



Bristol JSNA Chapter 2018

Fuel Poverty

Chapter information	
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Linked JSNA chapters	

Executive summary

Introduction

Fuel poverty and health

Fuel poverty is a term that is typically used to describe a person on a low income who is struggling to afford their energy costs. People's energy costs may be unaffordable for a number of reasons, these typically include being on a low income; living in a property that's not energy efficient and therefore expensive to run; living in a home that is much larger than needed; and / or using a more expensive heating fuel e.g. electricity. Living in fuel poverty and experiencing a cold home have been shown to have a significant impact on mental and physical health. Fuel poverty in England is measured using the Low Income High Costs (LIHC) indicator. However, this definition excludes households with lower than average fuel needs (often those living in smaller homes), and ignores some difference in the heating needs of different groups including elderly people and people with health conditions exacerbated by the cold i.e. who need higher temperatures at home.

Several large scale evidence reviews have suggested that living in a cold home and coping with unaffordable fuel bills can have significant adverse implications for a range of outcomes, including mental and physical health, educational and social outcomes (Marmot Review Team, 2011; CSE, 2016; NICE, 2015). Risks from fuel poverty are different for different groups. Older people are at greater risk from excess winter deaths. An estimated 21% of excess winter deaths can be attributed to cold homes (Marmot Review Team, 2011), of which there were an estimated 34,000 in England and Wales in 2016/17 (ONS, 2017). Children living in cold homes are at greater risk of respiratory problems and lower educational attainment (Marmot Review Team, 2011). Struggling to pay fuel bills also has a negative impact on mental health, with studies showing that people who are struggling to manage their bills experience higher levels of anxiety and depression (Scottish Government, 2012; CSE, 2010). Cold homes also exaggerate many respiratory and cardiovascular conditions (Marmot Review Team, 2011).

The 2012 'Hills Review of Fuel Poverty in England' estimated that 34% of fuel poor households include somebody with a disability or long term health condition (CASE, 2012). It is important to note that official statistics probably underestimate the extent of fuel poverty among disabled people due to the inclusion of benefits provided for meeting the extra costs of disability as 'disposable income'.

Systematic reviews of evidence of the health benefits of home energy efficiency and heating interventions suggest a positive improvement in health. Where interventions are targeted at households struggling to afford energy bills or with respiratory conditions, health benefits are clearest (Thompson et al., 2013). Improvements include respiratory outcomes for children and adults, and improved wellbeing and mental

health (Milner and Wilkinson, 2017). A meta-analysis of 36 studies, involving over 33,000 participants found an overall significant positive impact on the health of residents following the installation of energy efficiency measures (Maidment et al., 2013).

Fuel poverty in Bristol, and progress towards national frameworks

Based on the LHC definition, there are an estimated 20,709 fuel poor households in Bristol, 10.8% of all households (BEIS, 2018). This is higher than the rest of South West where 10.2% are fuel poor, but lower than England overall, where 11.1% are fuel poor (BEIS, 2018).

National Institute for Health and Care Excellence (NICE) Guidelines (2015) on winter deaths, illness and health risks associated with a cold home include twelve key recommendations to tackle the issue. Whilst not an exhaustive list, key recommendations include: setting up a single point of contact referral service for those living in a cold home where frontline workers are able to refer vulnerable households; training for frontline health staff; and ensuring no vulnerable people are discharged to a cold home. The service should be able to provide access to a range of solutions from home improvement agencies, housing providers and advice agencies.

The UK Government's Clean Growth Strategy (2017) sets out key policies and proposals to improve the energy efficiency of homes. This includes upgrading all fuel poor homes to Energy Performance Certificate (EPC) Band C by 2030 with the aspiration of as many homes as possible to be EPC Band C by 2035 where practical, cost-effective and affordable. The Fuel Poverty Strategy for England (HM Government, 2015) also focuses on the energy efficiency of homes. It sets a legally binding fuel poverty target for England, namely that as many fuel poor homes as reasonably practicable achieve a Band C energy efficiency standard by 2030.

All new private rented tenancies started after the 1 April 2018, must have an EPC rating of at least "E". This includes all renewals or extensions to tenancies to the same tenant for the same property. The private rented sector has the worst efficiency housing in the city. Currently 74% of EPC ratings for the private rented sector are below C with 5.2% being F or G.

Local experiences

A small survey of fuel poverty support providers and academics that was conducted for this JSNA found that the needs of fuel poor households in Bristol are complex and access to advice needs to span heating, energy efficiency and tariff advice. Households also need advice on benefits and debt to help maximise their income and reduce the burden of fuel costs on household finances. Age UK and East Bristol Foodbanks' experience of households in fuel poverty shows that they are likely to be struggling with other costs, including food and transport, leading to social isolation. Advice and support should

cover benefits, debt and budgeting skills. Links between fuel poverty and health mean support is needed from health services (including mental health services), and adult social care. Services used by fuel poor households that provide an opportunity to reach them include foodbanks, health services (including Bristol Community Health), credit unions and community and faith groups. Most advice agencies that participated in the survey reported that they are at capacity and overwhelmed by demand.

Key issues and gaps (summary of section 8)

There needs to be more collaborative work and data sharing between support and health services across the city. Frontline health workers lack information about patients' housing conditions that could be extremely beneficial for providing holistic support. Integration of health and housing data could help identify areas of the city with high levels of people in poor health that are living in inefficient homes. Furthermore, it could also help track the health outcomes of insulation and heating support measures.

The NICE Guidance should be used to inform local health and social care. An assessment of Bristol's progress towards meeting these guidelines could help inform where efforts and resources need to be directed. Links with the University of Bristol and Bristol Health Partner's Using Data Better project could help establish a baseline for activity. Further research into excess winter deaths in Bristol among certain vulnerable groups including people living with Alzheimer's disease or related dementias could also help better inform interventions.

Recommendations (summary of section 10)

As part of the JSNA process, the JSNA Fuel Poverty reference group for the chapter discussed and developed a range of recommendations to be included in the chapter. These recommendations replicated many of the NICE guideline recommendations for *Excess winter deaths and illness and the health risks associated with cold homes*. The recommendations outlined in the NICE guideline are key tasks that would have a significant impact towards reducing and ultimately eliminating fuel poverty in Bristol.

The JSNA report recommends the Health & Wellbeing Board implements the NICE guidelines for *Excess winter deaths and illness and the health risks associated with cold home*:

1. NICE Guideline recommendation 1: Develop a strategy

The JSNA chapter recommends that the Health & Wellbeing Board facilitate the development of a fuel poverty strategy in collaboration with various organisations in Bristol.

2. *NICE Guideline recommendation 2: Ensure there is a single-point-of-contact health and housing referral service for people living in cold homes*

NICE Guideline recommendation 3: Provide tailored solutions via the single-point-of-contact health and housing referral service for people living in cold homes

The JSNA chapter recommends the Health and Wellbeing Board should ensure that a local single-point-of-contact (SPOC) health and housing referral service is commissioned to help those living in cold homes.

3. *NICE Guideline recommendation 4: Identify people at risk of ill health from living in a cold home*

The JSNA recommends the Health and Wellbeing Board should identify people at risk of ill health from living in a cold home, applying Bernard Stafford's methodology for assessing the social costs of cold homes to Bristol.

4. *NICE Guideline recommendation 7: Discharge vulnerable people from health or social care settings to a warm home*

As part of the planned discharge of vulnerable people, the JSNA recommends that coordinated efforts by all practitioners to make sure the home is warm enough when the patient returns to their home.

5. *NICE Guideline recommendation 8: Train health and social care practitioners to help people whose homes may be too cold*

NICE Guideline recommendation 9: Train housing professionals and faith and voluntary sector workers to help people whose homes may be too cold for their health and wellbeing

Appropriate agencies should educate health staff and other frontline workers in basic fuel poverty trigger training which enables them to identify people in need of support and make onward referrals. The JSNA recommends that a provision should be made for people known to be in cold homes and checked in regularly by health staff and other frontline workers.

6. The Health and Wellbeing Board should be responsible for regularly reporting on the progress towards completing the recommendations of the NICE guideline.

JSNA chapter report

A: What do we know?

1) Who is at risk and why?

Defining fuel poverty

Fuel poverty is a complex and hard to define issue, with varying impacts on different groups. Fuel poverty in England is measured using the Low Income High Costs (LIHC) indicator. This considers a household to be fuel poor if they have required fuel costs (based on modelled energy need) higher than the national median and, were they to spend that amount, be left with income below the official poverty line. Using this definition, latest estimates (2016) consider 11.1% of households in England to be fuel poor, a 0.1% increase from the following year (BEIS, 2018). Higher levels of fuel poverty are seen amongst private renters and households with low energy efficiency ratings.

However this definition excludes households with low modelled fuel costs (often those living in smaller homes), and ignores some difference in heating needs of different groups including elderly people and people with health conditions exacerbated by the cold i.e. higher temperatures.

Most people experiencing fuel poverty will not consider themselves to be fuel poor, but will present to services with problems that may be a symptom of fuel poverty. Symptoms include not being able to pay household bills or other necessary costs, debt, excessive damp and mould growth, and health problems (physical and mental) especially cardiovascular and respiratory problems.

Groups at risk

Several large scale literature reviews have suggested that living in a cold home and coping with unaffordable fuel bills can have significant adverse implications for a range of outcomes, including health, educational and social outcomes (Marmot Review Team, 2011; CSE. 2016; NICE. 2015). Although anyone could potentially be affected by living in a cold home and unaffordable fuel bills, the literature does identify associations between certain characteristics of individuals or households and:

- Having an above average likelihood of living in a cold home and/or
- Being likely to be particularly vulnerable to the harmful effects of living in a cold home.

Those whose health is at highest risk from the harmful effects of living in a cold home include:

- older adults
- young children

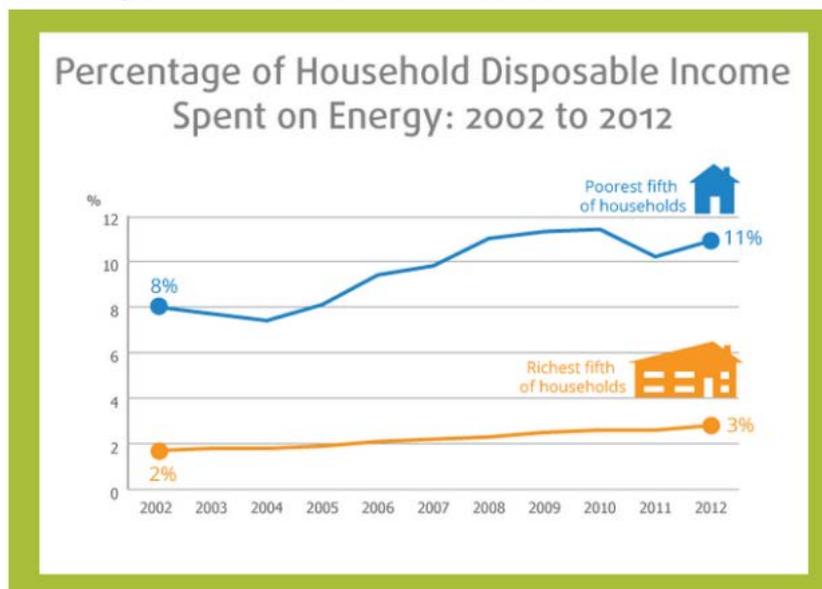
- households with someone who is disabled or has a long-term limiting illness
- respiratory or circulatory disease
- mental health problems

This section presents a summary of the evidence, with a particular focus on identifying household-level vulnerability. There is evidence of a high degree of overlap between the reported household vulnerability characteristics i.e. a high likelihood households with one vulnerability will have multiple vulnerabilities.

Low incomes

Fuel poverty is broadly caused by low incomes, low efficiency homes, heating systems and appliances and high energy costs. Households on low and unreliable incomes are vulnerable to fuel poverty and the LIHC definition of fuel poverty makes this link explicit. As household energy costs rise and incomes remain stagnant, more households are struggling to afford their energy bills. Fuel poverty can be transient, meaning people with unreliable work through zero hours contracts, or variable incomes through the introduction of Universal Credit, may move in and out of fuel poverty.

Figure 1: Disposable income spent on energy by poorest and richest fifth of households



Source: Office for National Statistics

Lower incomes logically lead to households spending higher proportions of their incomes on fuel bills. Beyond this, poorer and more vulnerable households actually pay more for energy. Low income households are more likely to pay more for their fuel and higher rates of digital and financial exclusion among low income households make it more difficult for them to switch to cheaper deals. The three quarters of low income households who have not switched in the last two years pay an estimated £233 more a year (Davis et al, 2016). Higher use of prepayment meters also restricts low income households' ability to switch. Christians Against Poverty (2015) report that of their clients in arrears on prepayment, 54% are self-disconnecting and 8% did not use their heating at all over the winter.

Inefficient homes

In 2015, one fifth of homes failed to meet the Decent Homes Standard and the highest proportions of non-decent homes are seen in the private rented sector. Whilst energy efficiency ratings of homes in England have increased in recent years, privately rented and owner occupied properties are less efficient than socially rented homes (English Housing Survey, 2017). Section 2 and 3 further discuss household energy efficiency across housing in Bristol.

Older people

There are various reasons why older people have an above average risk of living in a cold home. One explanation is that older people are more likely to live alone, often in a large family home, and thus have high running costs that they must pay for from a single income (Goodman et al 2011, in Centre for Ageing Research and Development in Ireland, 2014). Older people who are no longer working are more likely to spend more of their time at home, so may need to spend more of their income on heating to keep the house at a comfortable temperature. Amongst older generations, below average rates of computer literacy and internet access and a lack of confidence in engaging with energy-related online services, such as online switching and tariff comparison sites, may partially explain why older people are also less likely to take advantage of cheaper tariffs (Tod et al, 2012, Stockton, 2014).

The literature specific to fuel poverty is relatively thin in its development of more social, attitudinal or behavioural explanations for why older people may be at greater risk of living in a cold home. These are likely to be important in understanding, for example, how attitudes to comfort, debt, investment in home improvement or availability of mortgage lending for older people may influence the fact that older people continue to live in poorly insulated homes that cost more to keep warm. One indication is from Tod et al 2012, which finds that 'factors usually associated with fuel poverty do not fully explain why some older people live in cold homes'.

As well as being more likely to live in cold homes, older people are more likely to be vulnerable to the harmful effects of living in cold homes. The vast majority of studies included in the NICE guidance evidence review identified greater winter and cold-related mortality at older ages (NICE 2015). This is very clear in the numbers of excess winter deaths amongst older people in England and Wales. An estimated 21% of these can be attributed to cold homes (Marmot, 2011). As reported in the NICE guideline, in 2013/14, 51% of cold related deaths were among people aged 85 years and older and 27% were among those aged between 75 and 84 years (NICE, 2015).

Physiological factors contribute to older people's greater susceptibility to the harmful effects of cold homes. These include a reduced ability to maintain their bodies at a stable temperature, greater susceptibility to the flu, age-related increased risk of heart attack, age-related increased susceptibility to cold-induced high blood pressure and the greater

likelihood, with increasing age, of having pre-existing health conditions which are exacerbated by cold temperatures (Age UK, 2012; Day and Hitchings, 2011; Marmot Review Team, 2011; Lacroix and Chaton, 2015). Living in cold homes can also increase the risk of falls amongst older people.

Living in a cold home can also worsen social isolation amongst older people. Costly fuel bills make it harder to afford to go out, and increase reluctance to risk getting cold going out and then having to go back to a cold home. It can also deter fuel poor households from inviting friends and family into their homes (Marmot Review Team, 2011).

Children – either aged less than 18 years or aged less than 5 years.

There are an estimated 1.6 million children in the UK who are living in fuel poverty (ACE, 2013). According to a report made by the National Children Bureau, based on the LIHC definition, over four million young people in England are living in fuel poverty (National Children's Bureau, 2016). Children living in certain household types are particularly at risk of living in cold homes, namely lone parent households, low income households, households in rural areas, households headed by a black or minority ethnic parent and households headed by a parent with a long term health condition (National Children's Bureau, 2016). Members of households with children, particularly children aged less than five years, spend an above-average amount of time at home, increasing their exposure to the harmful health effects of living in cold homes.

Physiological factors which contribute to children's greater susceptibility to the harmful effects of cold homes include a lesser ability to deal with thermal stress as compared with adults, making children living in cold homes more prone to respiratory health problems, such as asthma and bronchitis (Marmot Review Team, 2011) (Climate Just, 2014). Weight gain in babies and toddlers can also be impeded by the increased calorie requirements to keep warm in a cold home. This can be particularly acute in materially deprived households with below-average calorie-intake (Liddell, 2008). Slow weight gain in the early years can lead to developmental disadvantages that persist into adult life. For school-aged children, there can be harmful consequences for educational attainment if school is missed due to cold home related illness (Liddell, 2008). A lack of a warm place to do homework may also cause children to fall behind in their studies (Marmot Review Team, 2011). Amongst adolescents, links have been drawn between mental health problems and time spent living in cold homes (Shelter, 2006), the reasons for this are not certain.

Disabled people and people with long term health conditions

The 2012 'Hills Review of Fuel Poverty in England' estimated that 34% of fuel poor households include somebody with a disability or long term health condition (CASE, 2012). It is important to note that official statistics probably underestimate the extent of fuel poverty among disabled people due to the inclusion of benefits provided for meeting the extra costs of disability as 'disposable income'. Amongst disabled people, many struggle with paying their bills and keeping their homes

warm enough (Gore and Parckar, 2009). Below-average employment rates amongst disabled people and associated below-average incomes mean that disabled people have a greater than average risk of living in a cold home (Disability Action, 2011). Furthermore, high rates of unemployment amongst disabled people increase the likelihood of spending more time at home, potentially in a cold home. Condition-related or impairment-related needs, such as muscular dystrophy, also explain why some disabled people or people with long term conditions spend greater than average time at home (Snell, Bevan and Thomson, 2013). Relatedly, disabled people with reduced mobility may suffer from reduced blood circulation, so a higher-than average temperature is needed to achieve a comfortable level of warmth in the home. It is well established that disabled people encounter increased costs to enable participation in everyday activities, whilst low incomes (associated with unemployment or low-paid employment) reduce the ability of households to afford energy bills (Disability Action, 2011; Gore and Parckar, 2009; EAGA Charitable Trust, 2013). For people living with certain long term conditions, living in a cold home may exaggerate their condition and/or hinder their recovery (Bevan Foundation, 2010). The literature identifies respiratory diseases, chronic obstructive pulmonary disease (COPD) and circulatory diseases as being the most likely to be aggravated by living in a cold home (WHO, 2011; Webb et al., 2013; Canterbury District Health Board, NZ, 2012; Lacroix and Chaton, 2015; Public Health England, 2014).

Mental health

There are a number of studies and reviews that identify associations between cold homes and mental health problems, with consequent harmful social costs such as the cost of mental health problems to the NHS or the loss of well-being (EAGA Charitable Trust, 2010; Stafford, 2015). Living in a cold home is a distressing experience that may combine physical discomfort with financial worries about the ability to pay fuel bills. Furthermore, households in fuel poverty may prioritise spending on fuel due to illness or young family members which increases the risk of debt and also impacts on their mental wellbeing. A Scottish study has shown that those struggling to pay their utility bills are four times more likely to be anxious and depressed than those with no such difficulties (Scottish Government, 2012). A coping strategy of just heating a small number of rooms can give rise to overcrowding, strained social relationships and feelings of shame associated both with the circumstances and with the inability to offer hospitality (Environment Canterbury, 2013).

A 2010 Centre for Sustainable Energy study, 'You just have to get by', reported that people in households with an income of less than 60% of the national average income had difficulty paying their fuel bills. During the previous winter, 62% of low-income households had cut back on heating and 47% had lived in homes that were colder than they wanted them to be. In low-income households, 47% of people with cold homes said the cold had made them feel anxious or depressed, and 30% said an existing health problem had worsened.

People living with mental health conditions are disproportionately on a low income, placing them at increased risk of being unable to afford to heat their homes adequately. Some studies also indicate that individuals with mental health conditions are more likely to subjectively perceive their home as too cold (Threlfall, 2011). However, since there is a lot of variation between people's perceptions of adequate warmth, including the statistically significant difference between men and women, this should be interpreted with caution.

2) What is the size of the issue in Bristol?

Fuel poverty in Bristol

Based on the LIHC definition, there are an estimated 20,709 fuel poor households in Bristol, which is 10.8% of all households. This is higher than the rest of South West where 10.2% are fuel poor, but lower than England overall, where 11.1% are fuel poor.

How Bristol compares to other core cities

Fuel poverty

The following graphs are based on the sub-regional fuel poverty data by local authority in England from the Department for Business, Energy & Industrial Strategy (formerly Department of Energy and Climate Change) for the years 2011 – 2016, 2016 is the most recent data available. This data is based on the LIHC definition of fuel poverty.

Figure 2: Percentage of households in fuel poverty in Bristol (2011 – 2016)

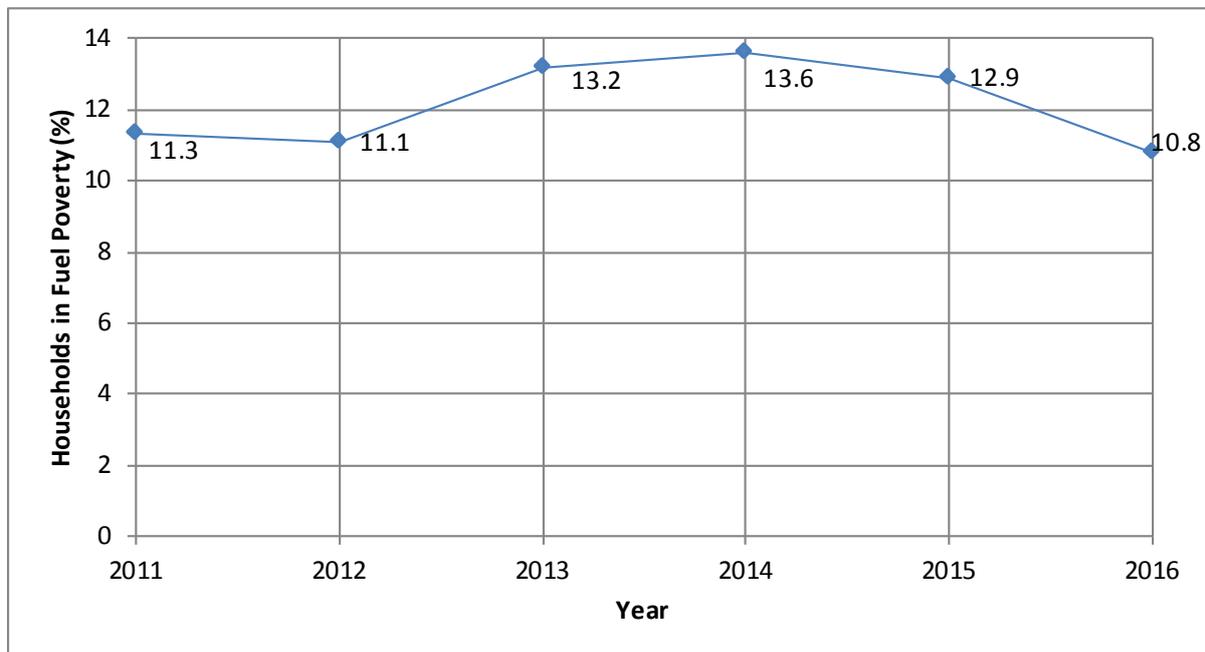
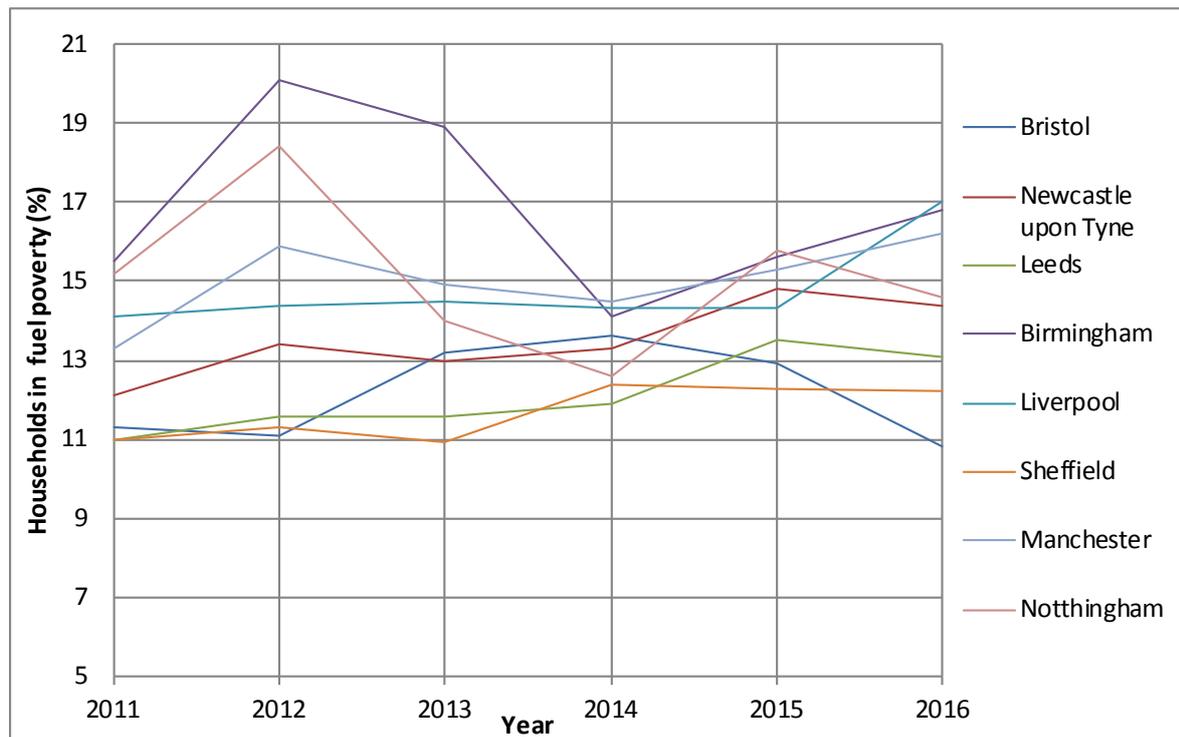


Figure 2 shows the percentage of households in fuel poverty in Bristol has changed over time from 2011, when the LIHC indicator was introduced, to 2016. There has been an increase in fuel poor households from 2012 to 13.6% in 2014. Since then fuel poverty has decreased to 10.8% in 2016. The LIHC indicator produces less variation than the previous indicator due to the calculation methodology i.e. the measure is based upon the median for the population.

Figure 3 shows the percentage of households in fuel poverty for all core cities in the UK. Overall, compared to other core cities, the percentage of households in fuel poverty in Bristol was relatively low. From 2012 – 2014 however, the percentage of households in fuel poverty in Bristol was higher than in Sheffield, Leeds, Newcastle Upon Tyne and

Nottingham. Most recently, in 2016, there were 10.8% of households in fuel poverty which is the lowest of all core cities.

Figure 3: Percentage of households in fuel poverty in all core UK cities (2011 – 2015)

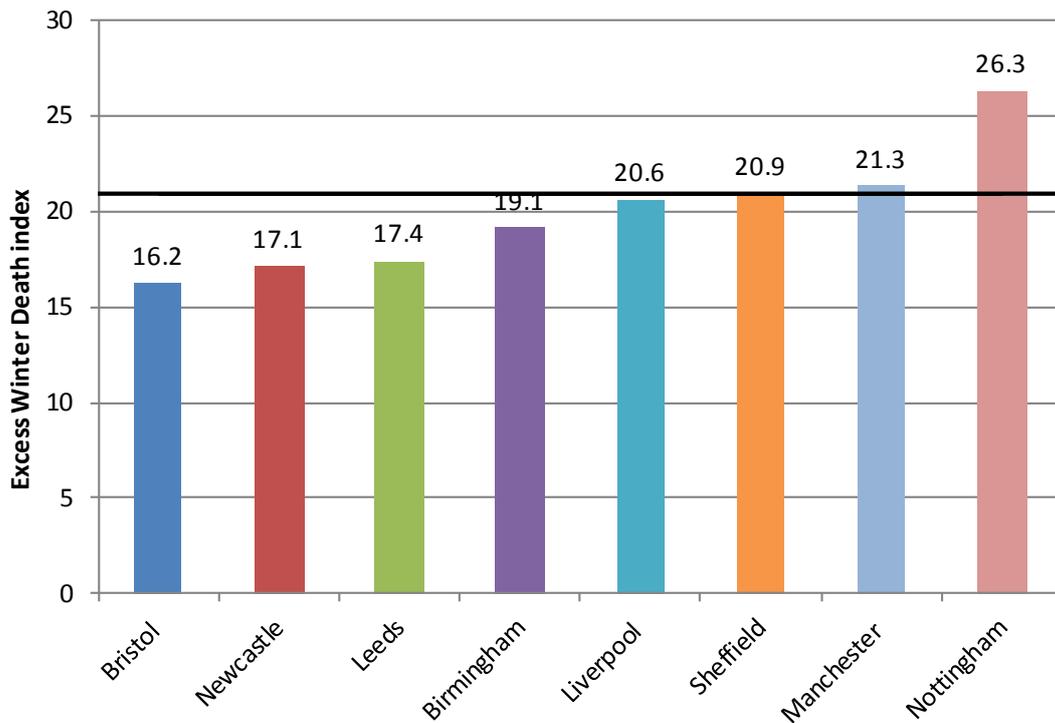


Excess winter deaths

Overall, the death rate in the UK is higher during winter months (from the start of December to the end of March) and this is referred to as 'excess winter deaths'. An estimated 34,300 excess winter deaths occurred in England and Wales in the 2016 – 2017 winter period, which represents an excess winter mortality (EWM) index of 20.9% (ONS, 2017). Most excess winter deaths and illnesses are caused by respiratory and cardiovascular problems during moderate outdoor winter temperatures of 4–8°C depending on the region. The risk of death and illness increases as the external temperature falls further. The death rate rises 2.8% for every degree Celsius drop in the outdoor temperature for people in the coldest 10% of homes. This compares with a 0.9% rise in deaths for every degree Celsius drop in the warmest 10% of homes (Wilkinson, 2001). Public Health England's advice is that the minimum temperature for homes in winter is 18°C (65°F).

The following graphs are based on the excess winter death data from the health profiles for each core UK city produced by Public Health England. The data used is the excess winter death index which is the ratio of excess winter deaths to average non-winter deaths, calculated over three years.

Figure 4a: 2012-2015 Excess Winter Death Index across Core Cities, showing England and Wales EWD at 20.9



The above chart is based on the EWD data taken from each core city’s 2017 health profile and shows that the EWD rate in Bristol, at 16.2%, is lower than that in other core cities, with Nottingham having the highest rate at 26.3%. In other words, for the period August 2012 – July 2015, there were on average 16.2% more deaths in winter compared to the non-winter period in Bristol and 26.3% more in Nottingham. Bristol has a lower EWD index than the England and Wales index, (20.9) shown by the black line on Figure 4.

Figure 4b: Changes in EWD index over time in Bristol

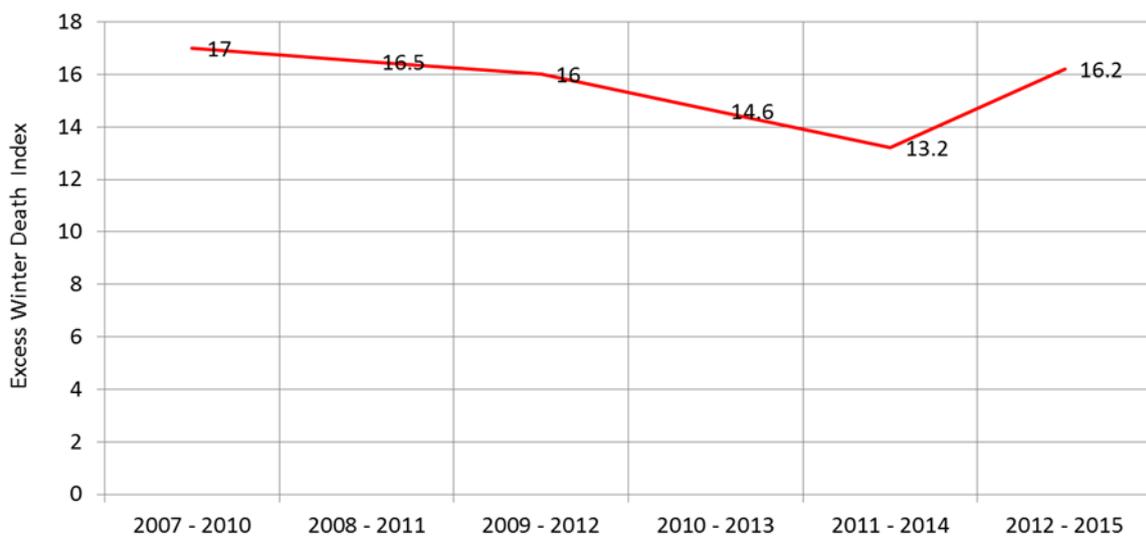


Figure 4b shows how the EWD index has changed over time in Bristol¹. The graph suggests that there has been a gradual decrease in EWD from August 2007 to July 2014 in Bristol from 17% more deaths in winter compared to the non-winter period for the period (Aug 2007 – Jul 2010) to 13.2% for the period Aug 2011 – Jul 2014. The most recent data shows that excess winter deaths have increased in the period Aug 2012 – Jul 2015 to 16.2% more deaths in winter compared to the non-winter period.

Of the 34,300 total excess winter deaths, 7,700 had dementia and Alzheimer's disease as the underlying cause of death (or 22.4%). In 2014- 2015, EWDs for dementia and Alzheimer's disease reached a peak of 9,030, which remains among the highest seen. The increase in recent years might partly be down to methodological changes. The reasons for the seasonal pattern in deaths from dementia and Alzheimer's disease are not clear (ONS, 2017). Research with carers (Grey et al., 2015) raised concern that people were not dressing appropriately for weather conditions, and not adding another layer when feeling cold. Several carers remarked that the homes were either very hot or quite cold, with the person switching off the heating when carers were not there. Circumstances such as a power cut or malfunction of the heating system could not be dealt with by the person with dementia.

Bristol housing stock

BRE modelled Bristol's housing stock (BRE, 2017), focusing on the private sector. The following section is from the results of this study.

There are 200,945 dwellings in Bristol: 53% are owner occupied, 29% of dwellings in Bristol are privately rented, and 18% are socially rented. 8,565 dwellings in the private rented sector are estimated to have category 1 Housing health and safety rating system (HHSRS) hazards. This equates to 15% of properties in the private rented sector. This is lower than the 17% seen in the private sector overall which may be a result of more flats in cities which are less likely to suffer from excess cold hazards 7.5% (12,275) of private sector dwellings and 5.2% (3,041) of private rented dwellings in Bristol are estimated to have an EPC rating below band E.

There are an estimated 12,559 house in multiple occupation (HMOs) in Bristol. HMOs in the private rented sector in Bristol are generally in poorer condition than non-HMOs. The levels of category 1 hazards are notably higher for HMOs (22% compared to 13% for non-HMOs), especially for fall hazards (15% compared to 5%). Levels of disrepair are also higher for HMOs (9% compared to 6% for non-HMOs). Levels of low income are the same (15%) across the private rented sector stock for both non-HMOs and HMOs. Despite HMOs having higher energy efficiency levels compared to non-HMOs (average Simple SAP score of 62 compared to 56), the levels of fuel poverty (both definitions) are higher for HMOs.

Overall the percentage of dwellings in the private rented sector across Bristol is 29% compared to the national average of 20%. A large proportion of wards (20 out of 34 wards)

¹ Each time period is the time period taken to calculate the EWD index. The first time period (Aug 2007 – Jul 2010) was the period in which the EWD index was calculated for the 2012 Health Profiles, the second (Aug 2008 – Jul 2011) for the 2013 Health Profiles and so on...

in Bristol have a percentage of private rented sector dwellings greater than the national average.

Renting costs in Bristol

The cost of renting from the private rented sector in Bristol is increasing year on year and affording a good quality home is becoming increasingly difficult for private tenants in receipt of medium income. Those tenants in receipt of either Local Housing Allowance (LHA or Housing Benefit) or Universal Credit are increasingly unable to afford the rising costs of rents in the city, both for shared room accommodation or for self-contained units.

Table 1: Bristol Local Housing Allowance (LHA) and Average Bristol Private Sector Rent

Bedrooms	LHA Weekly Rate	LHA Monthly Rates	Average Monthly Private Sector Rent 2015/16 ²
Shared room (single under 35 rate) ³	£67.37	£292.74	£394
1 bedroom	£124.87	£542.42	£567 - Studio property £717 - 1 bedroom property
2 bedrooms	£151.50	£658.30	£967
3 bedrooms	£181.01	£786.53	£1,160
4 bedrooms	£242.33	£1,052.98	£1,985

In 2014 the government introduced measures to ensure that any increase in Local Housing Allowance (LHA) - which determines the amount of housing benefit an individual can receive if they rent from a private landlord - would be capped at actual rent inflation, or 1%, whichever is the lower figure. This cap has continued and has further widened the gap between market rents and the maximum provided through the LHA rate.

The costs of rent for a good quality, three bedroom property in Easton has reached £1,350, some £563.47 per calendar month higher than the current LHA rate. Market rents in other areas in the city are considerably higher than this resulting in low income households moving further out of the city centre to find accommodation which is affordable. This has resulted in many benefit recipients struggling to afford safe, quality private rented accommodation in Bristol.

Fuel poverty hotspots

When mapping fuel poverty by the LIHC definition, wards showing the highest proportions of fuel poor contain areas with large student populations and more affluent areas around the centre with older Georgian homes i.e. those areas with households that have the highest total fuel bill. The largest cluster is seen around Cotham, Bishopston and Clifton. This has not been included as the indicator ignores the health of householders and householders on extremely low income without high fuel bills are also excluded. The chosen indicators consider housing efficiency as this is an important determinant of fuel poverty, alongside these other vulnerabilities.

² See <https://www.gov.uk/government/statistics/private-rental-market-statistics-may-2016>

³ The shared room rate applies to most single people aged under 35, even if that person lives in self-contained accommodation.

The JSNA chapter reference group and the respondents to the survey on local views were consulted on the best approach to targeting fuel poverty hot spots. Focussing on poor health, poor efficiency housing and low incomes represented the consensus of opinion. The following datasets were used to create two indicators to identify areas most at risk from fuel poverty in Bristol.

- Proportion of homes that have an EPC band E, F or G at Lower Super Output Area (LSOA) level
- IMD income domain at LSOA level
- PublicHealth England standard admissions rates data for COPD at Middle Layer Super Output Area (MSOA) level
- PublicHealth England standard admissions rates data for coronary heart disease at MSOA level
- PublicHealth England standard admissions rates data for myocardial infarction at MSOA level
- PublicHealth England standard admissions rates data for stroke at MSOA level

The first indicator combined EPC, IMD, COPD and coronary heart disease data. The second combined all of the factors listed above. All indicators were given equal weighting. The maps below show the LSOAs in Bristol that fall in the bottom three deciles. These have been used to select the wards with the highest count of LSOAs within them.

Figure 5 shows LSOAs that rank in deciles 1 to 3, for the combined COPD and CHD emergency emissions, IMD and EPCs with the highest vulnerability. Figure 7 shows LSOAs that rank in deciles 1 to 3, for the combined health, IMD and EPCs with the highest vulnerability. Darker areas show higher vulnerability.

Figure 5: Map showing LSOAs ranked in deciles 1 to 3 for combined COPD and CHD emergency admissions, IMD and EPC indicator

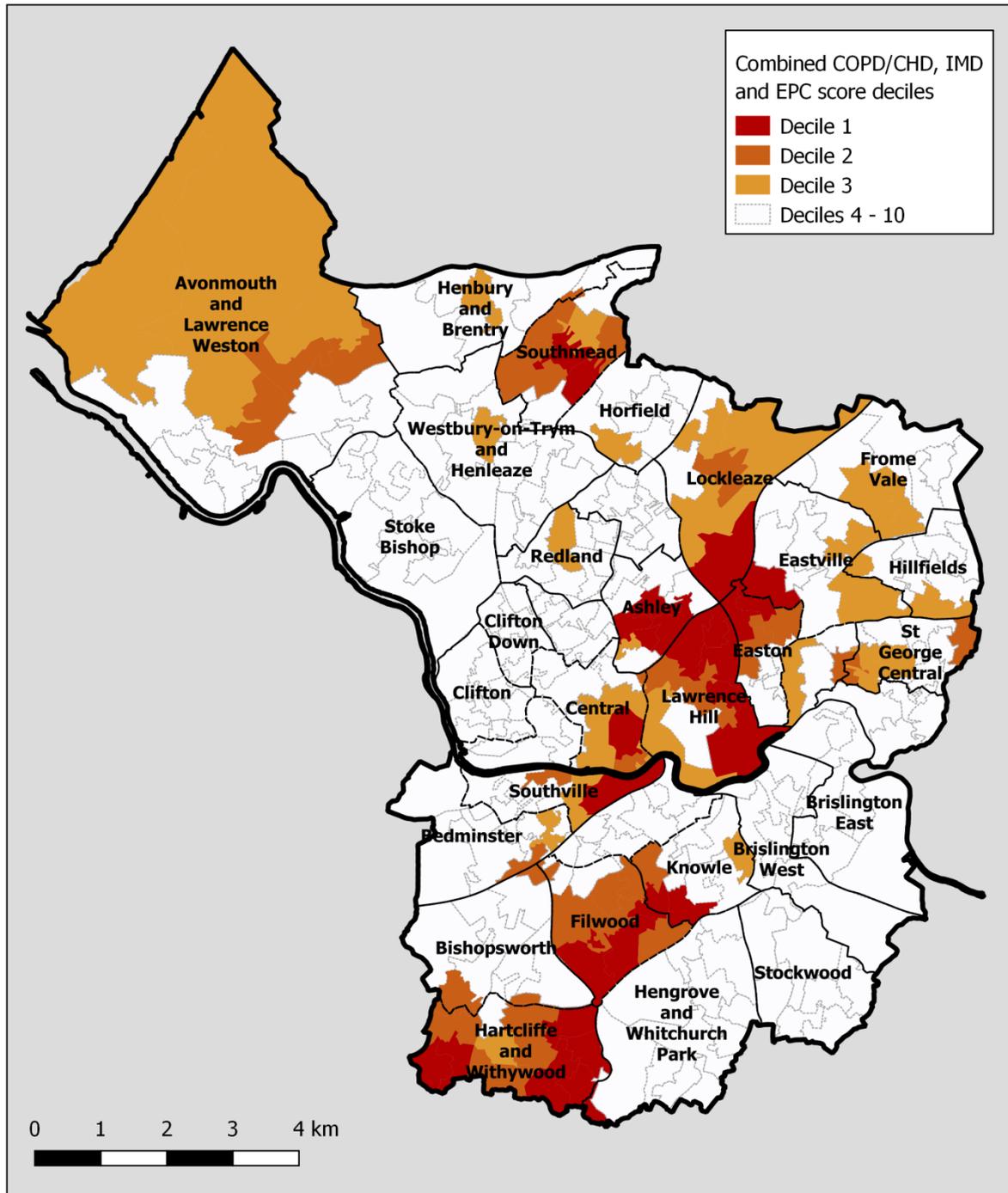


Figure 6: Map showing LSOAs ranked in deciles 1 to 3 for combined health, IMD and EPC indicator

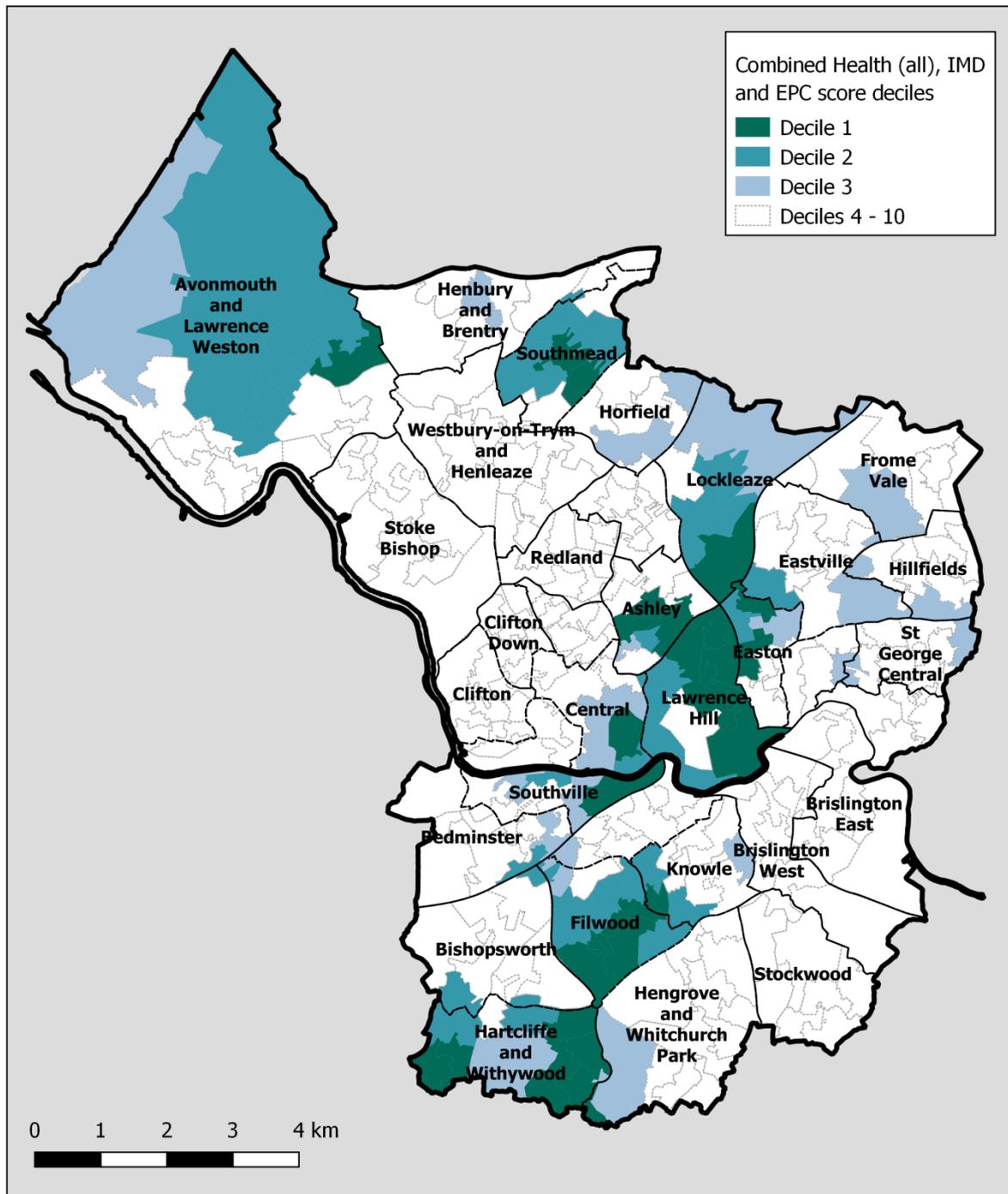


Table 2 shows the wards with LSOAs in decile 1 for both indicators. Both indicators show very similar wards. The wards highlighted have been selected as target areas for fuel poverty support in Bristol.

Table 2: Wards containing LSOAs in the decile 1 of combined vulnerability indicators

Ward name	LSOAs in decile 1 of Rank 1 (Combined IMD / EPC / health)	LSOAs in decile 1 of Rank 2 (Combined IMD / EPC / COPD & CHD emergency admissions)
Hartcliffe and Withywood	6	6
Lawrence Hill	5	6
Filwood	3	4
Ashley	4	3
Southmead	2	2
Easton	2	2
Lockleaze	1	1
Avonmouth and Lawrence Weston	0	1
Southville	1	1
Central	1	1

Table 3 shows the wards in Bristol with the highest number of (estimated) dementia patients, as they have been identified as a group who are particularly vulnerable to cold homes. Whilst there is some overlap to the wards in Table 2, there are also large differences. This is due to the overlap between elderly residents and dementia patients, as the condition is not strongly linked to deprivation as the other indicators in Table 2. As the link between fuel poverty and dementia is less clear than income deprivation, energy efficiency and other health indicators the wards shown in Table 2 are identified as target areas, however dementia patients should be considered as a vulnerable group.

Table 3: Bristol wards with highest numbers of registered dementia patients*

Ward	Registered dementia patients
Westbury-on-Trym and Henleaze	279
Avonmouth And Lawrence Weston	274
Frome Vale	272
Southmead	225
Hartcliffe and Withywood	174
Hengrove and Whitchurch	163
Bedminster	162
St George Central	143
Lawrence Hill	142

**Data is generated from patients registered GP surgery, ward level data shows the number of patients registered to a GP surgery in each ward, not all people will attend a GP in the same ward (or local authority) that they live in, not all wards contain a GP surgery so some areas with high rates of dementia could be missing from the list.*

3) What are the relevant national outcome frameworks indicators and how do we perform?

NICE Guidelines

NICE Guidelines (2015) on winter deaths, illness and health risks associated with a cold home include recommendations to set up a single point of contact referral service for those living in a cold home where frontline workers are able to refer vulnerable households. The service should be able to provide access to a range of solutions from home improvement agencies, housing providers and advice agencies. Other recommendations include; the health and wellbeing boards producing a strategy to tackle fuel poverty; making every contact count through training non-health social workers; and heating engineers visiting homes to assess heating needs and help vulnerable people at home.

NICE Quality Guidance published in 2016, set out the following statements focusing on health and social care commissioned locally:

- Statement 1: Local populations who are vulnerable to the health problems associated with a cold home are identified through year-round planning by local health and social care commissioners and providers.
- Statement 2: Local health and social care commissioners and providers share data to identify people who are vulnerable to the health problems associated with a cold home.
- Statement 3: People who are vulnerable to the health problems associated with a cold home receive tailored support with help from a local single point of contact health and housing referral service.
- Statement 4: People who are vulnerable to the health problems associated with a cold home are asked at least once a year whether they have difficulty keeping warm at home by their primary or community healthcare or home care practitioners.
- Statement 5: Hospitals, mental health services and social care services identify people who are vulnerable to health problems associated with a cold home as part of the admission process.
- Statement 6: People who are vulnerable to the health problems associated with a cold home that will be discharged to their own home from hospital, or a mental health or social care setting have a discharge plan that includes ensuring that their home is warm enough.

Public Health Outcomes Framework

The Public Health Outcomes Framework examines indicators that help us understand trends in public health. The framework sets out a vision for public health, desired outcomes and the indicators that will help determine how well public health is being improved (Public Health England, 2018). The online data tool helps to present various health indicators listed in the framework for the most recent period and allows for comparison with other indicators. The Public Health Outcomes Framework concentrates on: increased healthy life expectancy; reduced differences in life expectancy, and; healthy life expectancy between communities.

Indicator 1.17, which is the percentage of households estimated to be fuel poor, is the fuel poverty statistics collected by the Department of Business, Energy & Industrial Strategy based on the “Low Income, High Cost” definition. With the use of the online tool, fuel poverty statistics can be compared against other public health indicators such as healthy life expectancy at birth.

Clean Growth Strategy

The UK Government’s Clean Growth Strategy (2017) sets out key policies and proposals to improve homes, through improving the energy efficiency of homes and rolling out low carbon heating, including:

- Support around £3.6 billion of investment to upgrade around a million homes through the Energy Company Obligation (ECO), and extend support for home energy efficiency improvements until 2028 at the current level of ECO funding
- Upgrade all fuel poor homes to Energy Performance Certificate (EPC) Band C by 2030 with the aspiration of as many homes as possible to be EPC Band C by 2035 where practical, cost-effective and affordable
- Develop a long term trajectory to improve the energy performance standards of privately rented homes, with the aim of upgrading as many as possible to EPC Band C by 2030 where practical, cost-effective and affordable
- Consult on how social housing can meet similar standards over this period
- Following the outcome of the independent review of building regulations and fire safety, and subject to its conclusions, the UK Government intend to consult on strengthening energy performance standards for new and existing homes under building regulations, including futureproofing new homes for low carbon heating systems
- Offer all households the opportunity to have a smart meter to help them save energy by the end of 2020
- Build and extend heat networks across the country, underpinned with public funding (allocated in the Spending Review 2015) out to 2021
- Phase out the installation of high carbon fossil fuel heating in new and existing homes currently off the gas grid during the 2020s, starting with new homes
- Improve standards on the 1.2 million new boilers installed every year in England and require installations of control devices to help people save energy
- Invest in low carbon heating by reforming the Renewable Heat Incentive, spending £4.5 billion to support innovative low carbon heat technologies in homes and businesses between 2016 and 2021

Fuel Poverty Strategy

The Fuel Poverty Strategy for England (HM Government, 2015) focuses on the energy efficiency of homes. It sets a legally binding fuel poverty target for England, namely that as many fuel poor homes as reasonably practicable achieve a Band C energy efficiency standard by 2030. This sets out interim targets as a roadmap to achieve the main target as:

- as many fuel poor homes in England as is reasonably practicable improved to Band E

by 2020

- as many fuel poor homes in England as is reasonably practicable improved to Band D by 2025

The proportion of fuel poor homes that it is reasonably practicable to help is inherently uncertain: delivery and the pace of delivery will need to be informed by a range of factors, such as wider progress towards decarbonisation, and changes in delivery costs and affordability. In particular, more research is needed to understand how the energy efficiency supply chain needs to develop to ensure this target is achievable by 2030.

Cold Weather Plan

Produced by Public Health England, the Cold Weather Plan provides advice to help prevent the avoidable effects on health during the cold periods during the year in England. The plan aims to raise public awareness of the health effects of cold weather and trigger actions by those who are in contact with people who are most at risk (Public Health England, 2016). The report details the direct effects of cold weather such as stroke and respiratory disease, those that are at higher risk and the housing/economic factors that contribute to a person living in low temperatures (e.g. fuel poverty).

Private rental sector Minimum Energy Efficiency Standards

All new private rented tenancies started after the 1 April 2018, must have an EPC rating of at least “E”. This includes all renewals or extensions to tenancies to the same tenant for the same property. From 1 April 2020, all rented domestic property (including existing tenancies) must have the minimum E rating. The regulations apply to all properties that are required to have an EPC (HMOs are thus currently not included) and the current EPC must not be more than 10 years old.

Any energy efficiency improvements which would have passed the golden rule⁴ and qualified for Green Deal should be installed by the landlord. The most common improvements will be upgrades to the heating system and the installation of loft and cavity wall insulation.

There are a range of exemptions available e.g. if no funding is available to the landlord, permission is refused by the tenant, or improvements would be detrimental to the property. All exemptions need to be registered in advance and evidence provided, e.g. that no grants are available, written denial of permissions. A recent BEIS consultation is reviewing the proposal that landlords can be required to spend up to £2,500 before claiming an exemption, if this is approved the number of properties eligible for an exemption will be largely reduced.

If the EPC shows that the property is rated as an F or G and no exemption has been registered, landlords are liable to a fine of up to £5,000 and a new penalty can be imposed

⁴ The golden rule is that the charge attached to the bill should not exceed the expected savings, and the length of the payment periods should not exceed the expected lifetime of the measures.

when there is a change of tenant if the property is still non-compliant.

Bristol's progress

The average EPC rating for properties in Bristol with a certificate is 63 (D rating). In total the majority (66%) are below C which means we are not on track to meet our longer term targets. Figure 6 below shows the EPC ratings for the private rented sector where 74% are below C with 5.2% being rated F or G i.e. failing to meet the regulations discussed above.

Figure 7: Number and percentage of Bristol's private rented stock falling into each of the EPC ratings bands, based on Simple SAP (Source: BRE, 2017)

	Bristol		2012 EHS England
	Count	Percent	Percent
(92-100) A	1	0.0%	1.0%
(81-91) B	1,207	2.1%	
(69-80) C	13,858	23.9%	18.9%
(55-68) D	27,692	47.7%	46.2%
(39-54) E	12,240	21.1%	24.5%
(21-38) F	2,399	4.1%	7.0%
(1-20) G	642	1.1%	2.5%

Figure 8: Proportion of lodgings reaching C or above

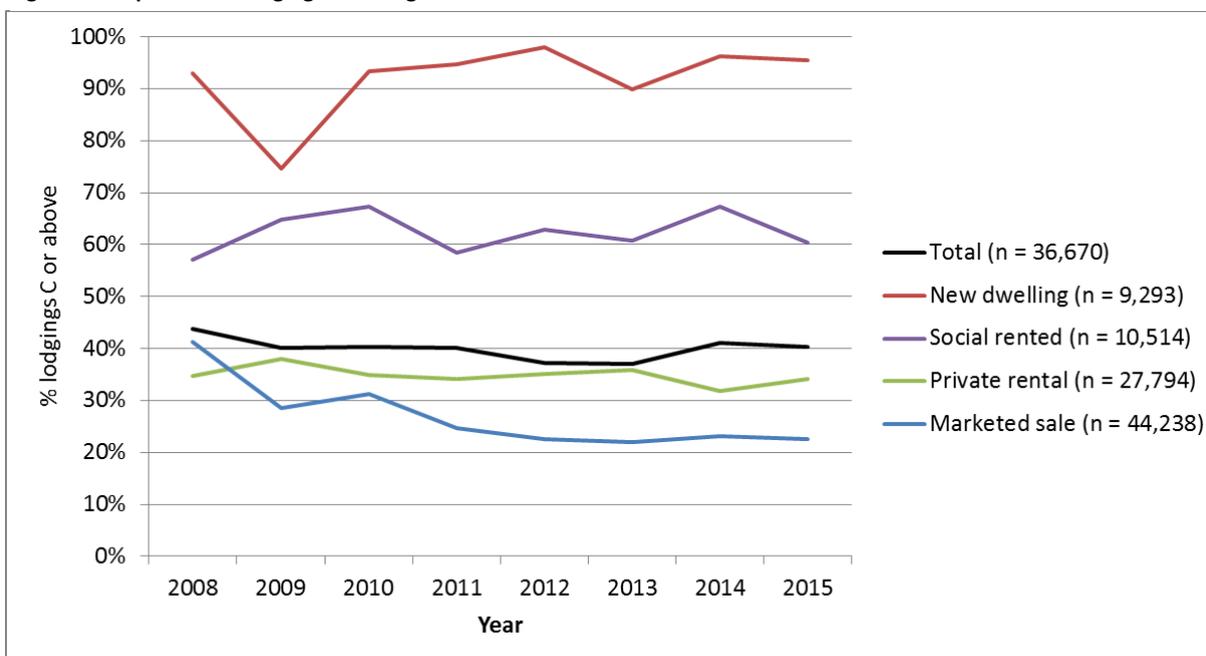


Figure 8 shows the SAP bands of EPCs lodged between 2008 and 2015. EPC ratings are only included where the dwelling was assessed due to being a new dwelling, rented (socially or private) or a marketed sale. Dwellings assessed for Green Deal, ECO and FiTs were excluded as they cannot be expected to represent Bristol housing stock.

Overall the proportion of dwellings rated C or above has declined slightly⁵. The majority of new dwellings are reaching C or above. However private rental and dwellings assessed for sale are achieving much lower proportions of C and above. Many more (around 60%) of socially rented dwellings are achieving C or above.

4) What is the evidence of what works (including cost effectiveness)?

Investment in housing energy efficiency and heating

Systematic reviews of evidence of the health benefits of home energy efficiency and heating interventions suggest a positive improvement in health. Where interventions are targeted at households struggling to afford energy bills or with respiratory conditions, health benefits are clearest (Thomson et al., 2013). A meta-analysis of 36 studies, involving over 33,000 participants found an overall significant positive impact on the health of residents following energy efficiency measures (Maidment et al., 2013).

UK – Decent Homes Standard and Energy Efficiency Standard for Social Housing (EESH)

The Government's Decent Homes Programme, underpinned by the Decent Homes Standard (DHS), launched in 2001 aimed to improve council and housing association homes by bringing them all up to a minimum standard. This includes minimum safety standards, modern facilities and services and efficient heating and effective insulation. In 2015, 19% of 4.6 million homes (all tenures) failed to meet the DHS, this is a reduction of 3.1 million homes since 2006 when 35% of homes failed to meet DHS. The private rented sector had the highest proportion of non-decent homes (28%) while the social rented had the lowest (13%) (Department for Communities and Local Government, 2017). Although the energy efficiency element of DHS set a low basic minimum standard that was not demanding enough to significantly reduce fuel poverty, it still resulted in higher average standards in social housing compared to those in the private sector. An updated housing standard could have a transformative impact on social housing with the potential to spill over to other tenures.

In 2014, the Scottish Government introduced Energy Efficiency Standard for Social Housing (EESH) to drive energy efficiency improvements in the social rented sector with the aim that by 2020, no social property will have an energy efficiency rating of lower than a 'C' or 'D' (standards slightly varied according to whether on gas network or type of property) (The Scottish Government, 2017a). According to the National Report on the Scottish Social

⁵ The proportion is based on lodged EPC on the register which are increasing for older less efficient properties relative to new buildings.

Housing Charter for 2015/16, social housing landlords have reported that 68.6% of houses in the scope of EESSH have already met this standard (Scottish Housing Regulator, 2016).

Scottish government energy efficiency programmes

Since 2009, the Scottish Government has allocated £650 million to a range of fuel poverty and energy efficiency programmes (The Scottish Government, 2017a). In 2013, the Home Energy Efficiency Programmes for Scotland (HEEPS) were launched, this programme consisted of:

- area-based schemes designed and delivered by local authorities targeting fuel poor areas
- Warmer Homes Scotland - a national fuel poverty programme to help vulnerable households and interest free loans of up to £10,000 available to social landlords and private sector households for energy efficiency improvements (The Scottish Government, 2017b).

The most recent (2015/16) HEEPS delivery report (The Scottish Government, 2017b) suggests:

- In 2015/16, HEEPS schemes were successful in installing over 28,000 energy efficiency measures in Scottish households
- Annual fuel bill savings of just over £7 million
- Lifetime fuel bills savings of £122 million

Building on previous energy efficiency programmes in Scotland, the Scottish Government will roll out Scotland's Energy Efficiency Programme (SEEP) in 2018, a new programme to achieve climate change targets as well as to help tackle fuel poverty. With an initial estimated overall investment of more than £10 billion, SEEP aims to improve the energy efficiency of homes and buildings in the commercial, public and industrial sectors and to decarbonise their heat supply (The Scottish Government, 2017a).

Warm Zones Evaluation

Warm Zones are insulation and home heating schemes that focus on a specific area and take a focussed ward-by-ward approach to identifying homes where free measures can be installed. The governmental initiative was designed to systematically reduce fuel poverty on a local area basis. Its three year pilot took place in five zones: Stockton, Newham, Sandwell, Northumberland and Hull. In 2002-2005, the Centre for Sustainable Energy (CSE) and National Energy Action (NEA) conducted an evaluation of the Warm Zones.

Key findings:

- During the pilot period, the Warm Zones approach removed approximately 7% of fuel poor households from fuel poverty in these areas – this ranged from 2% in Hull to 23% in Stockton (CSE, 2005).
- Warm Zones reached many more fuel poor and near fuel poor households than

would normally have been reached under a 'business as usual' scenario (BAU); a total of 11,300 households were removed from fuel poverty over the pilot period – this figure represented over three times the BAU rate (CSE, 2005).

- From this assessment, Warm Zones are judged to be reasonably cost effective with an average of £1,110 spent for every household removed from fuel poverty. The average cost effectiveness does not however take into account the 'added value' provided: role in encouraging significantly increased levels of energy efficiency and fuel poverty activity in local area, ability to access the 'hard to reach', increased energy awareness and knowledge among the general public (CSE, 2005).
- The evidence shows that there is value in the Warm Zone approach under certain circumstances (CSE, 2005):
 - Clustered concentrations of fuel poverty within a locality
 - Development of a local strategic and integrated approach to fuel poverty reduction
 - Access to sufficient resources for measures
 - Demonstration of need in both the social and private housing sectors

Welsh Government Nest Scheme

As part of its strategy to reduce fuel poverty in Wales, the Welsh Government implemented a demand-led fuel poverty scheme called Nest to improve the energy efficiency of homes. In order to inform potential future demand-led fuel poverty schemes in Wales, the Welsh Government commissioned a study which examined the impact of the current scheme on hospital admissions and general health for recipients of home energy efficiency measures (Welsh Government, 2017).

Administrative data for the Warm Homes Nest scheme was anonymously and securely linked to routine health records for analysis purposes. Levels of health service use were compared for 16,353 recipients of home energy efficiency measures and a control group of 24,895 people who were eligible but who had not yet received measures. Key points are:

- The data shows a significant positive effect on respiratory health for recipients of Warm Homes Nest measures. For those people for whom a respiratory GP event was recorded there was a 3.9% decrease in the average number of respiratory GP events. This is a statistically significant difference when compared with a 9.8% increase in the average number of respiratory GP events for the control group.
- The same statistically significant pattern was found for asthma events, with a 6.5% decrease in the recipient group. As would be expected, no difference was found in prescribing for asthma medications.
- The data suggests a 'protective effect' for infection, with a smaller increase in the average number of prescriptions for infection in the recipient group compared with the control group (an increase of 4.0% and 6.1% respectively for recipients and controls). Due to large numbers of both recipients and controls having very small numbers of events the overall difference did not reach the level of statistical significance.
- The data suggests a positive impact on emergency hospital admissions for both

cardiovascular and respiratory conditions. Numbers not sufficient to reach the level of statistical significance, however:

- for cardiovascular admissions: they found a smaller increase in the recipient group compared with the control group; and
 - for respiratory admissions: they found a decrease in the recipient group compared with an increase in the control group.
- The fact that the number of GP events was higher for the recipient group than the control group before measures were installed may reflect successful early targeting of the scheme at households in the greatest need.

Warm Homes Oldham

The Warm Homes Oldham scheme is a project delivering home energy improvements and advice to people at risk of fuel poverty, with a particular focus on people at risk of poor health as a result of fuel poverty.

The initiative delivered three forms of support aimed at alleviating fuel poverty:

- Physical energy efficiency improvements using ECO grant funding plus 'top-up' funding from the NHS, in particular: loft and cavity wall insulation, solid wall insulation and new boilers and heating controls
- Energy use advice, helping residents to use heating and appliances more efficiently in the home
- Income maximisation, including: relieving fuel debt (by applying for trust fund grants), help with bills/tariff switches, help to move from prepayment meters and benefits checks.

Sheffield Hallam University (2016) conducted an evaluation, key outcomes include:

- 60% of respondents with a physical health problem felt that the initiative had a positive impact on their health
- The median reduction of proportion of income spent on fuel was 5%
- almost all (48 out of 50) of those who self-reported as being at 'high risk' of mental illness on completion of the General Health Questionnaire moved to 'low risk' following the initiative
- 96% of respondents agreed that their home was easier to heat as a result of their involvement in the project; and 84% agreed that they now spend less on their heating.

The monetary valuation for individuals was calculated as between £399,000 and £793,000. Using NHS and NICE guidelines for cost-benefit analysis, these figures suggest that the £250,000 per year investment from Oldham CCG is cost effective. These were based on an assumption that the impact of energy efficiency interventions are fully realised immediately and last for one year.

Calculated savings to the NHS include:

- £2,500 of reduced medication costs
- £21,600 of reduced counselling costs
- £11,000 of reduced GP costs
- £2,800 of reduced outpatient costs
- £7,100 of reduced inpatient costs.

The affordable warmth access referral mechanism in Greater Manchester

The affordable warmth access referral mechanism is a programme linking health, housing and fuel poverty services that aims to increase referrals from front line organisations to help people experiencing fuel poverty. The support services it offers include (Public Health England, 2014):

- Benefit and debt advice
- Support with home repairs and improvements
- Energy efficiency advice
- Facilitating subsidised cavity wall and loft insulation
- Support with grant applications for heating repairs and replacements
- Fire safety checks

A cost-benefit analysis of the programme was conducted on 52 household interventions by Greater Manchester public health practice. The cost of 52 household interventions was estimated to be £88,800. The evaluation (Threlfall, 2011) identified a number of benefits to come out of the programme:

- A dramatic increase in referrals from across the social and care sectors
- An estimated health gain compared to over £600,000
- An estimated 2.55 life years gained from living longer
- An estimated gain in quality adjusted to life years (per person helped) of between 1.67 and 31.16

CSE Home Energy Advice Hub

The Centre for Sustainable Energy run a successful energy advice hub offering advice on saving energy and money on fuel bills to households in the West of England and Somerset area. According to the CSE Home Energy Advice Hub final report for 2016-17:

- The Home Energy Team supported over 7,700 households by answering more than 10,500 enquiries in the last financial year
- Assuming householders acted upon the advice provided to them, their collective savings will have been over £1 million per year, or £160 for each household.
- In Bristol, the Home Energy supported 1,212 households delivering a total saving of £174,741

Bristol City Council Tenant Energy Advice

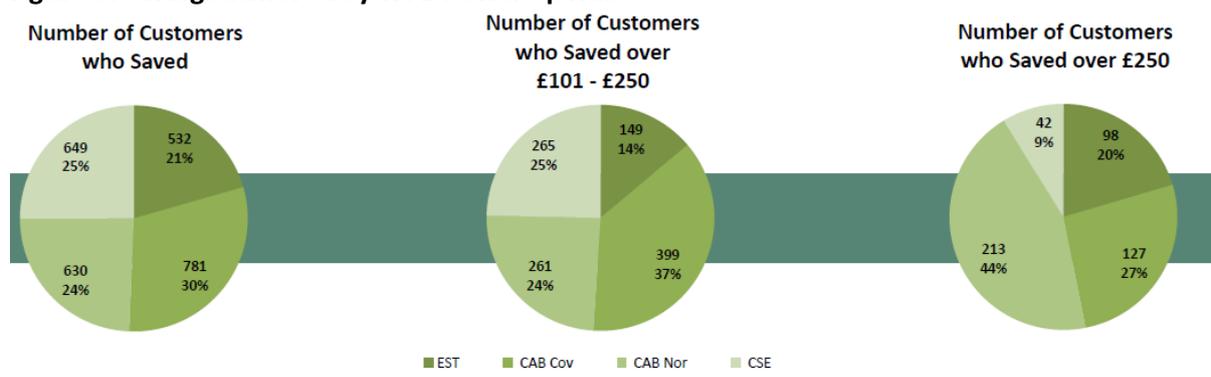
Tenants who call CSE's advice line or are referred by the council's housing officers can be referred for bespoke advice. CSE are able to offer home visits and ongoing support to people who need help understanding how to use their heating system, are having issues with their energy bills, or who are struggling in other ways to keep warm at home. Once a Bristol City Council tenant has a new heating system installed they are able to receive ongoing advice and a demonstration of their new system through contacting the TEA service. CSE are also contacting Bristol City Council tenants who have refused to have a heating upgrade. Through telephone calls and home visits they have explained the work required and the benefits of having a more modern and efficient heating system. Through CSE's intervention around 25% of these tenants have agreed to have their heating system replaced.

Additionally, the service provides workshops and drop-in sessions for council tenants throughout the year, on topics such as how to switch supplier or how to apply for the Warm Home Discount, along with face-to-face help with bills and fuel debt. If the advisors spot damp and condensation in tenant's homes they are able to alert the council, who can then install measures to address them. If tenants have self-disconnected from their energy supplier due to financial worries or difficulties, CSE can advise them on finding the right tariff and how best to manage their energy consumption so they use their heating without running up unaffordable bills.

WPD Power Up

Western Power Distribution (WPD) operates the Power Up schemes to support priority service register (PSR) customers who are facing fuel poverty. The scheme comprises four hubs which cover their license areas, namely the South West, Wales, West Midlands and East Midlands. The hubs support clients to increase their incomes, access grants and benefits, improve their energy efficiency and tackle high bills. The hubs currently support 7,205 customers with a financial a saving of £1.4million a year i.e. an average saving of £194 per client. WPD performs external evaluation of the project to check if householders act upon the advice they are given. The research shows that the savings claimed by the hubs are confirmed by the householder.

Figure 9: Savings achieved by WPD Power Up Hub



Wellington Healthy Homes

CSE, Western Power Distribution and Taunton Deane Council worked to engage patients at the Wellington Medical Practice. The project explored the value of partnering with a GP practice to promote energy and water advice to improve the health outcomes for their patients. The project used targeted mail outs to contact patients with relevant health conditions (that make them vulnerable to the health impacts of a cold home) and engaged the practice staff to make them aware of the support available. Patient's medical records were also updated to include the energy efficiency of their home (where data was available). The project provided support to 97 households with 64 of those receiving in-depth support and saving on average £307 per household.

Cold Homes Energy Efficiency Survey Experts (a community energy project developed with Bristol Energy Network)

Thermal imaging technology is used to reveal where heat loss occurs in homes. Householders are then equipped with the knowledge to know where to focus efforts to reduce heat loss. The project's analysis of 49 of the 56 homes surveyed by thermal imaging in winter 2016-2017 showed that one to three months after survey:

- 84% had taken action, mostly low cost (<£250 and mostly by DIY, e.g. installing LED bulbs and filling cracks/draught-proofing, which can have one-year pay-back periods).
- 10% were implementing or had implemented high cost measures such as floor insulation, new door, new double glazed window, secondary glazing.
- 92% were planning low cost measures.
- 35% were planning high cost measures, including installing one or more double glazed windows, floor insulation or solid wall insulation (SWI).

5) What services / assets do we have to prevent and meet this need?

Services and assets in Bristol

WHAM – Warm Homes Advice and Money

WHAM is a partnership (between Centre for Sustainable Energy, Talking Money and WE Care & Repair) working together to support people living in fuel poverty in Bristol. The project set out to assist at least 2,750 families on low incomes, unemployed householders and lone parents in private sector accommodation. The project ensures that low-income groups can access in-depth support from Bristol's leading organisations on energy (CSE), financial capabilities (Talking Money) and housing improvement support (WE C&R). Referrals can be made directly by other agencies and health professionals via a secure online referral form.

WRAMAS (BCC)

The Welfare Rights and Money Advice Service run by Bristol City Council provides specialist support services to over thirty 'short term' support agencies working with vulnerable

people. WRAMAS provides advice and support with all areas of the Welfare Reform Act, including benefit appeals at tribunal against Department for Work and Pensions decisions. They provide training, telephone support and information for support workers. They also refer for energy efficiency measures, handy-person services, food banks, grants and trust funds.

Money Advice West

Money Advice West is a partnership established in 2006 with the vision to help people who have money and debt problems in Bristol and the surrounding areas. It consists of seven advice agencies who understand that money can affect many areas of your life and they offer expert support. The five agencies that cover Bristol include; Talking Money, St Paul's Advice Centre, North Bristol Advice Centre, South Bristol Advice Centre and Citizens Advice. The partnership was established to help coordinate referrals for debt advice across the city. Referrals can be made via a secure online portal.

Talking Money

Talking Money is an independent charity dedicated to improving the lives of people in financial hardship. The Bristol based charity provides debt advice, energy advice, benefits advice, financial education and training and consultancy.

The charity runs an energy advice project which offers telephone advice to help people deal with fuel debt, access grants for energy efficiency measures, find the cheapest supplier and tariff, budget for energy consumption and understand bills and heating. Within Bristol, Talking Money can offer face-to-face advice, group sessions and home energy audits within the energy saving project. Referrals can be made via their secure online portal or clients can visit weekly drop-in sessions.

North Bristol Advice Centre

North Bristol Advice Centre offers financial advice in the North Bristol and South Gloucestershire areas through a mix of home visits, advice appointments, telephone advice and group workshops. They specialise in welfare benefits and debt advice, including representation at tribunal, and can provide basic housing and employment advice. For more complex queries, North Bristol Advice can signpost people to organisations that can offer more specialist support.

In 2014 North Bristol Advice Centre set up Buzz Lockleaze, a local social enterprise working with the Lockleaze community to enhance employability and access improved health and wellbeing. Through the Bristol Energy Cooperative's Megawatt Community Energy Fund supported by the Bristol Energy Network, a grant was awarded to Buzz Lockleaze in 2017 to deliver a series of 'energy awareness feasts' to promote and facilitate community action in relation to energy issues in the Lockleaze area.

South Bristol Advice Services

South Bristol Advice Services (SBAS) provides free and confidential advice and support to

residents of South Bristol looking for help with welfare benefits and debt. If people are seeking assistance outside of those areas, the team at SBAS are able to signpost people to specialist services. The charity run drop-in sessions at their centre as well as in community based venues across South Bristol as well as a free telephone advice service.

St Paul's Advice Centre

The St Paul's Advice Centre is a charity funded by Big Lottery Fund, Bristol City Council, the Money Advice Service and Wessex Water that offers free and impartial advice to residents of the St Paul's area in Bristol. The advice centre offers drop-in appointments, outreach sessions and home visits to support people on a variety of areas such as housing, welfare benefits, debt and money.

The service has had a positive impact on the lives of local Black and ethnic minority community in St Paul's who make up 78% of their clients. Importantly, the service offers bilingual advice at some of their venues – 120 drop-in sessions have been held in clients' own language. Other positive impacts include:

- £1.2m brought into the community by helping people maximise their income
- £1.5m worth of debt cleared with the help of the service's specialist money advisers
- 93% of clients said they understood their rights after using the service

Citizens Advice Bristol

Citizens Advice is a national charity providing free and independent advice to people in a range of areas including benefits, work, debt and money, consumer rights and health. They offer face-to-face, telephone and web-chat support across the UK. Citizens Advice engages extensively with the health sector, in part because a high proportion of its clients have many health and social care needs. The Citizens Advice health and social care strategy prioritises work in five areas: mental health, treatment in primary care and community settings, life changing events such as illness or accident, adverse childhood experiences. Citizens Advice is also the statutory energy consumer representation body. Citizens Advice run projects and campaigns that help people understand their energy usage, the energy system and how to manage and reduce their energy bills.

Citizens Advice Bristol's (CAB) main office is located in central Bristol, and the service can also be found in a number of outreach centres across the city, including health care settings. In 2016/17 CAB supported 8214 clients, helped clients manage £5,744,670 of debts and secured £9,061,384 in benefits entitlements.

Nationally, Citizens Advice has carried out a number of initiatives to support the NICE guideline on excess winter deaths and the health risks associated with cold homes. They include:

1. Trialling different ways to refer people that need support

2. Coordinating a single point of contact for housing and health services
3. Providing '[cold home toolkits](#)⁶' for local authorities and health trusts (Citizens Advice, 2018)

Citizens Advice's experience of implementing a single point of contact (SPOC) could be influential in supporting the creation of a SPOC in Bristol.

BCC TEA Advice Service

CSE provides energy advice to Bristol City Council's social housing tenants via the Tenant Energy Advice (TEA) project. Tenants who call the advice line or are referred to CSE by the council's housing officers or other support agencies receive bespoke energy advice. CSE are able to offer home visits and ongoing support to people who need help understanding how to use their heating system, are having issues with their energy bills, or who are struggling in other ways to keep warm at home. The project provides in-depth support and advice to around 600 tenants per year. As of 31st May 2018, TEA has helped Bristol tenants save a total of £156,702.

Warm Up Bristol

Launched in 2014, Warm Up Bristol (WUB) is a council scheme that is run by the Energy Service's housing division. It was created to help local residents improve their homes. Working on the private housing stock in Bristol, they offer a range of energy efficiency measures to create warmer, more affordable and healthier homes, while reducing carbon emissions. The scheme was founded after the Energy Service secured Green Deal funding from central government to support the installations of energy efficiency measures across Bristol.

Since the launch, the scheme has installed over 1,200 measures across Bristol representing an investment of over £4.5m in the city's housing stock. The Warm Up Bristol scheme offers a range of insulation types including cavity wall insulation, loft insulation and external cladding, as well as draught proofing, boilers, heating upgrades, double glazing and doors. For the future, the Energy Service's housing team is determined to continue to help improve the energy efficiency of buildings across the city and ultimately assist with the elimination of fuel poverty in Bristol. By offering a variety of financing and funding options, they aim to ensure that the energy efficiency measures are accessible to those that need them most.

Wessex Resolutions CIC

Wessex Resolutions CIC is a Community Interest Company that provides local authority backed low interest loans. In partnership with Bristol City Council, Wessex Resolutions CIC offers low interest loans to Bristol low income homeowners for energy efficiency improvements in the home. The Wessex Home Improvement Loan is available to fund repairs such as replacement boilers, central heating installation, damp remedy and energy efficiency improvements. The Home Energy Loan is available to fund energy efficiency

⁶ Available at www.citizensadvice.org.uk/about-us/how-we-provide-advice/advice-partnerships/cold-homes-toolkit/

measures in the home such as cavity wall insulation and solid wall insulation.

West of England Care & Repair (WECR)

WE Care & Repair is the home improvement agency for the West of England. Their guiding purpose is to enable older and disabled people to continue living independently. The services offered are available to homeowners and private tenants in the B&NES, Bristol, North Somerset and South Gloucestershire areas who are over 60 or disabled. The types of services on offer that help these groups of people keep a warm and healthy home and keep energy bills down include:

- Central heating repairs
- Dealing with damp
- Information and advice on heating in the home
- Help with applying for funding such as the Wessex Home Improvement Loan for energy efficiency measures and heating installation/repairs.

Bristol Energy Network

BEN is an umbrella organisation and network for individuals and community groups in Bristol with an interest in energy and creating a new energy system that works for everyone. In 2017, BEN allocated grants to projects tackling fuel poverty such as:

- The C.H.E.E.S.E. Project (Cold Homes Energy Efficiency Survey Experts): a project providing heat surveys enabling local residents to reduce domestic heat loss.
- Awaz Utaoh: A project in partnership with the Centre for Sustainable Energy to provide energy awareness days for older women from the South Asian community and provide translations of energy efficiency information.
- Re:draught: a scheme ran by Re:Work providing heat surveys for 10 households and energy efficiency advice to 50 households in the Knowle West area.

In 2017, BEN was awarded a £5,000 grant from the Bristol Green Capital Partnership for their project 'Fuelling the energy revolution in Bristol'. This funding will go towards helping vulnerable fuel poor households across the city.

Bristol Credit Union

Bristol Credit Union (BCU) helps local people make the most of their money by giving them access to affordable loans with low interest rates and competitive savings accounts. With no shareholders taking profits, any profits made are reinvested back in the local economy.

In 2013/14, BCU helped over 4,789 people borrow £2,908,292 at affordable rates. The credit union brings together the wealthier areas with the less well off, mobilising financial resources within Bristol for the mutual benefit of all communities.

6) What is on the horizon?

Local policy

Bristol City Council has published a Corporate Strategy for 2018-2022 which includes the aim of tackling fuel poverty in the next five years through improving Bristol's housing stock through developing Warm Up Bristol as a sustainable delivery mechanism, encouraging behavioural change and supporting Housing Delivery on their large-scale home improvement programme (BCC, 2018). Key commitments in the draft for consultation that relate to wellbeing include:

- Improve physical and mental health and wellbeing, reduce inequalities in health and consider health in all policies.
- Take action to improve air quality and minimise our environmental impact.
- Build resilience, improving our ability to cope with environmental, economic or social 'shocks and stresses' while putting Bristol on course to be run entirely on clean energy by 2050.
- Encourage life-long learning in environments where both academic and emotional development are understood and delivered together.
- Tackle food poverty.

Bristol's proposed district heating network

Bristol City Council is in the process of developing city-wide heat networks which will provide low cost heat to Bristol residents and businesses, thereby having the potential to reduce fuel poverty.

The actual impact on fuel poverty of heat networks will depend on how quickly they can be developed and how soon those currently using high cost heating systems (such as electric heating) are able to switch to heat supplied from the heat network.

Energy policy changes

Price caps

Ofgem have announced that from February 2018, the prepayment price cap will be extended to the one million households receiving the Warm Home Discount. Ofgem also released a consultation in December 2017 to extend this safeguarding tariff to include more vulnerable households not currently claiming the Warm Home Discount. The consultation proposed using DWP benefits data to identify customers who receive an income or disability benefit and automatically apply the safeguarded tariff through a data-matching exercise with suppliers. This could reach an estimated 2.2 million consumers on default deals (Ofgem, 2017).

The Government have promised further action to cap standard variable tariffs. Green tariffs are expected to be exempt and it is unclear how this will impact the energy market.

Energy Company Obligation (ECO)

ECO funding is a Government obligation on the larger fuel companies to provide domestic heating and insulation measures. The Affordable Warmth Obligation (Home Heating Cost Reduction Obligation) eligibility criteria are based on income benefits claimed by households. The Carbon Emissions Reduction Obligation (CERO) is aimed at carbon

reduction and has no specific eligibility criteria. Currently the ECO-flex aspect allows 10% of funding to be allocated based on an eligibility criteria determined by local authorities. From Autumn 2018, the government intends to remove the CERO element of ECO so that the whole of ECO is targeted at fuel poor and low income households. Other expected changes to the ECO include an increase of the proportion of funding allocated to ECO-Flex to 20-50%. This will increase the influence Bristol City Council has on how funding for heating and insulation is spent in Bristol.

Warm Home Discount

The Warm Home Discount is a Government obligation on the larger fuel companies to provide an annual discount of £140 off energy bills for eligible households. Currently the 'core group' eligible across all suppliers are recipients of the Guarantee Credit element of Pension Credit. Each fuel supplier has its own 'broader group' of low income households who are also eligible. Generally, households within the broader group are those eligible for Cold Weather Payments, although suppliers have some discretion over which of these households receive the discount. Currently, households need to apply through their energy supplier to receive the discount.

Research suggests that expected changes to this policy include using DWP benefits data to identify customers who receive an eligible benefit, and automatically assigning the discount through a data-matching exercise with suppliers.

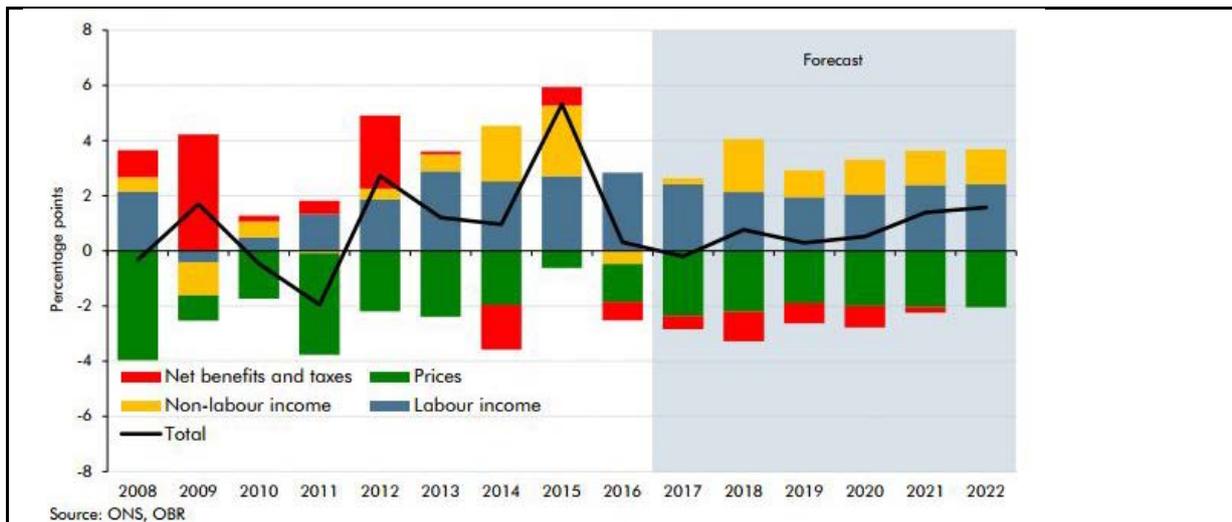
Smart meters

The national smart meter roll out is expected to help households understand their energy use and help them reduce energy bills and use energy more wisely. The roll out has been complicated by suppliers installing SMETS 1 smart meters which may not be able to operate in smart mode when you switch supplier. If a supplier installs a SMETS 2 meter then it will be able to communicate in smart mode after you switch and communicate with the central data communications company (DCC). Smart meters provide an opportunity for health safeguarding via monitoring energy use e.g. kettle and cooker usage, there is also the potential to connect additional monitoring equipment to the consumer access device (CAD) i.e. motion sensors which would allow you to track sedentary behaviour and intervene early in a patient's recovery.

Income projections

According to the Office for Budget Responsibility (OBR)'s November 2017 'Economic and fiscal outlook report', real household disposable income is forecasted to rise in 2018 as dividend income picks up and CPI inflation eases.

Figure 10: Contributions to real household income growth (ONS, OBR)



The forecast suggests that “real household disposable income will continue to grow. This growth is supported by a gradual increase in nominal earnings growth and contributions of other sources of household income also on the rise, partly due to increases in actual and imputed pension contributions, reflecting greater auto-enrolment and higher pension contribution rates. However, the freeze in most working-age benefits and tax credits, together with fiscal drag in the income tax system, continues to weigh on household income growth.”

Despite the OBR’s forecast, changes in incomes in the UK are likely to be heavily influenced by the outcome of Brexit negotiations. A joint report by Resolution Foundation thinktank and Sussex University (2017) predicts that as a result of the UK potentially leaving the EU without a trade deal there will be a squeeze in household budgets, especially for low income families. Through tariffs being imposed on EU imported goods, there will be an increase in price for essential goods. The report found that this rise in price would add 1.1% to the cost of living for the poorest 20% of households, against 0.8% for the richest 20%.

7) Local views

Local views survey and respondents

As part of the JSNA, a small survey was completed by service providers and academics in January 2018 to capture local views. The following organisations responded:

Responding organisation	Services provided
Age UK Bristol	Advice and Information, housing support, day centre, foot care, leg care, IT courses.
Bristol City Council	Health improvement services to address cause of disease i.e. lifestyle factors such as smoking, alcohol, diet, physical activity.
Bristol City Council Homes and Landlord Services	Council housing

Bristol Credit Union Ltd	Financial services, primarily savings and affordable loans.
Bristol Energy	Bristol City Council owned gas and electricity supplier, provide low-cost tariffs to vulnerable households traditionally on expensive tariffs.
Centre for Sustainable Energy	Telephone advice service, home visits and support around heating systems, energy bills and debt, financial capability and grant applications. Training to frontline workers and community groups.
East Bristol Foodbank	Provide food for people in crisis.
Healthwatch Bristol	Advocacy, signposting, patient experience participation and feedback, complaints, database of services.
North Bristol Advice Centre	Advice surrounding welfare benefits and debt as well as other projects surrounding combating social isolation in older people and advising on financial capability.
University of Bristol Accommodation Services	Accommodation advice.
University of Bristol Personal Finance Research Centre	Research.
Western Power Distribution	Priority service register and fuel poverty schemes tailored to customer needs.

The organisations support a range of vulnerable groups, most commonly including low income families (9/13), people with mental health conditions (8/13) and physical impairments (8/13). Other groups supported include: care leavers, ex-offenders, homeless people, people experiencing domestic abuse, people with learning difficulties, people with problematic drug/alcohol use, single or lone parents, teenage parents, unemployed people, refugees and asylum seekers, and people with sensory impairments.

Key findings

Additional needs of fuel poor in Bristol

Fuel poor people in Bristol have a wide range of needs including help to reduce their energy bills, grants for heating and insulation measures and support to find cheaper tariffs. Low engagement and trust in the energy sector leaves few people switching energy tariffs or supplier.

Access to advice needs to go beyond heating, energy efficiency and tariff advice. Age UK and East Bristol Foodbanks' experience of households in fuel poverty shows that they are likely to be struggling with other costs including food and transport, leading to social isolation. Advice and support should cover benefits, debt and budgeting skills. Links between fuel poverty and health mean support is needed from health services (including mental health services), and adult social care.

Identifying and targeting fuel poor households

Respondents were asked for ways to better target fuel poor people to ensure they are benefiting from available support. Suggestions include joining up local organisations more

effectively to refer vulnerable households to support needed. Services used by fuel poor households that provide an opportunity to reach them include foodbanks, health services (including Bristol Community Health), credit unions and community and faith groups.

University of Bristol suggest identifying small target areas through RdSAP and small area household income estimates. Inefficient rented homes need support from landlord groups to target and improve.

Bristol Energy highlights the challenges and opportunities of identifying and engaging fuel poor households. The smart meter roll out, and consent to access energy consumption data provides an opportunity to identify under heating and self-disconnection.

Capacity of services in Bristol

Nearly all advice agencies that responded indicated that advice agencies in Bristol are at capacity and overwhelmed by demand. The winter of 2017/18 has been the busiest ever for requests for energy advice at CSE and Age UK cannot meet demand for home visits for low income older people to help with benefits and social care. North Bristol Advice Service specified there is not adequate capacity for debt advice despite only one in five people in debt seeking help.

The large market for short-term lending with high rates for credit provides an opportunity for Bristol Credit Union (BCU) to provide affordable alternatives for families, but BCU does not have capacity to meet demand. The city does not have enough affordable housing.

Case studies

Mrs N – Case Study

Mrs N is 57, and lives by herself in her mortgaged property. She has two grown up daughters. She is housebound as a result of a number of health problems including agoraphobia, depression and anxiety, diabetes, high blood pressure, IBS and restless leg syndrome. She had been on Employment and Support Allowance (ESA) for long time but her claim had been cancelled as she hadn't attended the work capability assessment, despite requesting a home visit. Her payments stopped in November 2017 and were not resumed until March 2018 because of the time it took to appeal the decision and wait for a new claim to be paid. In the meantime, she had no income at all other than a short term grant of £25 a week from St Monica's Trust.

She was referred to Warm Homes Advice and Monday (WHAM) by a caseworker from Welfare Rights And Money Advice Service (WRAMAS) as she had said she was too scared of running up a bill to put her heating on. WHAM visited her at home in December and spoke to her energy supplier to explain the situation. They advised her to cancel her direct debit and switch to quarterly billing. They also established that she was not actually behind with her bills yet. This helped to reassure her that it was ok to use her heating.

During the visit, WHAM observed that her house had a number of repair issues and her boiler was very old. She was referred to WE Care & Repair, a partner in the WHAM project, for an occupational therapist assessment for some adaptations around her home; to inspect some damp patches; reseal double glazed units and fix some light fittings. Initially

WHAM tried applying to a fund for a new boiler called 'Let's Talk Energy' but unfortunately this was rejected. The only other funding option was through ECOflex funding delivered by Bristol City Council's Warm Up Bristol Scheme. ECOflex allows local authorities to set their own criteria for eligibility and therefore enables ECO Funding to be available more people in need and not just those in receipt of benefits. This was perfect for Mrs N as she had stopped receiving her ESA. She received a quote from Warm Up Bristol and WHAT applied to the Anchor Society, St Monica's Trust, and Independence at Home for further funding towards her contribution. The remainder was made up from WE Care & Repair gas safe fund and WHAM funds. This enabled her to have a new efficient heating system, free of charge, which was much cheaper to run. WHAM also sent her a series of vouchers for the North Bristol food bank, and also got her £100 worth of food shopping via Talking Money

Mr M – Case Study

Mr M is 48 and lives alone in his privately rented flat. He has been suffering from depression for a long time, although he had been working as a self-employed plasterer until the end of 2017 when he had to stop work and go onto ESA. His mental health is being made worse by the situation in his property. He has a very bad relationship with his landlord who has been aggressive, has tried to put the rent up illegally, and refuses to carry out any repairs. His flat is very cold and draughty, with large single glazed windows and high ceilings. There was no carpet down in either the lounge/kitchen area or bedroom – Mr M had some carpets, but could not afford underlay, and his landlord refused to pay. This meant that the floor was really cold and draughty.

He got really behind with his EDF electric bill and was not able to get on top of the payments. Part of the reason for this is that his meter is not in his flat – it is in the flat above – so he cannot take regular meter readings (or have a prepayment meter installed). The fuse board is in his flat, and covers the entire ground floor, so Mr M is billed for the lighting and fire alarms in the communal areas. He felt very aggrieved by this and that he should not have to pay it. His landlord refused to get a separate meter or fuse board installed for the communal areas. However, he had put the lighting on a sensor which helps to reduce the bill.

Mr M was already in touch with Shelter and Tenancy Relations at the council, and unfortunately there was not much that the landlord could be forced to do about the meter/fuse board. It was explained that the communal lighting and fire alarms would be using a minimal amount of electricity anyway, and that the most probably reason for the arrears was due to non-payment following the reduction in his income and mental health difficulties. An application was made to the EDF Energy Trust, who awarded him £1373 to clear his arrears. WHAM set up a payment plan for his ongoing usage so he does not get behind again.

WHAM funds are being used to pay for some carpet underlay so that he can lay the carpets, which will improve the warmth in winter and reduce draughts. He was also referred to another project at CSE to install some draught proofing strips around his windows and doors. He decided to try applying for PIP and was helped to complete the application by the WHAM support worker.

B: What does this tell us?

8) Key issues and gaps

The average SAP rating for Bristol is currently 63 which is equivalent to EPC band D. The Government has set long-term fuel poverty targets of achieving SAP band C by 2030. Considerable energy efficiency activity will be needed in Bristol to achieve these targets. Housing stock in Bristol is not on track to reach efficiency targets as most are not reaching EPC C or above.

The private rented sector represents the worst efficiency housing in the city, with 15% having a category 1 hazard 1 HHSRS hazard. HMOs have even higher rates of category 1 hazards and fuel poverty. The cost of renting from the private rented sector in Bristol is increasing year on year and for many people, affording a good quality home is becoming increasingly difficult for private tenants in receipt of medium incomes. Those tenants in receipt of either Local Housing Allowance (LHA or Housing Benefit) or Universal Credit are increasingly unable to afford the rising costs of rents in the city, both for self-contained or shared room accommodation.

Bristol has a number of organisations providing support and advice to households in poor housing, fuel poverty, financial difficulty, at risk of homelessness and with health problems and poor housing. Advice agencies are overwhelmed with demand, and lack the necessary scale of funding to provide the support needed. Services make and receive referrals from other organisations including inside the local authorities. There is no single point of contact for fuel poverty services and referrals.

Some services, including CSE and Citizens Advice, engage with the health sector and work with frontline health workers in some cases to link health and energy advice services and target those most in need. This is not standard practice and Bristol lacks a single point of contact for fuel poverty or cold homes as recommended in the NICE (2015) guidelines. Frontline health staff do not all receive training on how to identify and help those in fuel poverty. The hospital discharge process also currently risks returning patients to cold homes without the necessary support.

Data sharing remains a barrier to agencies working more closely with each other. Information security is a growing concern as data protection regulations become more comprehensive. Patient data is particularly sensitive and a number of stakeholders identified information security as a barrier to working with the health service.

9) Knowledge gaps

Knowledge and data sharing across support services in the city is patchy. Frontline health workers lack information about patients' housing conditions that could be extremely beneficial for providing holistic support, including relevant referrals. Integration of health and housing data could help identify areas of the city with high numbers of people in poor health living in inefficient homes. Furthermore, it could also help track the health outcomes of insulation and heating support measures.

The NICE Guidance should be used to inform local health and social care. An assessment of Bristol's progress towards meeting these guidelines could help inform where efforts and resources need to be directed. Links with the University of Bristol and Bristol Health Partner's Understanding Patient Data project could help establish a baseline for activity. Further research into excess winter deaths in Bristol among certain vulnerable groups including people living with Alzheimer's Disease or related dementias could also help inform better interventions.

C: What should we do next?

10) Recommendations for consideration

As part of the JSNA process, the JSNA Fuel Poverty reference group for the chapter discussed and developed a range of recommendations to be included in the chapter. These recommendations replicated many of the NICE guideline recommendations for *Excess winter deaths and illness and the health risks associated with cold homes*. The recommendations outlined in the NICE guideline are key tasks that would have a significant impact towards reducing and ultimately eliminating fuel poverty in Bristol.

The JSNA report recommends the Health & Wellbeing Board implements the NICE guidelines for *Excess winter deaths and illness and the health risks associated with cold home*. In the following section, the chapter discusses which recommendations should be prioritised for implementation:

1. NICE Guideline recommendation 1: Develop a strategy

The JSNA chapter recommends that the Health & Wellbeing Board facilitate the development of a fuel poverty strategy in collaboration with various organisations in Bristol. A working group should be used to develop a strategy for Bristol that includes advice agencies, health workers and those who can provide data and fuel poverty support. The JSNA recommends the strategy should be produced by the No Cold Homes steering group⁷, as it includes a variety of organisations in the city, as well as multiple

⁷ The No Cold Homes steering group is an action group created out of the 'No one should suffer a cold home' event hosted by Bristol Energy, Western Power Distribution, and the Centre for Sustainable Energy and launched by Mayor Marvin Rees

departments from Bristol City Council. The Health and Wellbeing Board should ensure there is adequate representation from the health sector, in particular the Clinical Commissioning Group (CCG), within the No Cold Homes steering group. The group will aim to deliver a practical strategy that works in conjunction with the recommendations of the NICE guidelines and additionally addresses the wider determinants of fuel poverty, such as housing stock and housing supply.

This strategy should include an attainable EPC target for all homes in Bristol in line with the central government target, which is “as many fuel poor homes as is reasonably practicable achieve a minimum energy efficiency rating of Band C, by 2030”.

2. *NICE Guideline recommendation 2: Ensure there is a single-point-of-contact health and housing referral service for people living in cold homes*

NICE Guideline recommendation 3: Provide tailored solutions via the single-point-of-contact health and housing referral service for people living in cold homes

The JSNA chapter recommends the Health and Wellbeing Board should ensure that a local single-point-of-contact (SPOC) health and housing referral service is commissioned to help those living in cold homes. The chapter concludes that this SPOC should be integrated into the delivery support of frontline health staff (OTs etc.), community organisations and other agencies across the city. Local advice and support projects should be expanded to meet the requirements of SPOC referrals. Likewise the hospital discharge process should be reviewed to ensure no patient is discharged to a cold home. If a home is cold, then the SPOC should identify their support needs and make onwards referrals.

3. *NICE Guideline recommendation 4: Identify people at risk of ill health from living in a cold home*

The JSNA recommends that collaborations should be formed (primary health care, local authority departments and community contacts) to identify fuel poor patients who need advice and support. This assessment concludes that the CCG should engage GP practices to encourage them to implement systems to identify people in fuel poverty with cold related illnesses. The inclusion of cold homes data within patient’s records on the ‘Connecting Care’ project is an opportunity to improve care pathways by drawing connections between temperature-related illnesses and living conditions.

4. *The JSNA recommends the Health and Wellbeing Board should apply Bernard Stafford’s methodology for assessing the social costs of cold homes to Bristol. The approach*

in November 2017. The group has representatives from various council departments, councillors, local advice & support agencies and local community organisations. The group is working to develop an action plan towards meeting their city-wide goal: No one in the city suffers a cold home by 2028.

expresses the importance of the investment in energy efficiency as a saving in health costs.

- 5. NICE Guideline recommendation 7: Discharge vulnerable people from health or social care settings to a warm home*

As part of the planned discharge of vulnerable people, the JSNA recommends that coordinated efforts by all practitioners to make sure the home is warm enough when the patient returns to their home.

- 6. NICE Guideline recommendation 8: Train health and social care practitioners to help people whose homes may be too cold*

NICE Guideline recommendation 9: Train housing professionals and faith and voluntary sector workers to help people whose homes may be too cold for their health and wellbeing

Appropriate agencies should educate health staff and other frontline workers in basic fuel poverty trigger training which enables them to identify people in need of support and make onward referrals into the SPOC. This builds on the existing work to make every contact count and recommends that a simple fuel poverty checklist should be developed and shared with frontline health staff. The Health and Wellbeing Board can facilitate the development of an online learning pool to make training accessible to as many industries as possible.

- 7. The Health and Wellbeing Board should be responsible for regularly reporting on the progress towards completing the recommendations of the NICE guideline.*

11) Key contacts

Key commissioning/strategic group who own the chapter

Named leads within Bristol City Council and Bristol CCG with email addresses.

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Ian Preston – Centre for Sustainable Energy
Daisy Goaman – Centre for Sustainable Energy
Adwoa Webber – NHS Bristol Clinical Commissioning Group
Rhianne Hawkins – Talking Money
Andrea Finney – University of Bristol
Professor David Gordon – University of Bristol
Tim Chatterton – University of the West of England
Karen McCalman – Western Power Distribution

Bristol JSNA process – website: www.bristol.gov.uk/jsna / email: jsna@bristol.gov.uk

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