizens is shaped by social, economic and environmental determinants, and the challenge of persistent health inequalities cannot be addressed satisfactorily by a single agency alone.

2. **Partnership is part of the solution** – a single, agreed picture of health needs is essential for strategic planning among partners.

3. **A clear picture of needs means stronger partnerships** – JSNAs will enable partners to better understand and value the contribution of each organisation. An agreed, comprehensive picture of needs and assets demands that NHS and local authorities overcome professional and organisational differences and take joint responsibility for delivering services and improving outcomes.

4. **Demand is not the same as need** – building an objective picture of needs is fundamental to ensuring that appropriate services are provided. Use of services data is useful but it will not demonstrate the health requirements of a community.

5. **Each JSNA requires local design** – while there are common elements of a good JSNA, each process requires local engagement and leadership to adapt the process and product/s according to local circumstances.

3 Identify and prioritise those most at risk in the local population

Building on the JSNA, and working closely with NHS, social care and wider partners, enables directors of public health and health and wellbeing boards to develop effective strategies to identify and prioritise those most in need of affordable warmth interventions. This is complicated, because of the need for data-sharing and analysis as outlined, so a concerted and strategic effort is required to ensure available resources reach those in greatest need.

Greater understanding, identification and prioritisation of vulnerable residents can facilitate a more systematic approach to providing and encouraging take-up of key interventions to ensure affordable warmth (outlined later in this guide, starting on page 33) combined with other preventative healthcare such as annual flu vaccinations, healthy lifestyles advice and support, and preventing falls. Examples include assimilating affordable warmth interventions into integrated care pathways for health conditions such as Alzheimer’s disease, and respiratory and cardiovascular disease, and individual patient health and social care assessments such as the Single Assessment Process, Community Care Assessment and the Common Assessment Framework for children. The outcomes of interventions can be monitored and evaluated to enable potential problems and barriers to be identified and shared with strategic partners involved in managing and implementing local affordable warmth strategies. These data can also inform ongoing analysis linked to the JSNA.

Developing a local register of caring staff in the community

Department of Health guidance on how to systematically reduce the risk of seasonal deaths among the elderly at population level recommends creating “a list of caring staff in the community who manage caseloads of the vulnerable elderly.” This is recommended as an alternative to developing a new register of the most vulnerable people in communities which would be extremely complex and resource intensive to create.

This approach could be applied to both morbidity and mortality risks from cold homes in the local population. Drawing on the principles of this guidance, a designated coordinator could be appointed to maintain the list and manage communication across the network of staff. These staff could then be commissioned to develop their own list of patients who they deem most vulnerable to health problems and higher risk of death during the winter period. A coordination group, for example the local authority affordable warmth strategy group, could develop criteria to prioritise those most at risk.

The characteristics that need to be considered collectively include:

- age
- mobility
- whether living alone
- whether they have young children
- health vulnerability including illnesses, or long-term conditions
- self-reported fuel poverty or underspend on fuel
- energy inefficient homes
- benefit eligibility
• fuel affordability
• inability to adapt to weather conditions in order to keep warm.

4 Integrate fuel poverty within health improvement programme planning and evaluate effectively

Public health staff will want to identify how they can integrate issues relating to fuel poverty and cold homes, such as advice on energy efficiency and welfare benefits, into wider community health improvement programmes. Such action will complement year-round planning and commissioning in connection with health protection and harm reduction from cold weather, as recommended in the Cold Weather Plan. Examples include issues relating to healthy lifestyles, public mental health, accidental injury prevention, environmental sustainability, community safety and social exclusion. It also involves developing fuel poverty prevention programmes targeted at particular groups and settings, such as children’s centres, schools, children’s residential and public care, day care centres and wider community provision.

Assessing and using evidence and good practice on affordable warmth interventions

Knowing how and where to access wider evidence and guidance on the practical delivery of affordable warmth interventions can be difficult because of a lack of robustly evaluated local programmes and portal for collecting and disseminating this type of evidence, and the challenges of scaling up relatively small interventions. Reviewing this starter list of documents may be helpful as part of health improvement planning.

For more information, see Resources section (starting on page 37).

• Public Health England Warm Homes Healthy People Fund evaluation 2012–13
• Keep Warm in Later Life (Kwillt)
• Going Local, Consumer Focus
• Winter Warmth England.

Evaluating the impact of affordable warmth interventions is important to understand what works best, assess cost benefits and value for money, inform future commissioning and provision of services, and contribute to the evidence base on what works. However, adequate resourcing, expertise and a long-term view are required to evaluate effectively. In the absence of national guidance to evaluate affordable warmth interventions, it may be useful to consider the following:

• Ensure that monitoring and evaluation are factored into the commissioning and delivery of interventions from the start, and that providers are given the support they need to evaluate their work effectively. It is important to recognise the challenges of resourcing robust evaluation, particularly for small voluntary sector organisations.
• Be clear on the target group for the intervention. Evidence indicates that the greatest gains from affordable warmth interventions are achieved within targeted populations.
• Evaluation, analysing both qualitative and quantitative data, should focus on measuring intervention outcomes not just the numbers of people reached or the number of measures provided.
• Cost-benefit analysis relating to health and social outcomes of interventions can build the case for investment in affordable warmth interventions.

5 Enable frontline staff to integrate affordable warmth within their everyday practice

Fuel poverty has previously been referred to as a public health crisis related to extreme weather events. A more proactive and systematic annual ‘seasonal health’ approach is needed to reflect the ongoing changes in weather patterns and events in the UK as a result of climate change, helping to deliver long-term improvements in public health and reduce health inequalities.

"Reducing excess winter illness and death is not something that can be tackled in the winter alone. It requires a long-term strategic approach by Health and Well-being Boards, directors of public health and commissioners to assess needs and then commission, plan and implement interventions. Action to reduce cold-related harm should be considered core business by Health and Well-being Boards and included in JSNAs and Joint Health and Well-being Strategies."


Health professionals will need to know about referral networks for vulnerable patients and the scope of grants available for home improvements. Training should include materials for health professionals to use in their daily work with patients such as temperature cards, winter wellness packs, and general information about local and national advice and support. Directors of public health should also consider how to support professionals to manage any gaps in support or eligibility criteria that might limit the amount of support an individual can receive from external agencies, which might potentially undermine the confidence of health professionals when referring their patients to services.

Advice and support can also be disseminated through relevant public health mailings such as those related to implementation of the Cold Weather Plan. One example is information about the flu vaccine, displayed in health
services such as GP practices, hospitals and community settings, and promoted through local newsletters, newspapers and radio.

Referral networks
Many local authorities have set up affordable warmth and seasonal health single point of referral schemes to help people to access government grants and benefits and a range of national and local support. These are delivered through partnerships across frontline staff, voluntary and community sector organisations, and local contractors in order to identify those most in need and to enable them to access support. The Consumer Focus report Going Local brings together some of the learning from implementation of referral networks across the country which may be helpful to public health teams and health and wellbeing boards.

“I would recommend that any local authority looks at setting up or facilitating an affordable warmth referral network. There are lots of sources of help and support, and a network like this can help ensure that this reaches the households who need it. Working with other stakeholders like the NHS and Citizens’ Advice Bureau has multiple benefits in terms of raising awareness of fuel poverty and helping to identify those in need of help.”


It is important that frontline health professionals know about these schemes, as well as national support, so they can offer relevant and timely advice, support and referral for vulnerable patients.

For more information, see Resources section (starting on page 37). This gives details of available local and national support.

Where such a scheme does not exist locally, directors of public health and health and wellbeing boards may wish to consider this approach as part of their affordable warmth strategy.

For more information, visit the Healthy Places website – www.healthyplaces.org.uk. See also UK Health Forum guidance for primary care practitioners – Tackling Cold Homes, Ill-health and Fuel Poverty via Primary Care.

Recommended actions for directors of public health and health and wellbeing boards

- Directors of public health, supported by the health and wellbeing board and leader of the council, to champion and lead the development and delivery of a systematic and comprehensive approach to addressing fuel poverty and cold homes, underpinned by the best scientific evidence, a robust Joint Strategic Needs Assessment and multi-disciplinary partnerships.

- Lead the development of an affordable warmth strategy and implementation group (that reports directly to the health and wellbeing board), working in
partnership with other local authority and statutory bodies, NHS providers, private sector, voluntary organisations and community groups to ensure joint ownership.

- Appoint a health improvement specialist from the public health team as an affordable warmth coordinator or advocate to help stimulate and support systematic action on fuel poverty backed by senior colleagues across the health and wellbeing board and local authority.

- Ensure a comprehensive, inclusive and transparent process to assess fuel poverty need as part of the Joint Strategic Needs Assessment. This includes allocating sufficient resources for effective management of JSNA processes, and data collection and use across a wide range of stakeholders.

- Set up systems for proactive sharing through the public health team and health and wellbeing board and wider strategic partnerships of key issues that are acting as barriers to achieving affordable warmth for vulnerable residents, thereby informing long-term planning on fuel poverty.

- Secure commitment to pooled funding from local authorities, clinical commissioning groups, energy providers and other organisations for affordable warmth interventions and promote the importance of health vulnerability as a criteria for energy efficiency investment with local providers.

- Public health staff to integrate affordable warmth into wider community health improvement programmes.

- Improve, develop and commission referral systems or networks to ensure that the most vulnerable households and those in urgent need receive timely and relevant interventions to protect and improve their health and wellbeing.

- As expert advisers to clinical commissioning groups and NHS providers, directors of public health to provide the latest evidence to clinical commissioning group commissioners, GPs, health visitors, district nurses and other primary care professionals on the proven link between fuel poverty, cold homes and health problems, and the cost-benefits of tackling fuel poverty.

- Work with key partners to ensure a systematic approach to identifying those most vulnerable to fuel poverty and cold homes, and prioritise receipt of affordable warmth support.

- Provide ongoing training and support to frontline health staff to ensure they are confident and competent in delivering health improvement through provision of information, advice and support on affordable warmth.
Notes

88 Ibid.
89 Ibid.
A full and regularly updated list of resources is also available on the [Healthy Places](#) website.

**Core resources**
National data and statistical sources for England and the UK are included in [Appendix E](#) (on page 52).

- **Age UK: Winter Wrapped Up: A guide to keeping well and staying warm in winter**
- **Chartered Institute of Environmental Health: Good Housing Leads to Good Health. A Toolkit for Environmental Health Practitioners**
- **Local Government Association: Reducing harm from cold weather: local government’s new public health role**
- **National Energy Action: The UK Fuel Poverty Monitor 2013**
- **National Institute for Health and Care Excellence: guidance on excess winter deaths and illnesses**
- **Public Health England: Cold Weather Plan for England 2013**
- **Public Health England: Evaluation Report: Warm Homes, Healthy People Fund 2012 to 2013**
- **UCL Institute of Health Equity: The health impacts of cold homes and fuel poverty**

**National government programmes and schemes**
- **Better Care Fund**: a single pooled budget to support health and social care services to work more closely together in local areas.
- **Big Energy Saving Network**: scheme for voluntary and community sector to undertake outreach to vulnerable consumers on energy saving.
- **Cold Weather Payment**: government website on eligibility and how to claim.
- **Energy Company Obligation (ECO)**: subsidy from energy suppliers to provide home energy efficiency improvements for those most in need and for properties that are harder to heat.
- **Energy Saving Advice Service (ESAS)**: centralised government-funded telephone advice service that signposts callers to a wide range of organisations that can help install energy-saving measures in their homes and businesses and reduce their fuel bills. T 0300 123 1234
- **Home Heat Helpline**: advises people who are worried about paying their energy bills and keeping warm during the winter. T 0800 33 66 99
- **Home improvement agencies**: local, not-for-profit organisations that assist vulnerable home-owners and private sector tenants who are older, disabled or on a low income to repair, improve, maintain or adapt their homes.
The Warm Home Discount: provides energy price support. T 0845 603 9439

Winter Fuel Payment: government website on eligibility and how to claim. T 0845 915 15 15

Organisations and campaigns
Key organisations, agencies and advocacy groups involved in eliminating fuel poverty.

Organisations
Association for the Conservation of Energy
Carbon Action Network
Centre for Sustainable Energy
Chartered Institute for Environmental Health
Citizens Advice Bureaux
Consumer Futures
Department of Energy and Climate Change
Department of Health
Friends of the Earth
Fuel Poverty Advisory Group
Local Government Association
National Energy Action
Public Health England
Turn 2 Us

Campaigns
Age UK “Spread the Warmth”
End Fuel Poverty Coalition
Energy Bill Revolution
Fuel Poverty Action
National Right to Fuel Campaign
Who benefits campaign

Further research and resources

Cochrane review: impact of housing improvements on health.

Going Local, Consumer Focus: review of fuel poverty activity in local authorities including referral schemes.

Kwillt: Keep Warm in Later Life Project: explores the everyday experiences of older people living in fuel poverty including contextual and attitudinal factors and barriers that need to be taken into account when planning services and for this group.

Let Us Switch: report by Church Action on Poverty. Available at: http://www.church-poverty.org.uk/switch

Local Government Association: guidance on fuel poverty for local authorities.

Winter Warmth England: offers a range of information and support for keeping people warm and well in winter.
APPENDICES
## APPENDIX A

### NATIONAL OUTCOME INDICATORS LINKED TO ACTION ON FUEL POVERTY AND COLD HOMES ACROSS THE ENTIRE HEALTH AND CARE SYSTEM

<table>
<thead>
<tr>
<th>National Outcomes Frameworks</th>
<th>Public health</th>
<th>NHS</th>
<th>Social care</th>
</tr>
</thead>
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<td>Domains</td>
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<tr>
<td>Bold text denotes shared indicators.</td>
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<tr>
<td>Indicators</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Numbering corresponds to indicators in the specific National Outcomes Frameworks.</td>
<td>1.1</td>
<td>1a</td>
<td>1a</td>
</tr>
<tr>
<td>1.1 Children in poverty</td>
<td><strong>1.1</strong> Potential Years of Life Lost (PYLL)</td>
<td>1a Social care-related quality of life:</td>
<td>from causes amenable to healthcare (adults and children and young people)</td>
</tr>
<tr>
<td>1.2 School readiness</td>
<td><strong>1.2</strong> Life expectancy at 75 (males and females)</td>
<td>• proportion of service users who have control over their daily life</td>
<td></td>
</tr>
<tr>
<td>1.3 Pupil absence</td>
<td>2 <strong>2 Health related quality of life for people with long term conditions:</strong></td>
<td>• proportion of service users and their carers who reported that they had as much social contact as they would like.</td>
<td></td>
</tr>
<tr>
<td>1.9 Sickness absence rate</td>
<td>• Reducing time spent in hospital by people with long term conditions:</td>
<td>• Earlier diagnosis, intervention and reablement means that people and their carers are less dependent on intensive services</td>
<td></td>
</tr>
<tr>
<td>1.17 Fuel poverty</td>
<td>• Enhancing quality of life for people with long term conditions:</td>
<td>• Dementia – a measure of effectiveness of post-diagnosis care in sustaining independence and improving quality of life</td>
<td></td>
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<tr>
<td>1.18 Social isolation</td>
<td>• Enhancing quality of life for people with long term conditions:</td>
<td>3 People who use social care and their carers are satisfied with their experience of care and support services</td>
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<td>2.1 Low birth weight of term babies</td>
<td>• Reducing time spent in hospital by people with long term conditions:</td>
<td>• Improving people’s experience of integrated care</td>
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<tr>
<td>2.11 Diet</td>
<td>• Enhancing quality of life for people with long term conditions:</td>
<td>• People know what choices are available to them locally, what they are entitled to and who to contact when they need help</td>
<td></td>
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<tr>
<td>2.23 Self-reported well-being</td>
<td>• Enhancing quality of life for people with long term conditions:</td>
<td>• People, including those involved in making decisions on social care, respect the dignity of the individual and ensure support is sensitive to the circumstances of the individual</td>
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<tr>
<td>2.24 Falls and injuries in the over 65s</td>
<td>• Enhancing quality of life for people with mental illness</td>
<td>4 People are protected as far as possible from avoidable harm, disease and injuries</td>
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<td>3.3 Population vaccination coverage</td>
<td>3a Emergency admissions for acute conditions that should not usually require hospital admissions</td>
<td>• Enhancing quality of life for people with long term conditions:</td>
<td></td>
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<tr>
<td>3.6 Public sector organisations with board-approved sustainable development management plan</td>
<td>3b Emergency readmissions within 30 days of discharge from hospital</td>
<td>• Reducing time spent in hospital by people with long term conditions:</td>
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<tr>
<td>3.7 Comprehensive, agreed inter-agency plans for responding to public health incidents</td>
<td>• Preventing lower respiratory tract infections in children from becoming serious</td>
<td>• Ensuring people have a positive experience of care and support</td>
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<tr>
<td>4.3 Mortality from causes considered preventable</td>
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<tr>
<td>4.4 Under 75 mortality from all cardiovascular diseases (including heart disease and stroke)</td>
<td>• Helping older people to recover their independence after illness or injury</td>
<td>• Ensuring people have a positive experience of care and support</td>
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<tr>
<td>4.7 Under 75 mortality from respiratory diseases</td>
<td>4a Patient experience of primary care</td>
<td>4 People are protected as far as possible from avoidable harm, disease and injuries</td>
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<tr>
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<td>4b Patient experience of hospital care</td>
<td>• Ensuring people have a positive experience of care and support</td>
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<tr>
<td>4.11 Emergency readmissions</td>
<td>• Improving hospitals’ responsiveness to personal needs</td>
<td>4 People are protected as far as possible from avoidable harm, disease and injuries</td>
<td></td>
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<tr>
<td>4.13 Health-related quality of life for older people</td>
<td>• Improving children and young people’s experience of healthcare</td>
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<tr>
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<td>• Improving people’s experience of healthcare</td>
<td>4 People are protected as far as possible from avoidable harm, disease and injuries</td>
<td></td>
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<td>4.15 Excess winter deaths</td>
<td>• Improving people’s experience of integrated care</td>
<td>• Ensuring people have a positive experience of care and support</td>
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**FUEL POVERTY HOW TO IMPROVE HEALTH AND WELLBEING THROUGH ACTION ON AFFORDABLE WARMTH**

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**Safeguarding adults whose circumstances make them vulnerable and protecting them from avoidable harm**
The scale of research, policy and practice relating to fuel poverty continues to trigger intense debate, leading to greater awareness of fuel poverty as a distinct health inequalities and social and environmental justice issue.\(^1\)

Factors influencing the existence of fuel poverty can be dated back to early building practices in the UK where industrialisation drove mass construction of cheaper housing which lacked the necessary features for ensuring thermal comfort and warmth, the majority of which now make up the UK’s ‘hard to heat’ housing stock. In addition, the UK took longer to embrace more efficient heating systems such as central heating compared to its European counterparts. The UK’s temperate climate and building regulations contributed to attitudes in favour of ventilation and fresh air as opposed to insulation and warmth. Thermal regulations are a relatively recent development, coming into force in the mid 1960s.\(^2\)

Fuel poverty as a concept began to be shaped in the 1970s and 80s. In 1991, Professor Brenda Boardman provided the first definition for measuring fuel poverty as a need to spend more than 10% of household income to fulfil reasonable heating and cooking fuel requirements. Government first embraced fuel poverty as a concept in 1997, and in 2000 the Warm Homes Energy and Conservation Act (WHECA) came into force, giving the UK (England and Wales) its first fuel poverty target. In 2001, government produced its first fuel poverty strategy, adopting the 10% threshold. It is argued that the decision to adopt a threshold based on old data resulted in an under-estimation of fuel poverty prevalence and, consequently, distorted assessments of the effectiveness of local programmes which could not match the actual scale of the problem.\(^3\)

It has been suggested that fuel poverty is in itself a symptom of a problem caused largely by poor housing conditions – the UK’s old, poor quality and energy inefficient housing stock.\(^4\) The alternative term ‘energy poverty’ is emerging which recognises that cold homes and fuel debt are caused by households being unable to afford or access adequate energy services to meet their health and wellbeing needs.\(^5\)

At the time of writing, government is setting a new target to address fuel poverty that will be established through secondary legislation. There remains a legal duty on the Secretary of State to adopt a fuel poverty strategy to meet the new target. The previous fuel poverty target set by government was to eliminate fuel poverty, as far as reasonably practicable, by 2016.\(^6\) Government has announced that the new target will focus on improving the energy efficiency of fuel poor homes.

Notes
2. Ibid.
3. Ibid. p.10.
Based on the revised official statistics for fuel poverty in 2011 using the Low Income High Cost indicator, the largest number of households in fuel poverty consists of couples and lone parents with dependent children (40%). People over 60 now account for around a quarter of all fuel poor households in England; this was previously over half using the 10% indicator. Figure 6 shows the composition of fuel poor households based on the new LIHC indicator.

The reasons given for this change are that younger family households (under-25s age group) have a greater likelihood of fuel poverty because of lower incomes and a large proportion (two-thirds) of these households live in private rented properties that are less energy efficient, thereby increasing heating fuel costs. Over three-quarters of people over 60 own their property and therefore have reduced housing costs and higher incomes compared to the other age groups. However, the average fuel poverty gap (the difference between what a household’s energy bill would need to be or how much their income would need to be for them to no longer be in fuel poverty) is much greater in households where the oldest person is aged 60 years or over. (The exception is households where the oldest person is under 25 years.) This gap is around £503, compared to £355 for households where the oldest member is aged 25-34 years. Under the LIHC indicator, while older people are identified as less likely to be in fuel poverty, those that are in fuel poverty are more likely to be in severe fuel poverty.

Infants, children and young people
Children make up a substantial proportion of people in fuel poverty in the UK. Recent analysis indicates that more than one in 10 families with dependent children are in fuel poverty in England. Recently updated statistics using the original definition of fuel poverty (10% measure) indicates that at the beginning of 2014, there were 2.57 million children in fuel poverty in the UK. Of this figure, 1.94 million are in England. It is estimated that 1.44 million families are in fuel poverty in the UK, a rise of 17% (290,000 families) since the start of 2013. In England, the number of families with dependent children in fuel poverty has reached 1.07 million and, of
these, 961,000 have children under the age of 16, and 456,000 have children under the age of 5.3 4

Under the new Low Income High Cost fuel poverty measure, it is estimated that there are 2.23 million children in fuel poverty in England, 290,000 more children than calculated using the original definition.

**Disabled people**
The needs of disabled people have been neglected within research and policy making on fuel poverty. However, evidence indicates that disabled people or families with a disabled person or someone with a long-term illness are at greater risk of fuel poverty due to lower incomes and the additional unavoidable living costs that they face such as those related to care support, mobility, communication aids and health-related heating needs.5 The extent of fuel poverty among disabled people is often under-estimated because disability benefits are counted as disposable income, despite the fact that these benefits are meant to cover the additional costs associated with disability.6 The University of York is carrying out research to increase understanding and inform policy development in relation to disability and fuel poverty.7

**Black and minority ethnic communities**
Many black and minority ethnic households in England and across the UK are at risk of fuel poverty and cold homes owing to the greater likelihood of low incomes and living in private rented accommodation,9 which is generally less energy efficient than other housing tenure, and greater language and cultural needs that may mean they experience barriers to accessing mainstream services and support. Programmes aimed at supporting black and minority ethnic households have provided valuable learning on how to plan and deliver support effectively to meet their needs; this highlights the importance of building relationships with residents through face-to-face contact and the need for an in-depth understanding of the issues faced by black and minority ethnic communities.9 Voluntary and community sector agencies will be able to help health and social care agencies provide affordable warmth support to black and minority ethnic communities.

**Off-gas grid households**
Fuel poverty is much higher among households using non-gas heating fuels such as wood, electricity, oil, liquefied petroleum gas (LPG) and bottled gas, compared to households using gas heating across all three countries.10 Over a quarter (29%) of the 2 million English homes not connected to the gas grid are fuel poor.11 These households will pay substantially more to heat their homes compared to similar households using mains gas.12

**Gypsy and traveller communities**
There is a dearth of research on the needs of gypsy and traveller communities despite their vulnerability to fuel poverty. Many of the sites where gypsy and traveller communities live are not covered by local authority housing standards and regulations despite paying council tax and rent. They are also likely to be paying a premium for their fuel costs. Gypsy and traveller communities are often in poor health and disconnected from mainstream services. In addition, there are wider issues relating to park homes which are becoming more common as a result of the housing crisis.13
Fuel poor households in rural areas

To date, policies and programmes have struggled to meet the specific needs of fuel poor households in rural areas, particularly those not connected to the mains gas grid, despite the number of those affected increasing more quickly compared to urban areas.14

People living in rural areas are at greater risk of fuel poverty because of:

• limited access to the mains gas network and therefore paying more for their energy
• a higher proportion of older ‘hard to treat’ properties, such as those with solid walls (which makes cavity wall insulation impossible) and detached houses, which leads to greater heat loss
• a higher proportion of people on lower incomes compared to urban areas
• a lack of affordable good quality housing for those on low incomes.15

Other influencing factors include lower benefit take-up and under-occupancy because of single older people living in larger homes that are more difficult to heat. In addition, there is a dearth of advice and support for households on how they can access cheaper energy; this is part of a larger problem of how to provide adequate information and support to relatively isolated homes dispersed across a wide geographical area. Pockets of wealth can also conceal areas of rural deprivation and, therefore, fuel poverty need.16 17
Notes

2 Ibid.
15 Ibid.
16 Ibid.
APPENDIX D

THE NATIONAL POLICY FRAMEWORK RELATING TO FUEL POVERTY AND COLD HOMES

There is a range of health, environmental and social policies that support action on fuel poverty and cold homes. This Appendix summarises those most relevant to local authorities, health and wellbeing boards, and public health and primary care teams.

Health and wellbeing

Health and Social Care Act 2012
Under the Health and Social Care Act 2012, the Secretary of State for Health is required to reduce health inequalities – the avoidable and unfair differences in health between people in different social circumstances – along with other parts of the health system such as clinical commissioning groups.

Public Health Outcomes Framework
The Public Health Outcomes Framework for England 2013–2016, produced by Public Health England and the Department of Health, identifies reducing fuel poverty as one of its key indicators to address the wider determinants of health. Reducing illness and cold-related deaths from cardiovascular and respiratory diseases are also identified as indicators against which the public health system should deliver improvements. Twenty of the 66 outcomes in the framework can be linked to fuel poverty and cold homes.

NHS Outcomes Framework and Social Care Outcomes Framework
The Public Health Outcomes Framework also sits alongside the outcomes frameworks for the NHS and social care, reflecting the entire delivery system. The NHS Outcomes Framework 2013–2014 describes the outcomes and indicators that the NHS Commissioning Board is required to deliver against in order to meet its responsibilities to improve health outcomes. The Adult Social Care Outcomes Framework includes indicators relating to keeping people safe and well in their home (and out of hospital) and reducing social isolation. There are a number of complementary and shared indicators across all three frameworks, many of which relate to fuel poverty and cold homes. The alignment across these three frameworks aims to facilitate a holistic approach to improving health across the entire system. For example, reducing premature mortality is an indicator shared by both the public health and NHS outcomes frameworks.

The Cold Weather Plan
The Cold Weather Plan for England is produced annually by the Department of Health, Public Health England and NHS England. It aims to “prevent avoidable harm to health, by alerting people to the negative health effects of cold weather, and enabling them to prepare and respond appropriately.”

In 2011, and again in 2012, the Department of Health provided £20 million of Warm Homes Healthy People funding to local authorities to support the
implementation of the Cold Weather Plan. An Age UK evaluation undertaken through its local services identified that the funding was a valuable resource that had enabled Age UK branches around the country to reach and assist many more old people during the winter. Other outcomes included raised awareness of the health risks, more energy assessments, greater collaboration across the health and voluntary sector, and increased volunteering.6 Public Health England’s evaluation of Warm Homes Healthy People reinforced the need for greater health service engagement in affordable warmth initiatives. Government funding for the Warm Homes Healthy People fund stopped in 2012 on the basis that local initiatives can be funded through the £2.6 billion ring-fenced public health funding devolved to local authorities.

Making every contact count
‘Making every contact count’ is about health professionals using every opportunity to talk to individuals about improving their health and wellbeing. It was a recommendation of the NHS Future Forum which reported in 2012. It is relevant to fuel poverty and cold homes, where health practitioners can use their time with patients to find out whether they are able to keep warm in their homes, understand how this is affecting their health and wellbeing, and provide treatment, support and referral, where appropriate.

New public health guidance on excess winter deaths and illnesses
At the time of writing, the National Institute for Health and Care Excellence (NICE) is developing new public health guidance on excess winter deaths and cold-related illnesses, due to be published in 2015. This guidance will be aimed primarily at commissioners and practitioners working in local authorities and health services, providing guidance on effective approaches to prevent excess winter deaths and morbidity associated with cold homes, according to the best available evidence.7

Fuel poverty

Warm Homes and Energy Conservation Act 2000
The Warm Homes and Energy Conservation Act 2000 gives England and Wales their fuel poverty target and places a duty on government to have a fuel poverty strategy to meet the target. Last year, the government amended the Warm Homes and Energy Conservation Act, replacing the previous target with a new requirement to bring forward a target in secondary legislation later this year.

Fuel poverty strategy
The UK’s fuel poverty strategy was launched in 2001 following the Warm Homes and Energy Conservation Act 2000 and set as its interim target “to eliminate fuel poverty in England among vulnerable households by 2010.” It is noted that health and wellbeing featured significantly in its definition of vulnerability, with health mentioned numerous times throughout the strategy.8 Government is intending to develop a new strategy following its decision to adopt a new indicator for measuring fuel poverty, which will be published in 2014.
Environmental

The Climate Change Act 2008
The Climate Change Act 2008 sets out UK policy to reduce carbon emissions, including its commitment to reduce CO₂ by at least 80% in 2050 from a 1990 baseline. Action on fuel poverty and cold homes contributes to the UK’s legally binding carbon budgets by reducing carbon emissions from the existing housing stock as well as reduced demand on the NHS, and supporting climate change adaptation planning.

Household energy
Energy efficiency policy and programmes aimed at those in fuel poverty
The Energy Act 2011 includes provision for improving energy efficiency through the Green Deal and the Energy Company Obligation. The Energy Company Obligation and the Warm Home Discount Scheme provide help to fuel poor and vulnerable households. In December 2013, government announced proposed changes to the Energy Company Obligation which is currently being consulted on. These changes will reduce the overall cost of the scheme but with respect to fuel poor and vulnerable households these changes will not lead to any reduction in the intended level of support. The consultation proposes setting new targets for 2017, ensuring that the current annual scale of activity and ambition continues into the future. The changes announced will result in £30–£35 savings on households bills, on average, in 2014 and they are part of a wider package of changes to reduce the cost of household bills by £50 a year on average.

There are specific challenges about how households are prioritised for energy efficiency measures if they are vulnerable because of health status but are not eligible for the Energy Company Obligation. Projections indicate that energy efficiency programmes are likely to reach just 2.6% of the fuel poor in England. The government’s Energy Bill includes provision for ‘mandated referrals’ which would require follow up by energy companies. However, this power is yet to be explored by government.

Household energy savings policy
The Department of Energy and Climate Change and the Local Government Association are promoting collective energy switching to help consumers reduce their gas and electricity bills. The Department of Energy and Climate Change has encouraged local authorities to run schemes through its Cheaper Energy Together Fund, which ran in 2012–13, and provides fact sheets for consumers and organisers.

While collective switching schemes can be a useful component of the intervention mix for reducing household energy costs, there is inconclusive evidence about whether these schemes will benefit fuel poor households. The evidence from the Cheaper Energy Together scheme has confirmed that collective switching programmes can support households that are vulnerable or that usually shy away from engaging with the energy market, including those in or vulnerable to fuel poverty.

It is important that collective switching schemes involve low income consumers and those vulnerable to fuel poverty. A recent evaluation of the Big London Energy Switch recommends engaging public health services...
and the voluntary sector in order to promote switching initiatives to vulnerable households, including holding briefing sessions for practitioners. A barrier to engagement was found to be a lack of understanding of household energy usage, with several recommendations made to help provide this information to consumers so they can benefit from switching initiatives.\textsuperscript{13} In the context of continued energy price rises, improving the energy efficiency of the homes of the fuel poor is the most effective long-term solution to lower bills and keep them low, and reduce health risks, excess winter deaths and carbon emissions.

\textbf{Social and housing policy}

\textbf{Housing Health and Safety Rating System (HHSRS)}

The Housing Act 2004 includes provision for the Housing, Health and Safety Rating System – a tool for local authority inspection and assessment of risks arising from hazards in residential properties – which came into effect in 2006. Excess cold is included in its list of category 1 hazards.

\textbf{Decent Homes Standard 2000–2010}

The Decent Homes Standard was launched by government in 2000 and updated in 2006 to reflect the Housing Act 2004. It provides a measure against which the quality of housing can be rated, including thermal comfort. It was identified as a key programme through which to deliver improved health and wellbeing outcomes for individuals and communities.\textsuperscript{14} Despite its closure in 2010, some local authorities are continuing programmes, sometimes referred to as ‘better homes’. Under the regulatory framework, providers are required to ensure their homes continue to meet the Decent Homes Standard as a minimum.

A number of issues and barriers have been identified in relation to delivery of the programme. The targets set for upgrading social housing and private properties that house vulnerable households have not been achieved.\textsuperscript{15} Proposals were submitted for a phase 2 of this programme but, as yet, no further policy commitments have been made by government.

\textbf{Income measures}

\textit{Cold Weather Payment}

The Cold Weather Payment is made to eligible households when sub-zero temperatures are predicted or recorded for seven days or more. A £25 payment is made for each seven-day period of very cold weather from 1 November until March. Households do not need to apply as payments are made automatically. Households may be eligible for payments if they are receiving Pension Credit, Income Support, income-based Jobseeker’s Allowance, income-related Employment and Support Allowance or Universal Credit. However, if a household contains children under five, and is receiving certain benefits, they will need to inform their local job centre to ensure they receive the payment.\textsuperscript{16}

\textit{Winter Fuel Payment}

The Winter Fuel Payment is an annual payment to help with heating costs, made to households with someone over Pension Credit age. A person under 80 years of age will normally receive £200, and £300 if they are 80 years or over. Most payments are made automatically between November and December and usually before Christmas.
The Winter Fuel Payment is made automatically for those who receive the State Pension or another social security benefit (excluding Housing Benefit, Council Tax Reduction or Child Benefit). If someone qualifies, but they do not receive payment automatically, they will need to make a claim. Once someone has claimed they should receive an automatic payment in the future assuming they remain eligible.17

Energy tariff measures

The Warm Home Discount

Eligible customers receive a one-off £135 discount (£140 from April 2014) on their winter electricity bills, usually paid between October and March.

To qualify for this discount people need to be with a supplier that is signed up to provide the warm home discount, and have their or their partner’s name on the bill, and be either:
• “75 or over and getting the Guarantee Credit element of Pension Credit (even if they get Savings Credit)”
• “under 75 and only getting the Guarantee Credit element of Pension Credit [they won’t qualify if they also get Savings Credit].”18

Those using pre-pay or pay-as-you-go meters are also eligible.

Eligible customers will get a letter telling them one of the following:
• they don’t have to apply for the discount – they will get it automatically
• they must apply for the discount before the deadline – the letter will tell them why and how

The eligibility criteria widens from April 2014, to include all those in receipt of Pension Credit Guarantee Credit only and all those in receipt of Pension Credit Guarantee Credit and Savings Credit.

Participating energy suppliers will also offer the discount to a wider group of other low income and vulnerable customers, such as those with a disability or long-term illness, and families with young children on certain benefits, but the actual eligibility criteria will vary. Customers need to contact their electricity supplier directly as each supplier has its own rules on who it offers the discount to in this wider group.

Consumers can find out more by contacting the Warm Home Discount Scheme helpline.19

For more information, see Resources section (starting on page 37). This gives details about the Warm Home Discount Scheme helpline.

The Office of Gas and Electric Markets (Ofgem) market reform programme

Ofgem, the national regulatory authority that protects consumer interests, has undertaken a review of the retail gas and electricity markets to ensure a fairer deal for customers. The main reforms include restricting suppliers to four ‘core’ tariffs for each fuel type, ensuring customers are automatically transferred onto a supplier’s cheapest variable deal when an old tariff is no longer value for money, providing clearer and simpler billing and tariff information, and increased powers for Ofgem to hold suppliers to account who treat customers unfairly.
Notes

19 Ibid.
APPENDIX E
STATISTICAL AND DATA SOURCES

The following statistical and data sources can help directors of public health, public health teams, and health and wellbeing boards to undertake an assessment of health and fuel poverty need as part of the Joint Strategic Needs Assessment (JSNA).

Available data for England include:

- Health patient data, for example illnesses, conditions (held by clinical commissioning groups and reported as national datasets by the Health and Social Care Information Centre).
- Use of health services, for example hospital admissions (held by clinical commissioning groups and reported as national datasets by the Health and Social Care Information Centre).
- Local health ward profiles (produced by Public Health England).
- Housing stock data, for example housing type, extent of solid walls, extent of insulation, heating systems, energy efficiency (held by local authority, national data collected via English Housing Survey by the National Centre for Social Research).
- Standard Assessment Procedure (SAP) rating of housing stock (held by local authority and national data included in English Housing Survey).
- Housing Health and Safety Rating System (held by the local authority).
- Proportion of households on welfare benefits (held by the local authority and Department for Work and Pensions which reports regularly on national take-up of income related benefits and on housing benefit and council tax benefits).
- Socio-economic data, for example age, family, disability, employment down to Lower Super Output Area level (English Indices of Deprivation, Department of Communities and Local Government and Neighbourhood statistics, Office for National Statistics).
- Annual statistics on national fuel poverty (reported by Office for National Statistics for Department of Energy and Climate Change).
- Annual statistics on sub-regional fuel poverty reported by Department of Energy and Climate Change (these are reasonably robust at local authority level, but need to be treated with caution at Lower Super Output Area level).
- Trends in fuel poverty, energy use and energy efficiency measures (interactive maps provided by Department of Energy and Climate Change based on local authority datasets).
APPENDIX F
ENERGY EFFICIENCY – THE MAINSTAY OF AFFORDABLE WARMTH STRATEGIES

The health impact evaluation of the Warm Front Scheme identified the health and wellbeing gains from home energy efficiency improvements, as shown in Figure 7.1

Figure 7: Home energy efficiency

Energy efficiency improvements refer to a reduction in the energy used for a given service (heating, lighting, etc.) or level of activity. The reduction in the energy consumption is usually associated with technological changes, but not always since it can also result from better organisation and management or improved economic conditions in the sector (‘non-technical factors’)."^{2}

Energy efficiency in the context of fuel poverty “is the quantity of energy used in the home and its cost.”^{3} Over 70% of the energy used in the home is for heating and hot water. The remainder is used for cooking, lighting and appliances. The proportion of energy used for appliances is growing as the numbers of energy-using gadgets used in the home increases.

The most common cost-effective energy efficiency measures installed in homes are loft and cavity wall insulation, as most of the heat in a home is lost through these cavities, and improvements to heating systems through installation of gas central heating. Analysis in 2008 based on the English Housing Survey indicated that around 43% of the UK’s housing stock is ‘hard to treat’: this was estimated at the time to be 21 million dwellings (most recent estimate of total housing stock is 22.8 million dwellings).^{6} For this study, hard to treat was categorised as properties with no gas supply, or cavity in their walls or loft which can be insulated, and high rise flats. The study found that the majority of these properties are in the private sector, and half is private rented housing."^{5}
The range of interventions to improve the energy efficiency of homes includes:

- **heating**: examples include gas or oil condensing boilers, heat pumps, biomass boilers and modern electric storage radiators
- **insulation**
  - loft
  - cavity wall insulation
  - hard to treat cavity wall insulation
  - solid wall insulation
  - underfloor insulation
- **double glazing**
- **draught-proofing**
- **energy efficient appliances such as fridges and washing machines**
- **ventilation (damp and condensation).**

How the energy efficiency of a property is measured

The energy efficiency of a property is measured using a Standard Assessment Procedure (SAP) rating, with a scale from 1 to 100. The higher the rating, the more energy efficient the property. Standard Assessment Procedure values translate to Energy Performance Certificate (EPC) band letters A–G. Low SAP values (low energy efficiency) are represented with later letters and high SAP values (high energy efficiency) are represented by lower letters. For example, a property meeting the requirements for ‘best energy efficiency’ will be allocated a rating in band A and properties that are the ‘least efficient’ will be rated in band G.

In 2011, fuel poor households averaged a SAP rating of 47.3, which is considerably lower than the average SAP rating of 58.4 among non-fuel poor households (based on the 10% measure). Under the Low Income High Cost indicator the figures are 49.3 (fuel poor households) and 63.6 (for “households in low energy costs quadrants”). Social housing is, on the whole, more energy efficient than private housing and this can offer some protection against severe fuel poverty.

From 2018, proposed legislation under The Energy Act 2011 will make it illegal for a private landlord to let a property that does not meet a minimum energy efficiency standard – currently indicated by government to be an Energy Performance Certificate rating of E or above. Fuel poverty, consumer and environmental groups have broadly welcomed the proposed legislation, but have also highlighted key areas where the proposed legislation needs to be strengthened to protect the most vulnerable tenants.

The Energy Company Obligation (ECO)

The Energy Company Obligation is the only energy efficiency programme targeted at the fuel poor. It has three elements:

- **Affordable Warmth Obligation**, which is focused on reducing heating costs. It provides energy efficiency measures to eligible owner occupiers and private tenants who receive certain means-tested benefits/tax credits. The supplier offers that are on the market at present are largely focused on gas boiler repairs and replacements, and loft and cavity wall insulation. These measures are generally free but if a customer contribution is required the customer should be clearly informed and then decide whether they want to proceed.
• **Carbon Emissions Reduction Obligation**, designed to lower fuel bills and reduce carbon emissions. The current scheme, available to households in all tenures, is designed to work alongside Green Deal, or other sources of finance, to provide energy efficiency measures for ‘harder to treat’ measures such as solid wall insulation. In December 2013, government announced proposals to allow standard cavity wall insulation, loft insulation and district heating to be installed under the Carbon Emissions Reduction Obligation, and the government is currently consulting on these changes.

• **Carbon Saving Communities Obligation**, for reducing carbon emissions. It provides energy efficiency measures to households living in low income areas (defined by the Indices of Multiple Deprivation). Fifteen per cent of Carbon Saving Communities Obligation must be delivered in rural areas.
Notes


REFERENCES


Age UK (2012) The Cost of Cold: Why We Need to Protect the Health of Older People in Winter. London: Age UK.


FUEL POVERTY
HOW TO IMPROVE HEALTH AND WELLBEING THROUGH ACTION ON AFFORDABLE WARMTH

A guide to delivering action on fuel poverty for public health professionals, health and wellbeing boards, and local authorities in England

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