

EFFECT OF UK ENERGY PRICE RISES AND WINTER WARMTH IN NHS BIRMINGHAM EAST AND NORTH

1.0 Introduction

Winter warmth and fuel poverty are important public health issues. The UK has one of the highest numbers of excess winter deaths in Europe accounting for around 40,000 deaths / year. Living in cold homes can increase the likelihood of ill health, including heart disease, stroke, influenza and asthma. Current high energy prices are exacerbating the issues with estimates that for every 1% increase in energy prices 40,000 people go into fuel poverty (spending more than 10% of income on heating).

Energy prices rose in early 2008 by an average of around 15% for gas and 13% for electricity. Subsequently, they rose again during the summer of 2008, by an average of around 30% for gas and 14% for electricity

It is estimated that 22,500 homes in NHS Birmingham East & North (NHS BEN) experience fuel poverty. Both the private and social housing sectors suffer from similar rates of fuel poverty, with the lone elderly at highest risk.

2.0 Policy Context

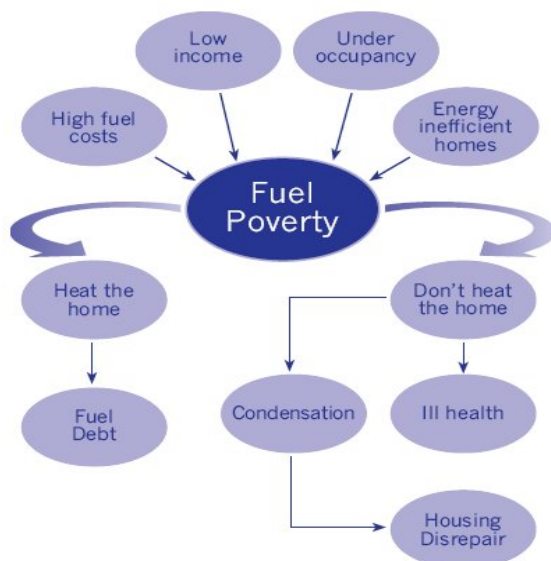
At a national level, the UK Fuel Poverty Strategy has been introduced and includes grant programmes to improve thermal efficiency in vulnerable households. It is monitored and kept under constant review by the Fuel Poverty Advisory Group. The Treasury, in its spending review of 2003-2006, has identified poor housing as a major cause of inequality and ill health.

Excess winter deaths (EWD) in the West Midlands region has been designated as a key area by the West Midlands Strategic Health Authority. In NHS BEN there are many interventions that relate to reducing ill health during the winter period. These include flu vaccinations, and 'Keep Warm – Keep Well' health promotion, which can refer people to housing improvements, resulting in improved health. NHS BEN is committed to ensure that effective commissioning can drive real improvements in health outcomes and has set a World Class Commissioning (WCC) target, that there will be no health inequalities in NHS BEN by 2018.

3.0 Determinants of Winter Warmth / Fuel Poverty

There is a dynamic movement of individuals experiencing fuel poverty / winter warmth, which means that they can move in and out of fuel poverty at various points in their life as factors change. The method of payment for fuel can affect prices; payment by direct debit is usually the cheapest, whereas pre-payment (meters) are the most expensive, and are most frequently used by those most at risk. Other major contributory factors are shown in Figure 1.

Figure 1: Contributory factors for Fuel Poverty (Source: National Energy Action)



3.1 Household composition

Eighty five percent of households experiencing fuel poverty are single or couple only households and/or under occupancy. 50% of people experiencing fuel poverty are aged over 60. Vulnerable groups are particularly at risk of fuel poverty as they tend to spend longer periods at home, i.e. low mobility and therefore have problems with keeping warm.

Non decent housing is housing that is unfit to live in, i.e. in substantial disrepair or requires essential modernisation. In England, 14.2% of households are in this category and percentage is higher for some groups in society, Table 1.

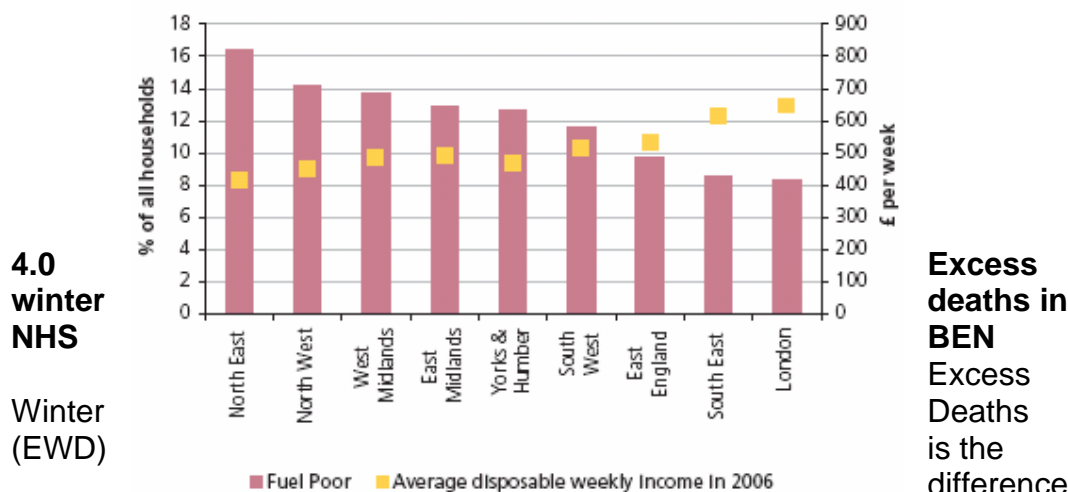
Table 1 – Percentage of the population living in non-decent housing, England 1996

Population Group	Percentage of households in the group living in non-decent housing
Pakistani & Bangladeshi	35%
Black	23%
Young (aged 16-24)	29%
Unemployed	25%
Elderly (75+)	20%
Lone Parents	18%

3.2 Income

When annual income is below £10,000 the household will face fuel poverty regardless of other determinants. Around 50,000 (31%) of households in NHS Birmingham East & North have an income below £15,000.

Chart 1 – Fuel poverty as a % of all households; average weekly disposable income, by region, 2006



**4.0
winter
NHS**

Winter
(EWD)

**Excess
deaths in
BEN**
Excess
Deaths
is the
difference

between winter deaths and summer deaths.

- Winter deaths – number between December and March
- Summer deaths – average of the deaths between August to November and April to July

Excess Winter Deaths Index (EWDI): The number of excess winter deaths expressed as a percentage of the summer deaths.

$$\frac{\text{EWD}}{\text{Summer Deaths}} \times 100$$

There are over 60,000 cold related deaths throughout the year in the UK which equates to around 1000 deaths in NHS BEN. Around 40,000 of these occur in the winter between December and March. Over half the excess winter deaths are from cardiovascular disease and a third are from respiratory disease. For every degree °C below the winter average in the UK there are 8,000 extra deaths. Around 20% of excess winter deaths are related to factors other than cold, such as air pollution, lack of exposure to sunlight, influenza incidence and diet. The effect of cold temperatures is largely independent of air pollution. It is also possible to predict when excess deaths will occur after a cold day: heart attacks after 2 days, strokes after 5 days, and respiratory disease after 12 days.

4.1 EWD / EWDI - Analysis by Wards in Birmingham East & North PCT

Using data from the Office of National Statistics annual death files, analysis of EWD and EWDI was done at a ward level, Charts 2 & 3. They show that there is great variation in the number of excess winter deaths between the wards within NHS BEN. Shard End ward seems to have the highest numbers whereas Sutton New Hall has the lowest. Although in Shard End, EWD/EWDI have been decreasing for three winters consecutively. Increases have been seen for three consecutive years in Oscott, Sutton Vesey and Sheldon. For the winter 05/06 eight wards saw an increase in numbers compared to the

previous year. NHS BEN as a whole saw a decrease in EWD in 05/06 compared to 04/05.

Chart 2 – EWD by wards in BEN 2003 – 2006

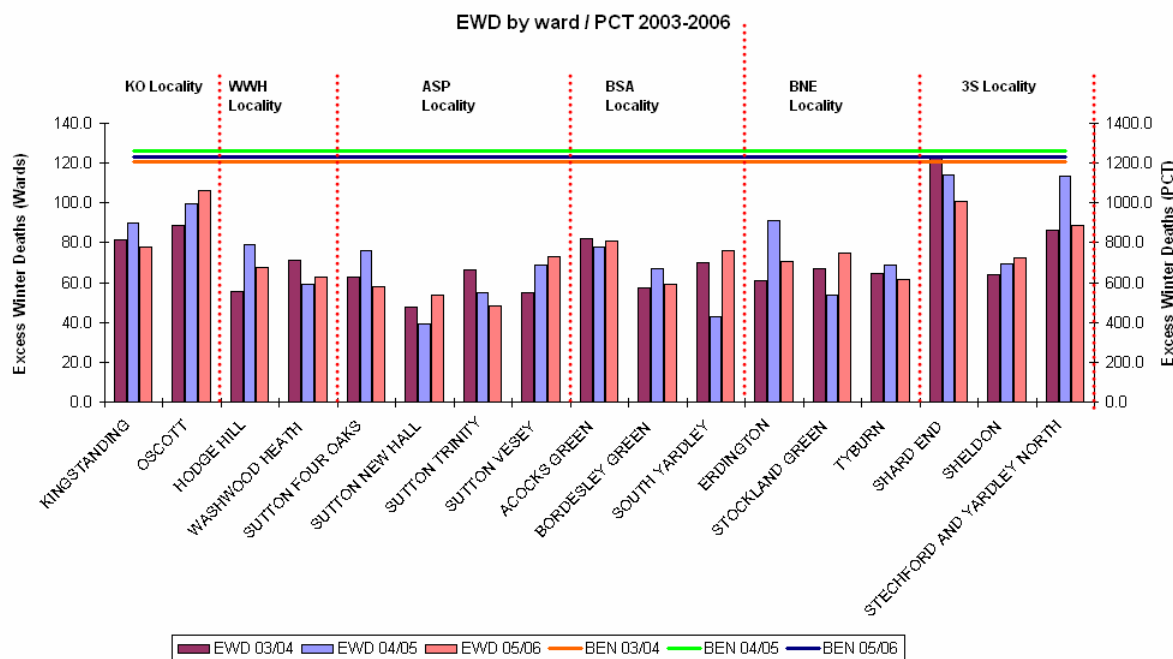
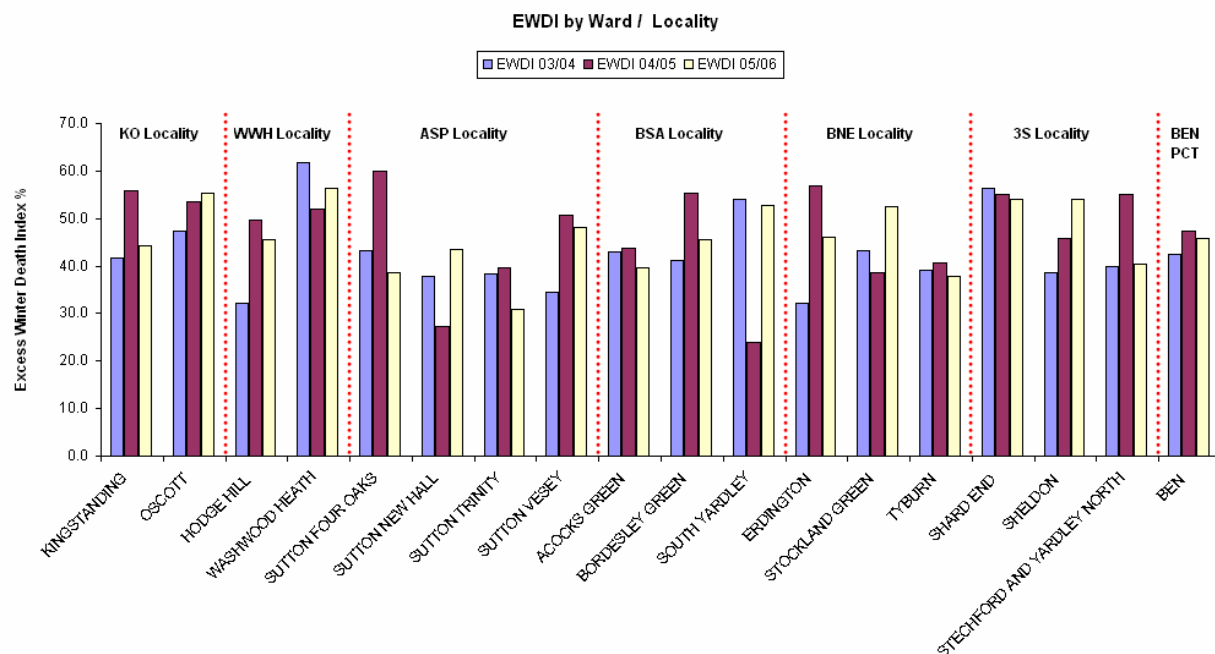


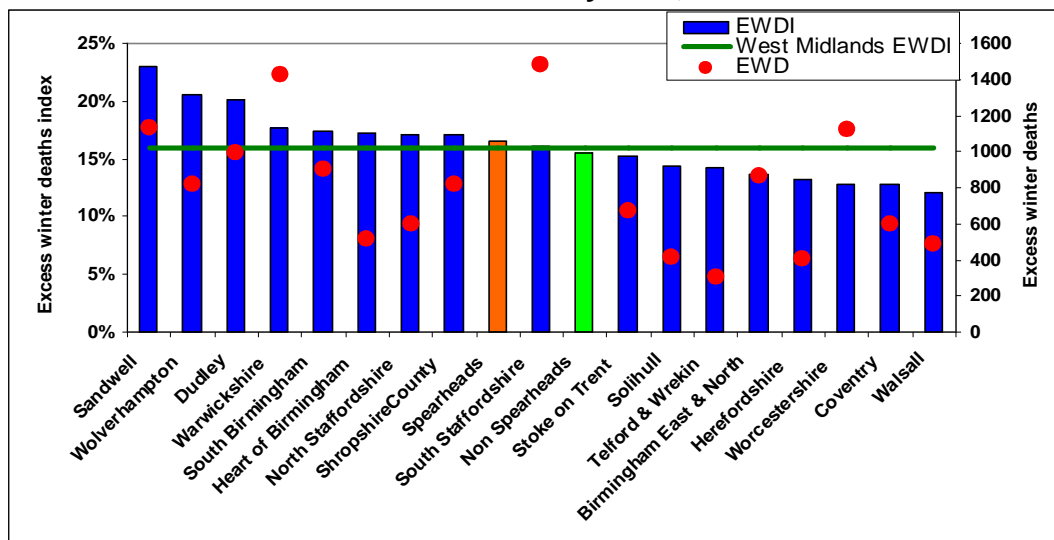
Chart 3 – EWDI by wards in BEN 2003 – 2006



As a Trust excess winter deaths are towards the lower end of the scale in comparison to other Trusts, in the West Midlands (Chart 4), although the

relative affluence of Sutton Coldfield might be responsible for the Trust's lower position.

Chart 4 - Excess winter deaths index by PCT, West Midlands

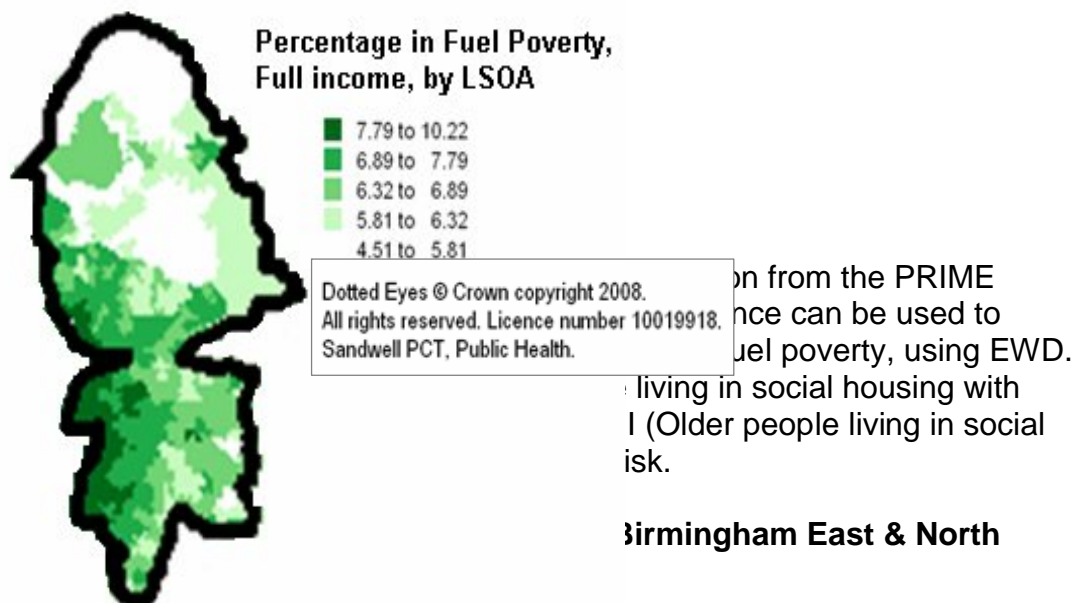


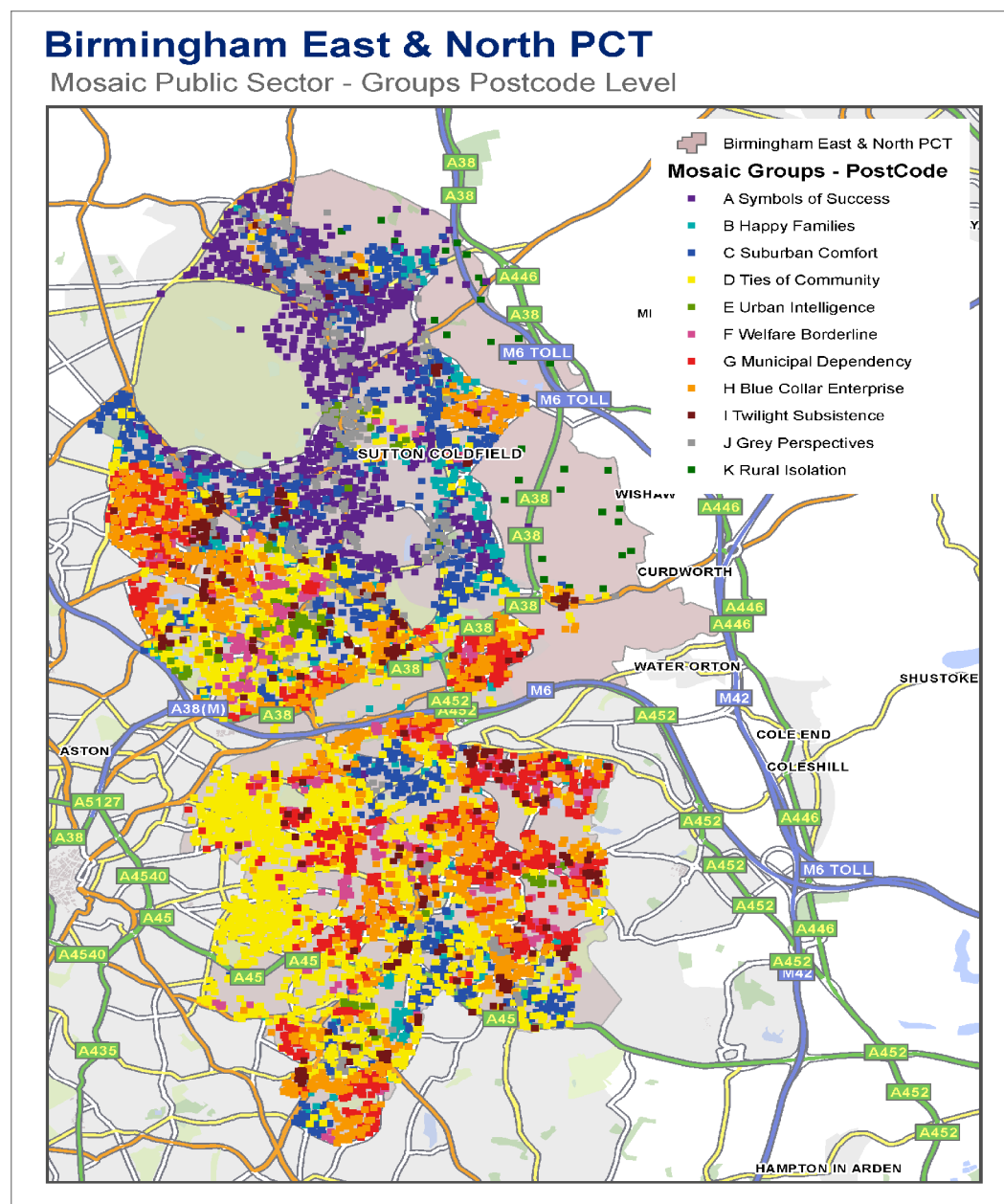
Source: ONS PHO deaths extract, analysis WMPHO

5.0 Fuel Poverty in NHS Birmingham East & North

The map below (Figure 2) shows percentage fuel poverty within NHS Birmingham East & North. There appears to be an East / West split with the East suffering higher fuel poverty. The north of the Trust has some of the most affluent wards in the country and appears to be suffering from lower fuel poverty.

Figure 2 – Map of NHS BEN showing percentage Fuel Poverty





6.0 Initial Outcomes of Winter Warmth Paper

A paper on winter warmth was taken to the Professional Executive Committee (PEC) in January 2009. This resulted in the development of an algorithm (Figure 4) which approved by the PEC and Medical Director and distributed for use by the Trust GPs with their patients. It was also presented at a national conference as a poster presentation - National Faculty of Public Health conference and received positive feedback

The algorithm was designed in partnership with Health Through Warmth (HTW) to identify people who are eligible for free loft and cavity wall insulation, lower fuel bills and other benefits. HTW in Birmingham is run in partnership with Birmingham City Council, Black Country Housing Group, npower and NHS BEN. It aims to help improve levels of warmth, comfort and

quality of life for vulnerable people with cold and damp related illnesses who are living in homes that do not have adequate heating or insulation.

People of any age who have a cold and damp related illness can receive help, regardless of whether they live in their own home or rented from private landlords or the local authority. Clients do not need to be on benefits but are likely to have a low income and insufficient funds to pay for the measures needed. HTW helps with:

- Cavity wall & loft insulation
- Boiler repairs or replacement (if broken)
- Heating systems or appliances
- Energy efficiency & benefits advice
- Access to grants & other funds

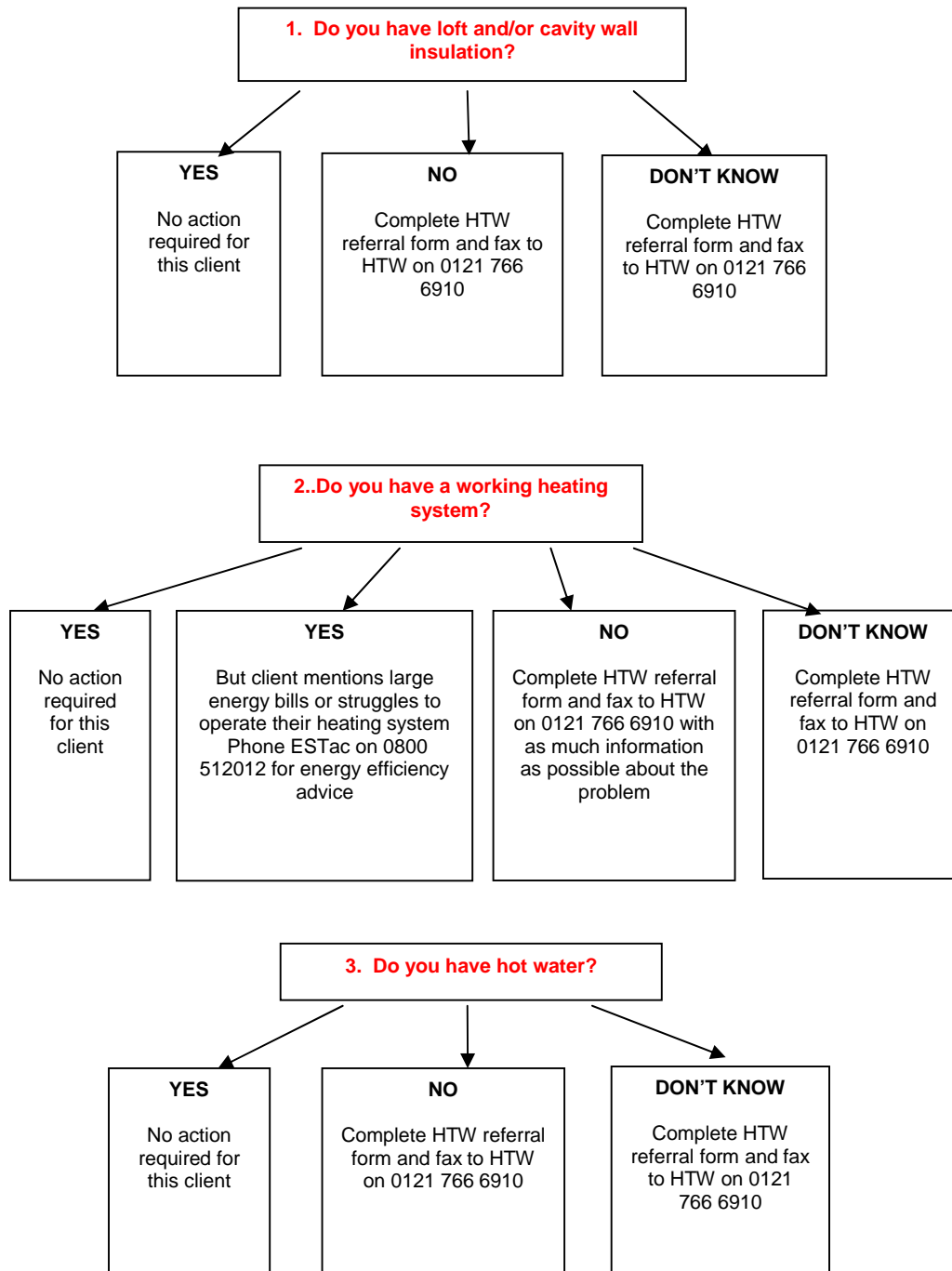
The algorithm is now used by Care Managers at Birmingham OwnHealth® - UK's first large scale telephone based care management service provided for residents of NHS BEN with long term conditions (including diabetes, heart failure, coronary heart disease and COPD). It is also being used by NHS Direct case managers.

We are currently discussing with the provider arm the algorithm's suitability for service providers. Its applicability will also be assessed with the Health Trainers.

Figure 4 – Winter warmth algorithm

Health Through Warmth (HTW) Process

When you are contacting your clients about their health and well being please ask the following questions in red and take the appropriate action as detailed below



7.0 Summary

Excess winter mortality is largely preventable if people keep warm both indoors and outside. Keeping warm indoors needs a combination of adequate heating, insulation and ventilation to ensure comfortable temperatures and humidity levels. Tackling fuel poverty can help save lives; prevent ill-health; reduce admissions (and re-admissions) to hospital (as well as length of stay) – ultimately reducing costs to the NHS. Cross-governmental and sectoral work on fuel poverty has seen numbers of households in fuel poverty fall.

Rural areas may experience greater fuel poverty due to lack of access to gas network and a high proportion of older houses. However, there is still a long way to go (given the continued rise in energy costs), and efforts must be augmented by mainstreamed practice within the NHS if targets to eradicate fuel poverty are to be achieved.

Fuel poverty is an issue of inequalities and households with low incomes are amongst those groups most at risk from fuel poverty and are in the hard to heat homes. The traditional medical model of 'case finding' and treating will not suffice and a more holistic approach is required. Health effects are not just physical but can also be mental and lead to social isolation and exclusion.

8.0 Recommendations

- Evaluation of the Winter Warmth algorithm
- Analysis of Excess Summer Deaths
- Partnership work with Birmingham Health & Well Being Partnership (BHWP)
- and development of a fuel poverty champion / strategy.
- Establish a local fuel poverty action team (including partner agencies) / local fuel poverty champion
- Raise awareness amongst frontline staff who are ideally placed to identify, advise and refer those at risk.
- Test its applicability with the Health Trainer service