

# An Evaluation of the FILT Warm Homes Service

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# An evaluation of the FILT **Warm Homes Service**



**Sheffield University** Research

Centre for Health and Social Care

**CLAHRC** for **South Yorkshire** 









# An evaluation of the FILT Warm Homes Service

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# **Final Report**

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The findings presented in the report are however entirely the responsibility of the research authors.

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# **Executive Summary**

# Introduction

This report presents the findings from an evaluation of the Foundations Independent Living Trust Ltd (FILT) Warm Homes Service (WHS). The FILT WHS aimed to assist older and vulnerable people at risk from cold weather and prevent cold related harm and illness. The evaluation was commissioned by FILT and also received funding from Collaboration for Leadership in Applied Health Research and Care for South Yorkshire (CLAHRC SY).

The research was conducted in two phases between May and June 2013 and then between July to November 2013. The first stage of the evaluation consisted of an online survey of 55 HIAs, ten telephone interviews of HIAs and ten telephone interviews with clients. The second stage consisted of 15 in-depth qualitative interviews (three over the phone) which explored in greater depth the impact of the FILT WHS as well as economic evaluation of the service. The evaluation team is from the Centre for Regional, Economic and Social Research (CRESR) and the Centre for Health and Social Care Research (CHSCR) at Sheffield Hallam University in collaboration with FILT.

# **About the FILT WHS**

FILT received £499,200 of funding from the Department of Health over winter 2012/13 for the FILT WHS. The service aimed to equip and fund the home improvement agency (HIA) sector to provide targeted and focused support to clients facing fuel poverty. The service included home visits, energy usage assessments and interventions to tackle cold homes and their effects on the health and wellbeing of older and vulnerable people. HIAs applied for the WHS funding from FILT. The FILT WHS funded 55 HIAs across 160 local authority areas. Funding allocations to HIAs were typically between £2000 and £6000, with a small number of HIAs receiving over £10,000.

Between mid-November 2012 and end March 2013 the programme achieved:

- 385 staff including handypersons, caseworkers, technical officers received bespoke one-day training, between November 2012 and January 2013
- 3,728 advice and information discussions with older and vulnerable people were completed by agencies
- 6,469 householders and families benefitted from personalised, relevant information and advice to make their home a warmer environment conducive to better health and wellbeing. Agencies also positively signposted and introduced individuals to partner organisations where the need was outside the scope of the HIA or handyperson provider
- linked to these visits, 1,148 jobs were been done quickly and effectively for older and vulnerable people suffering cold homes.

# **Key Messages**

# Organisation of the FILT WHS

The FILT WHS was delivered through a tripartite partnership with each partner providing an essential component of the service. These organisations (Foundations, FILT and HIAs) were able to provide a unique service which combined a national organisation, a nationally available charitable network, with local service provision to deliver the service quickly to vulnerable people.

The flexibility and "light touch" approach to funding and administration allowed HIAs to work quickly with vulnerable households. However, the limitations in terms of grant size and timescales created challenges for HIAs.

HIAs often acted as a single point of contact and were able to make the most of referral partnerships. They emerged from the evaluation as accessible and acceptable organisations for clients. The indication is they reached vulnerable households other agencies were not aware of.

## Volume of work

According to the data available, the FILT WHS was able to conduct 3728 assessments and delivered measures in over 1000 of these homes. The reach of the scheme was impressive in terms of numbers of contacts and interventions particularly within the project timeframe.

The volume of work was impressive in terms of the range of interventions. The impact of smaller interventions (draught-proofing, TRVs or reflective radiator panels) should not be underestimated. Data from across the evaluation indicated the small measures had a big impact on warmth and comfort.

# Capacity building

The FILT WHS had a capacity building element for the HIAs in terms of:

- staff training
- assessment systems and skills
- partnerships and referral options
- referrals were made to a diverse range of agencies but in the main referrals were to in house repairs and handy person schemes, health providers and advice agencies e.g. CAB and other debt advice.

# Delivery of the FILT WHS

The flexibility of funding enabled HIAs to plug gaps in terms of people at risk who had been missed by statutory services, for example people discharged from hospital to a cold home (HIA reported).

HIAs were mainly involved in providing assessment and interventions for people with cold related problems because they had no heating or faulty heating.

HIAs responded swiftly and in a timely fashion. Most assessments were completed within two weeks and most minor interventions within four weeks. More substantial work (boiler replacement) took longer. Speed of response and lack of bureaucracy means the FILT WHS compares favourably to larger schemes such as Warm Front, Green Deal or ECO.

## Benefits of the FILT WHS

Benefits were reported by participants in terms of home temperatures, warmth and comfort, and physical and mental health and wellbeing. Most clients expected to see a benefit in terms of energy bills. However, there was little evidence of this as for most the interventions were installed between January and March and clients had not experienced a full winter and in some cases work was completed after the coldest months. For some clients energy use may increase as the heating had not been functioning prior to FILT WHS intervention. Fuel price rises during 2012 and 2013 may also mean that energy efficiency improvements will not necessarily lead to reduced bills.

The HIAs were able to put in place timely interventions into vulnerable people's homes and secure additional funding. For every pound of the FILT WHS funding the HIAs were able to lever in at least an additional £2.10. This figure represents a cautious estimate and does not include for example, extra benefits that may have been claimed after referral. The qualitative interviews illustrate health benefits and how negative health events would have been avoided, for example falls, respiratory, cardiovascular health and diabetes, hospital admission or missed days at school.

As a result of the FILT WHS interventions the householder had more control over their home environment. This had a reported impact on physical and mental wellbeing as well as ability to self-manage long term conditions. This evaluation was limited in not being able to quantify this impact. The case studies illustrate how benefits (e.g. improved warmth and wellbeing) helped to promote social connections for householders who were previously socially isolated.

The majority of interview participants indicated how benefits were accrued from advice received through the FILT WHS and not just from affordable warmth or heating interventions. This advice included energy coaching following installation of measures which provided clients with confidence and knowledge of how to heat their homes adequately and safely.

The evaluation indicates how HIAs would appear to be "the only show in town" for helping some of our more vulnerable citizens. However, the ability of the HIAs to respond to this need is limited by financial constraints and a number of HIAs have recently been forced to close. The evidence presented in this report suggests that commissioners should look more closely at the benefits that the FILT and HIAs can deliver.

# Conclusions

This evaluation demonstrates that the FILT WHS provided a unique service to a large number of vulnerable people. Clients' vulnerability was extreme and complex in nature. The benefits experienced by clients were sizeable when compared to the average cost of the intervention (around £200) and the benefits and cost savings of such a scheme could potentially be realised across health, housing and social care. The case studies illustrate how the FILT WHS helped to maintain vulnerable clients in their homes thus helping to prevent the costs associated with residential care and possibly hospital admissions. This evaluation indicates how an initiative such as the FILT WHS could provide a key component of the delivery mechanism for the Cold Weather Plan nationally and locally. As excess winter deaths (EWDs) increase (it is estimated by the Office for National Statistics that 31,100 EWDs occurred in England and Wales in 2012/13 – a 29 per cent increase compared with the previous winter), it would be advisable for commissioners of health and social care services to consider the advantages and benefits that can be delivered by such a programme. The advantages could be realised in a range of outcome indicators across the current policy frameworks (i.e. NHS Outcomes Framework, Public Health Outcomes Framework and Adult Social Care Outcomes Framework). (See Appendix 4 for the relevant outcomes which the activity of HIAs could help deliver).

Introduction and Setting the Scene

# 1.1. Introduction

This report presents the findings from an evaluation of the Foundations Independent Living Trust Ltd (FILT) Warm Homes Service (WHS). FILT is a charity set up to help the clients of home improvement agencies (HIAs). Funding for the service is from Department of Health over winter 2012/13. The FILT WHS aimed to assist older and vulnerable people at risk from cold weather and prevent cold related harm and illness.

The evaluation was commissioned by FILT and also received funding from Collaboration for Leadership in Applied Health Research and Care for South Yorkshire (CLAHRC SY). The study aimed to i) identify the impacts on health and wellbeing of households in receipt of THE FILT WHS as seen from the perspective of HIAs and households in terms of physical health, comfort and mental health and wellbeing and ii) to understand which interventions have worked well for whom and why.

The research was conducted in two phases between May and June 2013 and then between July to November 2013. The first stage of the evaluation consisted of an online survey of 55 HIAs, ten telephone interviews of HIAs and ten telephone interviews with clients. The second stage consisted of 15 in-depth qualitative interviews (three over the phone) which explored in greater depth the impact of the FILT WHS as well as economic evaluation of the service. The evaluation team is from the Centre for Regional, Economic and Social Research (CRESR) and the Centre for Health and Social Care Research (CHSCR) at Sheffield Hallam University in collaboration with FILT.

# 1.2. The Policy Context

# Fuel Poverty and Energy Efficiency

Fuel poverty has long been acknowledged as a distinct social problem. It was officially recognised with the introduction of the Warm Homes and Energy Conservation Act (WHECA) in 2000 which required the Government to prepare a strategy for the eradication of fuel poverty in the UK. WHECA was followed by the UK Fuel Poverty Strategy in 2001 which officially defined fuel poverty, outlined actions to address the main causes of fuel poverty - the poor energy efficiency of homes; the cost of energy and low incomes - and set legally binding targets for its eradication so that by 2016 as far as reasonably practicable, no persons should have to live in fuel poverty.

The official definition of fuel poverty states that a household is considered to be fuel poor if it would need to spend at least ten per cent of its income in order to heat the house to an acceptable level of warmth (recommended by the World Health Organisation to be 21oC for the main living area, and 18oC for other occupied rooms). Between 1996 and 2004, the scale of fuel poverty in England fell from 5.1 million households to 1.2 million households. However, since 2004 the rising cost of domestic energy has seen fuel poverty in England increase dramatically to affect around five million households and many of the gains made through energy efficiency programmes like Warm Front which were targeted at low-income households have been lost.

Evidence also shows the most vulnerable households are disproportionately affected and hardest hit by fuel poverty. Around 3.2 million or 80 per cent of the fuel poor households in England were classed as vulnerable in 2009.

Up until March 2013 the Warm Front (WF) scheme was "a major component of government strategy to eliminate fuel poverty in England and enable even the poorest households to maintain healthy indoor temperatures." The WF scheme provided home heating and insulation measures to eligible households in England. It aimed to increase indoor temperatures to reduce cold related illnesses and improve occupant health.

In the face of rising energy costs and rising fuel poverty the Government commissioned a review of fuel poverty targets and definitions (the Hills Review, 2012) and plans to produce a new strategy to tackle fuel poverty using an alternative measurement framework which focuses directly on the overlap of high costs and low income. The framework contains twin indicators: a Low Income High Costs indicator (which measures the extent of the problem) and the fuel poverty gap (which measures its depth) and is designed to help identify the people at risk of fuel poverty and those with the greatest difficulties. Whilst there is some debate around the merits of the new definition, for example around its definition of 'reasonable' energy costs, the revised definition of fuel poverty is generally regarded as having made some improvements to the current definition and approach.

In place of Warm Front, the Energy Act 2010 makes provision for a range of policies to assist the UK in its transition to a low-carbon society through reduced domestic energy consumption and also provides assistance targeted on the fuel poor.

The Green Deal was officially launched on 28 January 2013 and is designed to support the take up of energy saving home improvements in order to help meet the UK's carbon reduction targets (Climate Change Act, 2008), to help keep people warmer and to make energy more affordable. The scheme is based on a 'pay as you save' model whereby households pay for improvements such as insulation and new boilers at no upfront cost but over time through their electricity bills. Repayments made through bills will be required to meet the 'Golden Rule' and will be no more than what a 'typical household' should save in energy costs. However, there is no guarantee that the eventual savings made by households will match the lifetime costs of the loan taken out and the actual level of savings will depend on how much energy is used and future energy cost. Should the cost of the work result in loan repayments being greater than the savings then householders may qualify for further subsidy through the Energy Company Obligation (ECO).

The Government has placed responsibility on energy suppliers to address the needs of the fuel poor through the 'affordable warmth' component of the Energy Company Obligation (ECO) which operates as part of the Green Deal. The ECO is designed to support the upfront costs of basic heating and insulation measures for those low income and vulnerable households who are likely to struggle to heat their homes.

The demise of the Warm Front scheme signals the end of national government funding to reduce fuel poverty and improve the energy efficiency of people's homes and heralds a sizeable reduction in funding to tackle fuel poverty. Analysis by the Association for the Conservation of Energy (ACE) suggests that national fuel poverty budgets are to be cut by almost 30 per cent in three years (ACE, 2012) and that energy efficiency programmes, found to be the most effective at alleviating fuel poverty, will be cut by 53 per cent of 2009/10 levels in 2013.

Initial assessments indicate that the impact of Green Deal and ECO on fuel poverty will be limited (see Rosenow and Eyre, 2012). Government proposals indicate that the fuel poverty impact of ECO will be to take 125,000 - 250,000 households out of fuel poverty by 2023 (DECC, 2012) but levels of fuel poverty are estimated to be around 4.5m in 2011 (DECC, 2011). The Hills Fuel Poverty Review commissioned by DECC concludes that Green Deal and ECO 'would be expected to increase fuel poverty' (Hills, 2012, p. 112) due to distributional impacts of the policy proposals. Even using the Hills approach to fuel poverty Government projections suggest that the key fuel poverty gap indicator will rise by more than 50 per cent between 2009 and 2016, and that it is unlikely that the problem will be eliminated on current trends by 2016.

Recent reports suggest that the Green Deal is not working so well. Research undertaken by Which? suggests that getting a Green Deal assessment is time consuming and confusing and that it is hard to get an appointment (see http://www.which.co.uk/energy/creating-an-energy-saving-home/guides/the-greendeal-explained/our-green-deal-investigation/), last accessed 19th November, 2013). Of concern is the discrepancies identified in Green Deal assessments of the same property which found differences in energy performance ratings and estimated energy savings. Age UK recently reported that the uptake of Green Deal has been poor with only 219 households completing work under the scheme by November 2013. In their survey 70 per cent of older people said they wouldn't access Green Deal despite saying they would benefit from energy efficiency measures. Sixteen per cent cite finance and fear of debt as the reason (http://www.ageuk.org.uk/latestnews/green-deal-failing-older-people-new-figures-show/), last accessed 19th November, 2013).

With ECO the potential expense of finding and engaging low income consumers and the cost of delivering solid-wall insulation, particularly if consumer demand is low and householders are not willing to co-finance measures, may also mean that the cost of the programme will exceed DECC assessments. In addition ECO is difficult for consumers to access and understand, for example, it covers the affordable warmth obligation, the carbon saving obligation and the carbon saving communities obligation and eligibility depends on what measures are needed, where the house is located and if the householder receives any benefits.

It therefore seems unlikely that policies such as Green Deal and ECO will be able to deliver the Government's statutory obligation with respect to eradicating fuel poverty by 2016 as far as reasonably possible.

Concerns about the costs associated with the ECO programme, other green charges and rising fuel bills have resulted in the Government recently announcing changes to green tariffs.

## Cold Homes Fuel Poverty and Health

There is widespread acknowledgement of the links between fuel poverty and health in policy reviews. Much of this focus is based on a medical model of health which

has provided compelling evidence of the physiological impact of cold conditions on health – highlighting the problem of excess winter deaths (EWDs) for example.

The health based assumption behind the UK's Fuel Poverty Strategy is that material improvements in living conditions will lead to better health. The Strategy refers to scientific evidence of a biological link between cold conditions and increased risk of both heart and respiratory disease.

More recently the Marmot Review Team (2011) report The Health Impacts of Cold Homes and Fuel Poverty reviews the evidence of the direct and indirect health impacts suffered by those living in fuel poverty and cold housing. The report highlights the direct effects of energy inefficient housing on EWDs, the strong relationship between cold temperatures and cardio-vascular and respiratory diseases, with children living in cold homes twice as likely to suffer from a variety of respiratory problems as children living in warm homes, and the negative effects of living in fuel poverty and cold homes on mental health. In particular the report makes the case for aligning environmental and health agendas and reviews the evidence on the health benefits of reducing fuel poverty and improving the thermal efficiency of the existing housing stock.

The Hills Review interim report (Hills, 2011) also highlights the health and wellbeing effects of fuel poverty as a major concern for Government and society. Living at low temperatures as a result of fuel poverty (low incomes, high fuel costs and thermally inefficient homes) results in health effects ranging from depression to cardio-vascular disease and also contributes to the problem of EWDs. The problem of fuel poverty results in additional costs for the NHS in treating the medical conditions associated with living in cold conditions, and has been shown to have wider social impacts on educational attainment and social isolation.

The negative health impacts of living in a cold home are recognised in the Cold Weather Plan for England first launched in 2011. It was subsequently re-launched for 2012 and 2013 (Department of Health, 2012, Public Health England). To support the aims of the Cold Weather Plan, the Department of Health (DH) established the Warm Homes Healthy People Fund for winter 2012/13. The aim of the fund is to support local authorities and their partners in reducing death and morbidity in England caused by cold housing in the coming winter.

# The health benefits of improving domestic energy efficiency

Given the evidence linking cold housing to poor health, it follows that investment in energy efficiency measures should affect the health of householders and help to improve both physical and mental health. There is growing evidence linking warmth interventions and energy efficiency improvements to health. For example a diverse range of positive health impacts resulting from household energy efficiency interventions were systematically identified and reviewed by Thomson et al. (2009) and in the recent Cochrane Review (Thomson et al., 2013). These included positive impacts on general health, respiratory symptoms and mental health from a range of different studies including some well conducted studies. Summarising the evidence, Thomson et al (2013) concluded that energy efficiency improvements are likely to impact on health, particularly when targeted at those with inadequate warmth and those with chronic respiratory disease. They conclude that the best available evidence indicates that housing which is an appropriate size for householders and is affordable to heat is linked to improved health and may promote improved social relationships within and beyond the household. In addition, there is some suggestion that provision of adequate, affordable warmth may reduce absences from school or work (Thomson et al., 2013).

# Other related policy

Since the creation of the current Coalition Government in 2010 there has been a raft of new policy implemented, in addition to energy and housing policy mentioned above. This policy changes the environment and structures within which related agencies can ensure safe and healthy home environments. There is extensive political and media debate about the combined impact of this policy on public health outcomes such as fuel poverty and EWDs. The new related structures will place HIAs in a different position locally regarding funding and commissioned activity. For these reasons the main policy innovations are summarised here.

A key example is the Welfare Reform Act (2012) which aims to reduce the amount of welfare spending in the United Kingdom and makes changes to the rules concerning a number of benefits. There is concern regarding the impact this policy will have on benefit income and housing, and therefore the ability of households to keep their properties warm and energy efficient.

http://www.cpag.org.uk/sites/default/files/CPAG-briefing-between-rock-hard-place-1012.pdf

A second important policy innovation is the **Health and Social Care Act (2012)** that introduced a revised structure for the NHS. Public Health departments were relocated from the NHS to Local Authorities and a number of new local agencies were created including:

- NHS Commissioning Board, with its Local Action Teams (LATs), responsible for primary care and specialist health services (including immunisations)
- Clinical Commissioning Groups (CCGs) commissioning local health care
- Health and Wellbeing Boards (HWBs), a committee of the Local Authority that is tasked to carry out a Joint Strategic Needs Assessment on behalf of the local population, with input from the Clinical Commissioning Group(s). The HWB will draw up a Joint Health and Wellbeing Strategy (JHWS), to be developed and progressed by local partners. The focus is likely to be on issues requiring joint action.

Local authorities continue to commission social care, housing and public health in order to protect the health and wellbeing of the local population under the umbrella of "Localism".

The HWB is tasked with addressing improvements in the health and wellbeing of its local population. Their activity will take place within the framework of a number of Outcome Frameworks (NHS; Public Health; Social Care), which will be monitoring progress on a range of selected measures, at population level locally and nationally. Of key importance here is the Public Health Outcomes Framework (PHOF) (2012), which will influence selection of HWBs priorities locally. A number of the outcomes within the PHOF link clearly to the intended impacts of HIA's and the FILT WHS including the following:

- 1.17 Fuel poverty
- 1.18 Social isolation
- 2.23 Self-reported well-being
- 2.24 Injuries due to falls in people aged 65 and over
- 4.11 Emergency readmissions within 30 days of discharge from hospital

- 4.13 Health-related quality of life for older people
- 4.15 Excess winter deaths.

The findings detailed later in this report demonstrate that the advantages and benefits of the FILT WHS could be evidenced in a range of outcome indicators across the NHS, Public Health and Social Care policy frameworks.

# 1.3. The Report

The remainder of the report is structured as follows:

- Chapter 2 provides a brief overview of the FILT WHS and Home Improvement Agencies and handy person services
- Chapter 3 details the purpose of the study, its aims and the methods employed
- Chapter 4 presents the views of Home Improvement Agencies regarding the FILT WHS
- Chapter 5 provides detailed qualitative findings of the experiences of the FILT WHS clients
- Chapter 6 looks at impact and cost effectiveness of the FILT WHS
- Chapter 7 concludes the report, highlighting key messages and reflecting on the implications of the study findings.

The FILT Warm Homes **Service** 

# 2

#### 2.1. Introduction

This chapter of the report provides a brief overview of the FILT WHS and home improvement agencies (HIAs) and handy person services.

#### 2.2. **About the Warm Homes Service**

Foundations is appointed by the Department of Communities and Local Government as the national body for HIAs and handy person services. HIAs and handy person services are local organisations dedicated to helping older people, people with disabilities and vulnerable people to live safely in their own homes. They do this by ensuring existing housing is fit for purpose and offering a range of preventative services that enable older and vulnerable people to live independently in their homes for as long as possible. There are currently around 200 HIAs and handyperson services in England providing services for local authorities across the country. Locally these organisations are sometimes known as Staying Put or Care & Repair agencies. Most agencies are operated by housing associations, some are provided by local authorities and some are small independent organisations with charitable status.

Foundations Independent Living Trust Ltd (FILT) is a registered charity which helps people live with dignity in their own homes by providing financial help for adaptations, repairs, home improvements, heating and insulation measures for the most vulnerable of home improvement agency clients. The Trust also provides practical support to home improvement agencies and other organisations that help vulnerable people to live with dignity in their own homes.

FILT received £499,200 of funding from the Department of Health over winter 2012/13 for the FILT WHS. The service aimed to equip and fund the home improvement agency (HIA) sector to provide targeted and focused support to clients facing fuel poverty. The service included home visits, energy usage assessments and interventions to tackle cold homes and their effects on the health and wellbeing of older and vulnerable people.

HIAs applied for the WHS funding from FILT. The FILT WHS funded 55 HIAs across 160 local authority areas. Funding allocations to HIAS were typically between £2000 and £6000, with a small number of HIAs receiving over £10,000 (see Figure 2 in Chapter 6).

According to FILT between mid-November 2012 and end March 2013 the programme achieved:

- 385 staff including handypersons, caseworkers, technical officers received bespoke one-day training, between November 2012 and January 2013
- 3,728 advice and information discussions with older and vulnerable people were completed by agencies
- 6,469 householders and families benefitted from personalised, relevant information and advice to make their home a warmer environment conducive to better health and wellbeing. Agencies also positively signposted and introduced individuals to partner organisations where the need was outside the scope of the HIA or handyperson provider
- Linked to these visits, 1,148 jobs were been done quickly and effectively for older and vulnerable people suffering cold homes.

# Methodology

#### 3.1. Introduction and aims of the study

The primary purpose of this study was to evaluate the FILT WHS in terms of the impacts on health and wellbeing of households in receipt of the FILT WHS as seen from the perspective of HIAs and households in terms of physical health, comfort and mental health and wellbeing. The evaluation also aimed to understand which interventions (systems, processes and interventions) have worked well for whom and why.

The project explored a number of key research questions:

- What are the impacts on health and wellbeing of households in terms of physical health, comfort and mental health and wellbeing?
- What is HIAs' ability to identify and intervene with vulnerable households?
- HIAs' partnerships / integration into PH activity regarding EWH/FP / securing sustainable funding?
- What was the clients' experience of the FILT WHS they received from their local
- What are the indications of impacts on health and wellbeing both for individual beneficiaries of the scheme and wider indicators of reduced use of health services/cost savings to the NHS?
- What are the wider impacts of the programme in relation to additional advice and information and signposting to partner organisations?
- What is the preliminary evidence of cost effectiveness of the FILT WHS?

#### 3.2. **Phase One: Methods**

The evaluation was carried out in two phases. The initial stage, conducted between May and June 2013, involved an online survey of 55 HIAs, ten telephone interviews of HIAs and ten telephone interviews with clients. Essentially, this stage of the study constituted a preliminary high level analysis of what worked, what didn't and what difference was made by some key features of the programme.

# Online Survey

Fifty-five HIAs were invited to take part in an online survey designed to gather feedback from the HIAs regarding the FILT WHS. The survey was sent out on 24 May 2013 with a final completion date of 17 June 2013. Two reminders to complete the survey were sent out in between these dates. Forty nine HIAs completed the survey in full representing an 89 per cent response rate.

# HIA telephone interviews

Ten telephone interviews were conducted with managers from ten of the 55 HIAs that participated in the FILT WHS. HIAs were recruited at random. Managers were contacted by FILT and their contact details passed on to the evaluation team if they were happy to participate. A member of the research team contacted the participant by phone, conducted the interview and audio recorded it. The recordings were selectively transcribed and field notes taken. Notes and selected quotes from the interviews were analysed and key themes identified.

# Client telephone interviews

Ten telephone interviews were conducted with clients of three HIAs that participated in the FILT WHS. HIAs were recruited at random. HIAs contacted clients to ask if they were happy to participate in the research. If they were, their contact details were passed on to the evaluation team. A member of the research team contacted the participant by phone, conducted the interview and audio recorded it. The recordings were selectively transcribed and field notes taken.

#### 3.3. **Phase Two: Methods**

The second part of the study was conducted between July and November 2013 and involved a more in-depth qualitative evaluation of the health based impact of HIA interventions. It consisted of 15 in-depth qualitative interviews which explored in much more detail the impact of the FILT WHS on clients' daily lives and their health and well-being. For this stage of the study a basic economic evaluation of the service was undertaken.

# In depth qualitative interviews with clients

Fifteen interviews (three over the phone) were conducted with clients of three HIAs which had participated in the FILT WHS. As this phase of the study was funded by CLAHRC SY two HIAs based in Yorkshire and Humber were initially recruited to contact clients to ask if they were happy to participate in the research. If they were their contact details were passed on to the evaluation team. A member of the research team then contacted the participant by phone, and arranged a time to visit the client to conduct the interview which was audio recorded. The recordings were fully transcribed and field notes taken. However recruitment of suitable clients willing to speak to the evaluation team was slow. In order to achieve a sufficient number of interviews within the time constraints of the project it was necessary to include an additional HIA that bordered the Yorkshire and Humber region.

# Economic assessment

A preliminary economic evaluation of the FILT WHS was undertaken which assessed the extent of, and relationships between, the inputs (or resources) and the outputs and outcomes achieved. The nature of the sets of data available limited the analysis that has been undertaken. A key difficulty was the absence of a unique identifier across datasets. Added to this was the different approaches HIAs have taken to recording information regarding referrals, work undertaken and perceived outcomes from the work carried out. These issues are detailed in Chapter 6. The data available to us has however enabled us to explore the different types of work undertaken and the costs involved including additional funds levered in. We have been able to look at the outcomes of the work perceived by HIAs and have included some analysis of the qualitative data. Limitations of this data and the problems is assigning cost saving figures are also explored in Chapter 6. Looking forward our critique of the data available should assist FILT and HIAs in how they collect data in the future.

# The views of Home **Improvement Agencies**

#### 4.1. Introduction

In order to garner the views of HIAs regarding the FILT WHS, an online survey (see Appendix 1) was sent out in May 2013 to 55 HIAs that had participated in the initiative. HIAs received two reminders to complete the survey over a period of three weeks. In total 49 HIAs completed the survey in full representing an 89% response rate. The survey provided HIA's an opportunity to give feedback on the FILT WHS and was used to assess which interventions (systems, processes and interventions) have worked well for whom and why.

In addition telephone interviews were conducted with managers from ten HIAs which explored in more detail issues arising from the survey and the impacts on health and wellbeing of households in receipt of the FILT WHS as seen from the perspective of HIAs. Interviews were analysed and key themes identified. (A full summary of HIA interviews is provided in Appendix 2).

The key results, issues and themes for the HIA survey and interviews are presented below under main headings:

- the Client Journey
- the HIA Journey
- the FILT WHS Offer
- health and the impact on health.

#### 4.2. **The Client Journey**

Table 1 below shows the main ways in which people found out about the FILT WHS.

Table 1: How did people find out about the Warm Homes service?

	Count	Per cent
Via contact from you / already existing clients	46	93.9
Via referral from voluntary and community sector organisation	31	63.3
Via referral from local authority	26	53.1
Via recommendation from friend/neighbour	23	46.9
Via referral from other healthcare professional	14	28.6
Other	4	8.2
Via referral from GP	2	4.1
Base	49	

Over half of the HIAs surveyed stated that at least half of the FILT WHS clients were new to their HIA. HIAs accessed clients in a number of ways with 53 per cent of HIAs in the survey stating that they operated as a 'single point of contact' or 'single point of referral' for the FILT WHS project.

HIAs emphasised the accessible nature of their service with one HIA stating:

"HIAs attempt to be as accessible as possible for clients, for example, they don't use a call centre and when a client phones up they can speak to a member of staff rather than an automated system of menus. All the calls are handled locally, clients are visited in their homes, and offices are centrally located". (HIA, 10)

Other comments from the online survey highlight how accessible the HIA and the FILT WHS were:

"The caseworker provided a single point of contact (phone number, in person, text number, e-mail address) to co-ordinate the referral and pass onto other partner organisations."

"Referrals all came to us. We were also part of another Warm Homes scheme, so we were able to combine the two on larger cases such as replacing boiler."

"The project worker took all the phone calls and then referred or sign-posted clients to other schemes as appropriate. Our HIA is part of a district authority and so we referred into the schemes that the upper tier authority also had under WHHP funding."

"The Lancaster HIA was designated as the single point of contact for Health Professionals throughout the district for affordable warmth referrals. The former PCT Public Health service undertook a series of presentations to Health Professionals highlighting Affordable Warmth and the HIA's contact details."

#### 4.3. The HIA Journey

Part of the funding for the FILT WHS was used to provide training for 400 HIA staff including handypersons, caseworkers and technical officers. Training on how best to advise clients on securing healthy homes and energy saving measure in order to help protect and enhance the wellbeing and health of vulnerable clients took place between November 2012 and January 2013 and was undertaken in partnership with

Staff were trained in undertaking energy use National Energy Action (NEA). assessment using FILT's assessment tool specifically designed for the FILT WHS.

HIAs were extremely positive about the training they received and saw it as a benefit to both their staff and their organisations. Around three quarters of HIAs completing the online survey stated that at least 20 per cent of their staff had received training as part of the FILT WHS project. The main benefits for staff identified were around the acquisition of new skills and knowledge and improved motivation. Training increased productivity which in turn enhanced HIA's ability to assess more homes and was a key benefit for around 80 per cent of the HIAs responding to the survey. Improved partnership working with other organisations was also an important benefit, highlighted by around 70 per cent of the HIAs in the survey (Tables 2 and 3 below).

Table 2: What were the main benefits of training for your staff?

	Count	Per cent
Acquired new skills and knowledge	46	93.9
Increased motivation	25	51.0
Improved prospects for the future	17	34.7
Increased confidence and self-esteem	15	30.6
Improved morale	11	22.4
Other	2	4.1
Base	49	

Table 3: What were the main benefits of training for your organisation?

40	81.6
40	81.6
35	71.4
24	49.0
5	10.2
1	2.0
49	
	24 5 1

Another benefit identified by HIAs was the 'added value' of the FILT assessment tool which helped HIAs to identify need and to assess health and risk. Beginning a dialogue with clients about affordable warmth and health and enabled HIAs to identify health and wellbeing need that was previously unnoticed.

## HIAs highlighted:

"The HIA doesn't usually have the time to go through all aspects of clients' needs which the FILT survey did allow them to do."

"The FILT survey (identifying structural issues; conditions; energy usage) and questions about household income were used to assess need."

"The Fuel Use Survey directed a greater dialogue with clients which would've been shorter if only the HIA's risk assessment had been used."

"The Fuel Use Survey (added value) directed the HIA to issues around affordable warmth. This was additional to the risk assessment undertaken by the HIA into falls prevention. When we visited we looked at a holistic view of that person's needs to continue living independently."

As stated above, the training HIAs received as part of the FILT WHS project helped HIAs improve their partnership working. Results from the online survey show that the project enabled HIAs to develop new working relationships with organisations. Table 4 below shows that prior to the project, HIAs were working with a range of organisations particularly voluntary and community sector organisations, fuel poverty advice agencies, local CABs and benefits and debt advice agencies and local health providers. Table 5 shows that almost 60 per cent of HIAs in the survey developed new relationships. For example one HIA commented:

"We developed new relationships with fire service and community rehabilitation service and improved existing relationships."

Table 4: Prior to the Warm Homes project did you have working relationships with any of the following?

	Count	Per cent
Voluntary sector	46	93.9
Fuel poverty advice agencies	40	81.6
Local CAB and other benefits / debt advice	39	79.6
Local health providers	37	75.5
Mental health service	21	42.9
Local GP	12	24.5
Other	3	6.1
Base	49	

Table 5: As a result of the Warm Homes project did you develop new working relationships with any of the following?

	Count	Per cent
Fuel poverty advice agencies	18	62.1
Voluntary sector	15	51.7
Local CAB and other benefits / debt advice	14	48.3
Local health providers	11	37.9
Mental health service	8	27.6
Local GP	4	13.8
Other	3	10.3
Base	29	

All HIAs were also asked to state any unexpected benefits of the FILT WHS project. Nineteen comments were received in total and a range of benefits were described. Among the comments received, three respondents mentioned raising the profile and improving perceptions of the work they do, two respondents referred to being able to help people they would otherwise not have been able to and two mentioned the ability to link successfully with other funding.

As well as benefits for HIAs there were also challenges. When HIAs were asked about what limited the work they were able to undertake as part of the FILT WHS project responses were overwhelmingly about the size of the grant available. Over 80 per cent of HIAs felt that the size of the FILT WHS grant was too small and often the cost of work required in clients' homes exceeded the size of the grant available. On the positive side HIAs were able to use the FILT WHS funding to complement or top up other funding that was available and use it to put a package of funding together. HIAs appreciated the extra resource and acknowledged that:

"Grants are never big enough but some grant is better than no grant!"

HIAs also identified issues with the FILT WHS funding timescales, with a number of HIAs stating that the lead in time was too short, whilst for others the subsequent time period to spend funding was limited. A couple of HIAs stated that the overall timing of the funding was an issue and that they would have liked to received funding before Winter had arrived. Online survey comments from HIAs included:

"Timescales for delivery were too short. To access other funding to match grant etc. takes time so this was a limiting factor."

"Timescale was too short. Longer lead-in would have allowed us to reach far more beneficiaries and enable better partnership working to deliver fuel poverty solutions."

"We would have liked to have received the money earlier to target clients rather than waiting until winter had arrived."

#### 4.4. The Offer

HIAs were mainly contacted for help with cold-related problems and because clients had no heating in parts of their house. The online survey response indicates that 95 per cent of HIAs were able to visit clients to assess their homes within two weeks of initial contact. After clients' homes were assessed work was completed in a timely manner, three quarters of HIAs stated that work was usually completed within a month (see Table 6 below).

Table 6: On average how long did it take from people's homes being assessed, for the work to be completed?

	Count	Per cent
Less than one week	1	2.1
At least one week but less than two weeks	12	25.0
At least two weeks but less than one month	23	47.9
At least one month but less than three months	11	22.9
At least three months but less than six months	1	2.1
Over six months	-	-
Don't know/not sure	-	-
Base	48	

Interviews with HIA caseworkers identified key factors about the FILT WHS funding which helped them to respond to clients and complete necessary work quickly. In particular, the administration of the funding was light touch and HIAs could spend money as they deemed appropriate and were not constrained by restrictive criteria. This enabled HIAs to play to their strengths and work in a responsive and flexible manner and helped to ensure that more people could qualify and benefit from funding. One HIA stated:

"The fact that FILT funds could be used in a number of imaginative ways opened up opportunities to help more people" (HIA, 8)

## Other comments included:

"It wasn't so prescriptive...it was very quick, so a case worker could go in, make an assessment, handyperson could go in, make an assessment, collect eligibility for funding and then do the works there and then." (HIA, 8)

"It wasn't prescribed so tightly... it was more focused on getting the jobs done rather than obtaining mountains and mountains of monitoring information." (HIA,

"Minimal paperwork, I could make decisions there and then and the interventions could be completed really quickly and it made a real difference to people's lives....we identified customers who did need FILT money spending but we also did identify further needs for them that perhaps we wouldn't have come across without that funding." (HIA, 6)

Online survey results support these views. HIAs were asked what was it about the FILT WHS project that worked particularly well, with 80 per cent of HIAs selecting 'the ability to provide a timely response' and just over 60 per cent 'the model of delivery'.

FILT WHS funding was used by HIAs for a range of mainly heating interventions, repairs and other energy efficient measures. The table below shows the types of interventions HIAs reported as being typically undertaken in people's homes.

Table 7: Which were the 5 most common interventions made in people's homes?

	Count	Per cent
Boiler servicing	32	65.3
Central heating repairs / replacement	32	65.3
Boiler repair / replacement	30	61.2
Draught-proofing doors and / or windows	28	57.1
Thermostatic Radiator Valves fitted / replaced	26	53.1
Radiators fitted / moved	18	36.7
Reflective panels fitted to radiators	14	28.6
Repairs / replacement of windows (e.g. double glazing)	13	26.5
Emergency measures, including portable heating etc.	13	26.5
Gas / electric fire repair / replacement	11	22.4
Loft insulation top-up / installation	6	12.2
Other minor adaptations to homes (e.g. grab rails fitted)	4	8.2
Cavity Wall top-up / installation	3	6.1
Other	3	6.1
Jacket / insulation fitted to hot water tank	2	4.1
Chimney balloon fitted	2	4.1
Loft clearance and new hatch access / widening	1	2.0
Base	49	

Often interventions were small scale or funding was used to provide temporary heating or as a contribution towards to more substantial work such as new central heating systems. The FILT WHS funding was an additional way to help clients and the flexibility of the scheme helped HIAs to 'plug gaps' and intervene quickly when other agencies hadn't been able to. For example, where renovation schemes funded by local authority grants fell short or where there had been a delay in accessing larger funds for bigger work. FILT WHS schemes could be a temporary fix or a bridge to bigger work.

"The HIA has been able to help more people, particularly where small funds have been used to plug shortfalls in funding larger work... it wouldn't have gone ahead if we hadn't had this last bit of funding, big work 18-19,000 pounds of works that were just hanging on waiting for last bit of money, so it makes a big difference." (HIA, 2)

When clients were visited in their homes they received additional advice and information and were referred either in-house to the HIA's handyperson service or other in-house teams, or to various outside organisations and agencies for further help and assistance. The most common types of information HIAs provided to clients are detailed in Table 8.

Table 8: Which were the 3 most common types of advice and information given in people's homes?

	Count	Per cent
Advice on keeping warm	41	83.7
Advice on energy saving options available	33	67.3
Advice on benefits available	28	57.1
Advice on programming thermostat	19	38.8
Advice on switching energy provider	13	26.5
Advice on bleeding radiators	11	22.4
Other	2	4.1
Base	49	

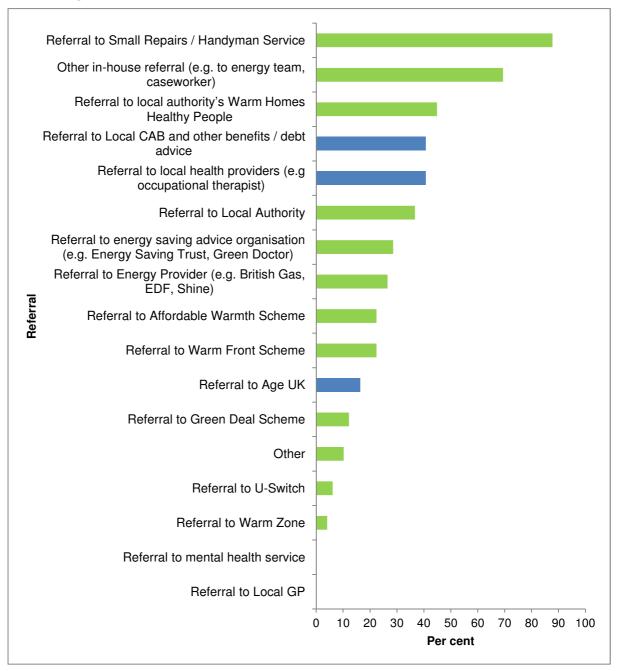
As highlighted above, HIAs operated in an accessible way sometimes acting as a single point of contact for vulnerable people and as a common referral point for partner organisations e.g. NHS, Local Authority, Housing, CAB, Welfare, voluntary sector. The FILT WHS enabled HIAs to make the most of referral partnerships that were already in place, helped to strengthen links with partner organisations and was also a mechanism to develop new referral partners, examples provided by HIAs included:

- enhanced links and raised profile of work with the occupational therapist which resulted in the HIAs receiving more referrals
- strengthened relationship with Age UK -the charity generated work for the HIA because they didn't have their own HIA service
- private tenants and landlords HIA spoke to landlords about improving their homes and did some works. Now engage with private landlords, which hadn't happened before
- strengthened links with district nurses
- established and maintained better links with charitable organisations. Consequently, referral systems have grown
- made contacts with different funding streams and different organisations for referrals, e.g. CAB, Fire Service, Beat the Cold etc. Referrals made back to the HIA as a result of developing effective referral networks.

Almost 60 per cent of HIAs responding to the online survey highlighted that the links and referrals with outside agencies was a factor of the FILT WHS project that worked particularly well. Figure 1 identifies the referrals that HIAs made with in house referrals being made most often. Health referrals are highlighted in blue whilst all other referrals are in green.

There were also examples of the FILT WHS plugging a gap in terms of identifying people at risk who had been missed by statutory services and organisations, for example people discharged from hospital to a home without functional heating. Through the FILT WHS one HIA realised that they should be working more closely with the health service for this type of work in order to identify where hospitalisations occur and people at risk.

Figure 1: Which were the five most common referrals that you made at or following assessments?



#### 4.5. Health and the impact on health

Many of the clients who contacted HIAs were suffering from an illness or condition which was affected by cold conditions and a lack of heating. Eighty five per cent of HIAs in the online survey stated that people were referred to the FILT WHS because they were suffering from an illness or condition affected by cold. (Overall home assessment data suggests that the health of at least a third of these clients was being made worse by the cold and about two thirds had issues with mobility). Table 9 below provides further details of the reasons why people were referred to the FILT WHS identified in the HIA online survey.

Table 9: Why were people referred to your Warm Homes Service?

	Count	Per cent
They were cold in their homes	45	93.8
•		-
They had a broken down heating system / boiler	45	93.8
They were suffering from an Illness / condition affected by cold	41	85.4
Their home needed extra insulation or draught-proofing	40	83.3
Their home was in need of general repairs / maintenance	37	77.1
They were struggling with fuel bills	27	56.3
They needed their windows repairing or replacing	27	56.3
Other	9	18.8
Base	48	

In the online survey HIAs were asked to identify three interventions which they thought had the greatest impact on a client's health and responses are summarised in Table 10 below.

Table 10: From this list of interventions which 3 do you think have the greatest impact on a client's health?

Boiler repair / replacement	28	58.3
Central heating repairs / replacement	25	52.1
Draught-proofing (doors and/or windows)	18	37.5
Boiler servicing	17	35.4
Thermostatic Radiator Valves fitted / replaced	11	22.9
Emergency measures, including portable heating etc.	11	22.9
Repairs / replacement of windows (e.g. double glazing)	9	18.8
Other minor adaptations to homes (e.g. grab rails fitted)	7	14.6
Radiators fitted / moved	6	12.5
Gas / electric fire repair / replacement	5	10.4
Reflective panels fitted to radiators	4	8.3
Loft insulation top-up / installation	2	4.2
Cavity Wall top-up / installation	1	2.1
Loft clearance and new hatch access/widening	-	-
Jacket / insulation fitted to hot water tank	-	-
Chimney balloon fitted	-	-
Other	-	-
Base	48	

Referrals that were reported as being the most beneficial to a client's health were referrals for small repairs/handyman services, in-house referrals to HIA caseworkers, and referrals to local health providers such as occupational therapists.

Table 11: From this list of referrals which 3 do you think have the greatest impact on a client's health?

	Count	Per cent
Referral to Small Repairs / Handyman Service	39	83.0
Other in-house referral (e.g. to energy team, caseworker)	21	44.7
Referral to local health providers (e.g. occupational therapist)	17	36.2
Referral to local authority's Warm Homes Healthy People	10	21.3
Referral to Affordable Warmth Scheme	9	19.1
Referral to Local CAB and other benefits / debt advice	8	17.0
Referral to energy saving advice organisation (e.g. Energy Saving Trust, Green Doctor)	8	17.0
Referral to Local Authority	7	14.9
Referral to Warm Front Scheme	6	12.8
Referral to Age UK	5	10.6
Other	3	6.4
Referral to Energy Provider (e.g. British Gas, EDF, Shine)	2	4.3
Referral to Green Deal Scheme	2	4.3
Referral to Warm Zone	2	4.3
Referral to Local GP	1	2.1
Referral to mental health service	1	2.1
Referral to U-Switch	-	-
Base	47	

HIAs were then asked to identify the three main benefits of interventions and referrals for their clients. Typically benefits identified by HIAs were to do with the health and wellbeing of their clients but benefits were also financial in terms of reducing fuel poverty and reducing hospital admissions. The three most common benefits identified by HIAs were: preventing Excess Winter Deaths (e.g. through fewer deaths from flu, respiratory and circulatory diseases), feeling warmer and improved general wellbeing.

Table 12: What do you think were the 3 main benefits of interventions and referrals for your clients?

	Count	Per cent
Prevented Excess Winter Deaths (e.g. through fewer deaths from flu,		
respiratory and circulatory diseases)	24	49.0
Feeling warmer	20	40.8
Improved general well-being	18	36.7
Reduced fuel poverty	17	34.7
Prevented / reduced exacerbation of conditions such as arthritis and		
rheumatisms	16	32.7
Reduced hospital admissions	16	32.7
Improved general health	11	22.4
Prevented falls and injuries in the over 65s	10	20.4
Feeling safer	6	12.2
Prevented / reduced incidence of minor illness (e.g. common cold)	5	10.2
Prevented / reduced mental health problems (e.g. by alleviating financial		
stress)	3	6.1
Reduced emergency readmissions	1	2.0
Base	49	

From interviews with HIA managers it was apparent that interventions and referrals may have helped to prevent further harm and illness. One HIA commented:

"[The FILT] WHS is a great way in to do a holistic assessment of somebody and when you visit you find a whole load of other issues that they wouldn't necessarily have known about - that they can get a stair lift or grab rails....or just that people care about them" (HIA, 9).

Many of the FILT WHS clients were at risk of becoming ill due to the cold because they could not afford to have their heating fixed or may have been at risk of falls or other accidents. Examples provided by HIAs included:

- a few clients were being discharged from hospital and returning to homes without heating
- some disabled people on dialysis didn't have any heating
- others were sleeping downstairs in rooms with limited heating whilst waiting to have stair lifts fitted
- falls prevention due to considerable work done fitting handrails and ice clearance
- some people had fires leaking carbon monoxide so the intervention helped to save lives.

In one case the HIA manager described visiting a household without a gas fire, where she saw a child lying on the settee absent from school with a chest infection. As a result of FILT funds, the family now has heating and a thermostatic radiator valve to help control fuel usage and keep bills to a minimum.

In another case the HIA manager explained how a number of issues were resolved and the potential risk of a fall was reduced as a result of the FILT WHS funding:

"The client had no heating in the kitchen and she was using rugs to block the draught which created a risk of falls. So, there were a number of issues which were dealt with by over boarding the floor, which in turn meant the draught was stopped, the rugs could be removed, preventing heat loss and potential falls multiple benefits were derived which the client wouldn't have had the money to pay for herself "(HIA, 8).

In summary, the HIA survey and interviews indicated the increased reach and the value of the FILT WHS from the HIA perspective. They reported improved capacity in terms of staff training and skills, increased client base and new assessment tools. Many of the clients that they contacted through the FILT WHS had no heating and the HIAs could cite tangible examples of perceived health benefit. The flexibility and "light touch" nature of the FILT WHS project meant the HIAs could respond in a timely fashion and were able to be flexible, in turn, with the client. The range of interventions varied from large (new central heating systems) to small (draughtproofing and TRVs). However, the small measures, as well as larger measures, generated big impacts for households.

# **Experiences of the FILT WHS Clients**

#### 5.1. Introduction

This evaluation of the FILT WHS incorporated a two stage qualitative exploration of the client's experiences. The aim was to generate detailed indications and evidence of impacts on health and wellbeing for individual beneficiaries of the scheme and wider indicators of reduced use of health services or cost savings to the NHS. We also intended to understand which interventions have worked well for whom and why.

A brief telephone interview was held with ten recipients of the FILT WHS in the first stage of the evaluation. They were recruited from three HIAs that participated in the FILT WHS. HIAs were recruited at random from across the UK. A member of the research team contacted the participant by phone, conducted the interview and audio recorded it.

In stage two, clients of the FILT WHS were purposively recruited from HIAs for indepth interviews which were conducted in the client's home. Fifteen interviews were conducted with clients of three HIAs which had participated in the FILT WHS. As this phase of the study was funded by CLAHRC SY, recruitment was initially conducted through two HIAs based in Yorkshire and Humber. However, as recruitment of suitable clients was slow, one HIA that bordered the region was included to enhance recruitment. This enabled the qualitative component to be completed within the required timescales.

Clients were approached by the HIA and asked if they were happy to participate in the research. If the clients were interested their contact details were passed on to the evaluation team. A member of the research team then contacted the participant by phone, and arranged a time to visit the client to conduct the interview which was audio recorded. The recordings from interviews of both stages were fully transcribed and field notes taken.

A summary of key findings from the client experience interviews is presented below. More detailed findings of client experiences and impacts are available in Appendix 3 in the form of case studies, as is a table providing details of the sample characteristics for those participating in the interviews, as well as a table outlining interventions provided and the perceived impact from the perspective of interviewees. The findings are presented here in the format of the case studies using the following headings:

- the client
- the problem

- accessing FILT WHS
- what was done
- and impact.

#### 5.2. The Client

The majority of the clients interviewed were of pensionable age. Some were extremely frail due to age (>80) or chronic and acute health problems. Three participants were younger but all participants were vulnerable to the negative impact of a cold home because of age, illness, lack of mobility, social isolation or low income. In some households there were compounded risks because of the multiple needs of different members of the household. All but two of the participants had health problems that would be exacerbated by cold e.g. cardio vascular disease, diabetes, respiratory problems.

"He [Mr CD] uses duvets because he's always cold.... even in summertime he feels cold as well. He does feel it more, even when we're warm, he still feels cold" (Mr and Mrs CD's daughter)

"Mr KL was so cold, he was so cold. He was sat and he was so cold because there's no radiator, and as you can see we have a big conservatory and there's no radiator there, and it's coming from the kitchen to the bedroom, it's just like being in an ice house .... For example that, that's been so cold out there you could see your breath, because that was the outside wall." (Mrs KL)

Those participants who had chronic health problems reported feeling the cold more because of illness, and the heating system was not functioning (e.g. Mr and Mrs KL). Others commented they had to leave the heating on for longer because the home was hard to heat or because of illness (e.g. Mr and Mrs EF).

"We have it on, in winter it's on all the time really, because Mr EF has to have it warm. .....I usually turn it down at night time, but when it's bitterly cold I've left it on, just on low yeah". (Mrs EF)

The three participants without health problems were younger, but worried about safety as a result of cold and problems with the heating in their home. For example Mrs MN was a single parent who worked as a child minder at home. She worried about keeping her home warm and safe for her own children and those she was caring for. Mrs MN was not ill herself but did comment on the respiratory health of her children related to a cold home.

Health and cold were reported as impacting upon one another, even though the client did not always explicitly acknowledge the link. A stark example was Mrs KL. who was in deteriorating physical and mental health herself but had been caring for a husband with Alzheimer's for seven years. They had been living in a house without functional heating and in extreme discomfort. The stress and physical impact of this life meant she was suffering anxiety and unable to find a way of accessing help. In another age group, Mrs MN, whilst in good health herself, was becoming increasingly worried about the health risk to her asthmatic child because of living in a hard to heat home and the safety of relying on supplementary heating.

The combination of a cold and damp home and the various co-morbidities meant most people felt the cold excessively and experienced much discomfort. Others were becoming increasingly socially isolated because they didn't want people to see they were suffering or because friends and family complained about the cold and so stopped coming to visit.

"I become a little bit of a recluse because you get used to being able to turn the hot water on to have a shower, but if you've got to heat water in a kettle on top of a fire....then wash out of a bowl, you don't sort of feel fresh and clean". (Mr F)

"Not much visitors come. They said it was cold, they always said get central heating done, get central heating done." (Mrs CD)

Because of the vulnerability experienced by the participants it is possible to suggest that they would have struggled to access other services, especially those that are outside of their community or have complex processes attached, for example Green Deal or ECO.

#### 5.3. The problem and its impact

The participants of the qualitative component of this evaluation were, in the main, living in extreme circumstances with broken or faulty heating systems or water heaters and in damp housing. In some cases the home was unsafe due to electrical or intermittent faults, as well as unsafe because of the cold.

"We switched on the immersion heater and we just kept our fingers crossed hoping it would still work" (Mrs AB)

People reported being in need of a variety of help from major interventions, such as a new central heating system, or minor interventions, for example draft proofing, reflective radiator panels or thermostatic radiator valves (TRVs). Boiler repair, servicing and replacement, water heater repair or replacement and other heating repairs were amongst the largest interventions installed.

Where people lived in homes without effective water heating, this created an accumulated risk. An extreme example was Mr and Mrs EF who had been relying on heating water in the kettle for personal hygiene needs and household tasks. They were old and ill and so vulnerable to infection. This meant maintaining their hygiene was more important, but challenging because the water heater was broken. Walking up and down the stairs with kettles of water increased their risk of falls and scalds. Despite being ill herself, Mrs EF cared for her husband. The lack of hot water increased the burden of caring for him.

"I mean I had to do all this because Frank's not really supposed to go up and down stairs very much.... and I've got two hip replacements and such like". (Mrs EF)

Stress and worry was reported as a consequence of living with the housing or heating problem, as well as the associated cost for some in trying to heat the home. This had a profound impact on mental wellbeing for some participants.

"It's terrible. It's freezing because I'm just trying to save gas. They are telling you wrap up, they are telling you do this, keep one room, but what about the rest of your rooms, what about your bedroom where you're going to go into the night?...Oh God! I cry, sometimes I cry because when I put in so much in gas, it's like which the government just give you a certain amount, and say that they give you £140 or, but you must live off that £140 and you have to pay electricity, you have to pay gas, you have to pay television, you have to buy food and plus life insurance, house insurance. It's like nothing"! (Mrs IJ).

For some participants, the heating system worked but more minor problems prevented them heating the home efficiently. Less extreme problems included draughts, inefficient radiators or lack of control because some radiators didn't work or there were no thermostatic valves on the radiators. Even though the problems reported, and solutions required, were less extreme they still had an impact on the home temperature and anxiety about the cost of heating the home.

"The house was dropping down to cold then you heat it all back up again". (Miss MN)

Most participants said that without HIA intervention they would not have been able to afford the work.

"Afforded it ourselves? Impossible, not when you are on a pension". (Mrs AB)

"I didn't have the money to have it [the heating] fixed and it would have taken a few hundred pounds. Yeah, we used to always put so much aside, but as he got ill and needed more care and I don't get my care free, as he needed more care so we watched our bits of savings disappear, as you do, you just do" (Mrs KL)

"To know that we could get help financially was amazing. Well I don't know, I don't know, we couldn't get a loan out because we're not working or anything, we hadn't got enough saved up, so I don't really know, I don't know what would have happened". (Mrs EF)

For four participants there was an added barrier in accessing help. They described feeling embarrassed or quilty about seeking funding. Mr OP had never asked for anything before that he hadn't been able to work and pay for.

"Never claimed a penny in all my life". (Mr OP)

"There's loads of people like me, we won't speak up and ask for help." (Mr F)

#### 5.4. Accessing the FILT WHS and related interventions

The HIAs were mainly contacted for help with cold-related problems. In the majority of cases the participant's descriptions of accessing the HIA indicated that it was luck rather than judgement that led to them accessing help. For some they were living. coping or suffering from a challenging home environment but assumed there was nothing that could be done to help them. It was only because of a chance encounter with a friend, neighbour or previous contact that they heard about the HIA. The role of neighbours and the local community in accessing the service is striking. For others, they were referred to or informed about the HIA as a consequence of seeking help about something else, for example pensions credit, or an equity release (see Appendix 3).

The HIA emerged from the evaluation as an accessible and acceptable organisation for both clients and referring organisations. For example, they approached and assessed vulnerable people in a non-threatening and reassuring way. All the participants were impressed by the responsiveness of the scheme. Having made contact with the HIA an assessment was performed within two weeks. If the work required was not invasive it was completed within a month. Where larger interventions were required work took longer. In those homes requiring new boilers the work took much longer to complete, often being installed after the winter months had passed, but in readiness for the following winter. In such circumstances clients understood, but it meant they found it hard to comment on the impact of the interventions, as the full effect had not been experienced.

There were a minority of cases where the client was uncertain about who had been to see them to assess the property, who had done the work and who had paid for it, for example Mr and Mrs CD and Mrs IJ. In these cases details were checked with the HIA themselves. This confusion and uncertainty of the client is indicative of the vulnerability of some of the clients, and how hard they would have found it to access help elsewhere.

#### 5.5. What was done

Details of the interventions are provided in Appendix 3. In response to the problems reported above, interventions ranged from new boilers and central heating systems to smaller interventions such as fitting TRVs, sealing doors, and servicing gas fires and boilers.

The manner and professional attitude of the HIA assessors and officers and contractors emerged as important in terms of trust and confidence in the work, as well as reducing stress related to the work being done. HIA workers and contractors were described as efficient and competent. All the clients commended them for doing the job(s) quickly and without leaving a mess.

"They were very nice, very efficient, they didn't cause any mess whatsoever." (Mrs A)

"Perfect, absolutely perfect!...It took him (the contractor) a full day to do it and he never stopped." (Mrs B)

"I cannot sing my praise enough." (Mrs C)

"They were efficient, good professionals....they put dust sheets down." (Mr F)

"Two very efficient young men came round and did the whole thing very quickly, I was most impressed. They serviced the boilers and put thermostatic valves on all the radiators....it was an admirable job." (Mrs E)

"Fantastic job, they were clean, they moved everything every day when they finished work, they were excellent." (Mrs AB)

Whilst tidiness, professionalism and efficiency were valued, there was a sense that what was valued was the interpersonal skills and manner of those working for the HIA and the contractors. Their expertise and approach had an impact on the accessibility and acceptability of the service, and the mental wellbeing of the recipient. They were a trusted source of help.

"[The HIA] were very warming, very helpful, there's no way they looked down on us that we were asking for a bit of assistance and anytime I phoned them they were very accommodating and very helpful and sort of took the pressure off that might have been building up". (Mr OP)

An important aspect of the work can broadly be termed "energy coaching". Examples include Mr and Mrs CD and Mrs KL, who struggled to understand how the heating worked, how to work new equipment or installations efficiently and what impact this had on fuel bills. There was evidence with these clients that HIA staff spent valuable time explaining new equipment, setting it to the requirement of the householder. The quality and nature of this work minimised disruption and removed any potential negative impact of the intervention. It also increased wellbeing and the readiness to ask for help in the future and to recommend the scheme to others.

With three clients there was some concern expressed regarding some element of the work e.g. unsightly piping left exposed. However, this did not outweigh the perceived benefit of the interventions.

#### 5.6. Impact of the FILT WHS interventions

The impacts of the FILT WHS interventions were diverse and wide ranging. Overall the interviewees struggled to make an explicit link between the intervention and an impact on their health, despite the fact many of their health problems were exacerbated by the cold. However, most did discuss wider benefits using terms such as 'feeling better', 'comfortable' and feeling 'warmer'. Very few clients talked about health and well-being as forming part of their initial assessment of their circumstances. However, a few were existing HIA clients so previous casework may have been produced so a thorough assessment may not have been necessary.

Relatively small, as well as large, interventions were seen to have made a big and immediate difference to client's lives, for example draught-proofing, boiler servicing, servicing gas fires, and installing TRVs.

"It couldn't have been any better...I was very pleased...I'm feeling happier with the bedroom. After they put it in, I didn't get much condensation in my bedroom. It's more efficient than my other one [heater]" (Mrs H).

"They fitted the TRVs", "he did the fire, he actually mounted the fire surround for us.... There's been a big improvement all around....there's nothing that was done that wasn't needed, but the stuff that was done that the guy who did it for me he went above and beyond" (Mr I).

Increased control for clients emerged as an important theme. This was control in terms of:

- heating and warmth from interventions such as TRVs and advice regarding bleeding radiators
- money including advice on welfare benefits and debt advice
- anticipated cost saving through energy use, possible savings from energy switching or advice on tariffs.

"It's a good thing to have done because its more efficient and I don't like the idea of things not functioning properly and using up resources which they don't need to use." (Mrs E)

More specific detail of the impact of the interventions will now be considered under the following headings:

- health and wellbeing
- financial
- and social impacts.

# Health and wellbeing impact

The client interviews revealed that people do not always make a direct link between the intervention in their home and their health. However, they all describe feeling more comfortable, happier and generally much better as a result of the intervention. This raises questions of how proactive people would be to ask for home interventions on health grounds and for themselves.

There were examples of clients who had been reclusive and socially isolated partly due to embarrassment because of their home circumstances and cold conditions. The evaluation illustrates how improvements in household conditions can improve social aspects of quality of life.

"I've had people come in [previously] and I've had to give them a blanket over their knees even when the central heating is on'. Friends, sister and children didn't visit for long because of the cold, now 'they are happy to come and to sit for a while and enjoy"(Mrs G).

The findings resonate with previous research that identifies that people benefit not just from warmer conditions but also more comfortable, less stressful living environments (see Gilbertson et al., 2006; Gilbertson et al., 2012).

"She's nearly ninety, she does feel the cold more" (Mrs A).

"Sometimes when I wanted to sit and watch television a bit later I couldn't do it because I was very cold and now I could sit comfortable for a bit longer, especially when you're on your own and nobody else, the television is a bit of company." (Mrs G)

"[the new radiators] are not going to cure me but as far as the heating goes, it's been beneficial." (Mrs A)

"When it's chilly and the house is cold I seem to have a cough or a cold or arthritis in the joints, so that extra warmth is very comforting and soothing to the pain." (Mrs G)

However, there were some examples where people commented on feeling better in terms of their health and symptoms as a result of the home being warmer. Having a warmer and more comfortable environment impacted on health by improving the ability to cook, eat a healthy diet, relax in a safe and comfortable environment and get a good night sleep. This was especially important when the client had chronic and complex co-morbidities. For example, Mrs KL and her husband had been eating wrapped up in a chair or in bed because it was so cold. This had impacted on their appetite. Because of Mr KL's dementia, without a familiar routine regarding meals, he found it difficult to eat.

"Well, you found you felt better, I didn't feel as ill and as cold and as lethargic, because when you're cold you're lethargic, did you know that, but you can't sleep....I do know that it made a difference to our wellbeing...Mr KL only liked to eat at the table so he wasn't eating very well in the chair. He used to sit in the chair. Once we sat at the table he was different, because he likes things laid out properly with the salt and pepper and everything. There was less mess. We just sat down and ate, which was much better for us, but he was losing weight because he was not eating and the doctor organised a vitamin for him, but then I realised it wasn't really that, it was just we weren't sitting together at the table as a family. I would say that it improved our lives tremendously. It's got to do. If you're warm it improves your life." (Mrs KL)

"My COPD was always a problem because I was cold. Mr KL had got COPD, he was freezing all the time, I had to circulate his feet and things like that. We were just cold." (Mrs KL)

Other participants provided illustrations of wider impact of health benefits derived from a more comfortable home and being more equipped to engage in activities of daily living such as sleeping and reading.

"It had a big impact really, because like I said, the heat, we had no heating upstairs at all, so it's made a heck of a difference. I don't have to sleep on the settee any more." (Mrs A)

"Well you're not walking round shivering, I mean at night when I get up obviously it's a bit chilly, but like I say I can switch that on, but I just put a thick dressing gown on and I'm fine. So yeah, it does, it makes a lot of difference." (Mrs AB)

Benefits were experienced in relation to mental health and wellbeing. This emotional and mental improvement was attributed to feeling warmer or less worried because of the stress of living in the challenging home environment or because people anticipated fuel bills would reduce.

"Certainly as a parent, peace of mind knowing that it's activated and it stays on all night and they're a nice steady temperature.....The relief of having it done is massive, especially before the winter." (Miss MN)

"Mentally yes, because I know it's there [the boiler], it's going to see my lifetime.. and the door, it's a lot less maintenance to worry about." (Mr ST)

"I feel good about coming home and picking me paper up, in that I don't have to sit there and shiver in my coat." (Mr OP)

The impact was described as like ripples in water spreading out from physical to mental and emotional benefits.

"Actually it's like a stone. When you throw it in a pond there's ripples that come out and that's exactly the ripple effect that having something like [the HIA] can have on the lives of people." (Mrs KL)

Another dimension to psychological impact was improved confidence and selfesteem.

"My rheumatoid arthritis does get worse in chilly weather and I do feel stiffer.....I think I feel more confident now." (Mrs E)

For example Mrs D was now able to wash herself. Not only did she feel better because of improved personal hygiene, she is more independent, less reliant on her husband, and had more in control and self-agency.

"When you're on your own sometimes, I wouldn't dare go and stand in the bath...I have to wait for my husband to be there and then I couldn't sit down. I could only just stand under the little shower." (Mrs D)

Another dimension to health impact was the improvement in personal safety and reduction in risk of burglary, accident or fires that was experienced following repairs or improvements to doors and windows:

"It is. I'm safer because if fire start here now I don't have to climb up. How can I climb up there?" (She asked for a window with lower level opening for safety reasons, which the HIA provided) (Mrs IJ).

### Economic impact

The majority of clients expected a reduction in fuel bills as a result of the work they had had done. However, most clients reported that the work was done between January and March and so they had not experienced a full winter since the work was completed. In the cases of some clients the work was completed after the coldest weather had passed.

"Well. at the moment I don't have much fuel bills at the moment because we've had a few months of hot sun...So I can't test, there's no way I can test it at the moment." (Mrs IJ)

Most participants who anticipated they would use less fuel in the coming winter had more efficient home heating as a result of the FILT WHS. An extreme example was Mrs EF who was no longer reliant on using kettles to heat water. However for most it was too early to tell if this expectation was realised.

"It's a good thing to have done because it's more efficient and I don't like the idea of things not functioning properly and using up resources which they don't need to use." (Mrs E)

"I can't notice a lot of difference....it's got to benefit me in some way. It might be warmer and the bills not quite as bad." (Mrs QR)

Some worried fuel bills may increase rather than decrease. These were participants who did not have functioning heating prior to the FILT WHS interventions and had not been using their heating. As the heating was now working they were using it and so expected fuel bills to increase (for example Mr I, Mrs AB, Mr and Mrs CD, Mr IJ). Mrs J commented that the increased warmth was worth this anticipated increased cost. In the case of Mrs H, she still expected her heating costs to be high because of residual problems with heating her home. Although the FILT WHS had made an improvement an underlying problem still existed.

One woman commented that she didn't understand how reflective radiator panels could make much impact upon fuel economy and heating efficiency.

"Yeah. In terms of then your health and wellbeing you say it's difficult for you to know whether having a little work like radiator foils put on, whether that's had any impact, it's difficult for you to look at and think. I can't say, oh yes I haven't had to put the heat on. Once it's on, it's on. It comes on very quickly and it stays on until I switch it off, obviously, it's on a thermostat." (Mrs QR)

As a result of their vulnerability, a number of the participants struggled to understand their fuel bills and so were not sure what to expect in terms of a reduction in fuel bills. For some, this anxiety was based in an anticipated increase of heating but also a lack of understanding of their bills and payments, for example Mr and Mrs CD.

"They're scared of the bill being too much." (Mr and Mrs CD's daughter)

There were a couple of examples where participants indicated that they had more control over the heating. This was because a new boiler gave them more control over the programming or TRV's allowed them to control the room temperature more sensitively and avoid wasting energy (for example Mr GH). This increased control may well accrue financial benefits but this claim is speculative and not evidenced by actual fuel bills of the participants.

"The settings are much more refined than the old boiler, so you can regulate it to suit." (Mr ST)

"The house is a lot warmer, it's running a lot more economically." (Miss MN)

Mrs GH commented that she never checked her bills, but always paid them regularly. She would therefore not be aware of any financial benefit.

"Well I never check it, so long as I pay my bills, as long as I'm in front that's all I bother about." (Mrs GH)

In one interesting example, Mrs AB, the FILT WHS client had approached a building society about an equity release scheme to pay for home and energy improvements. The building society had been the source of information about the FILT WHS. Whilst it is impossible to be certain, the implication is that the FILT WHS prevented the client taking out an equity release scheme which may have had long term financial implications to a low income household.

# Social impact

The evaluation illustrates how improvements in household conditions can improve social aspects of quality of life. There were examples of clients who had been reclusive and socially isolated partly due to embarrassment because of their home circumstances and cold conditions.

"I become a little bit of a recluse because you get used to being able to turn the hot water on to have a shower, but if you've got to heat water in a kettle on top of a fire....then wash out of a bowl, you don't sort of feel fresh and clean." (Mr JB).

Maintaining social connections is identified as a public health priority in the PHOF but sometimes the links between improvements in housing and social connections are overlooked or not considered as an outcome. In this evaluation of the FILT WHS, the participants did provide examples of how having a warmer home had a direct social benefit. Interviewees commented that where the home had been cold and damp, friends and family had commented and visited less often. As a result of the FILT WHS interventions they were more likely to invite people to their home. When they had visitors they were less likely to leave quickly. Where the visitors were grandchildren, this was especially valued.

"I've had people come in [previously] and I've had to give them a blanket over their knees even when the central heating is on'. Friends, sister and children didn't visit for long because of the cold, now 'they are happy to come and to sit for a while and enjoy." (Mrs G)

"Not much visitors come. They said it was cold, they always said get central heating done, get central heating done, but they struggle with money and it was too hard." (Mr and Mrs CDs daughter)

This suggests that the FILT WHS allowed HIAs to implement quick, cheap interventions that may have a broader social benefit. In addition to the wellbeing attributed to such social contact, visitors provide a valuable source of information and support.

In those households with school age children (Mr I and Mrs MN) there was an indication that the children benefited from better attendance at school. The reason cited was improved asthma and respiratory health.

"He's not missed as much school as what he did in the past having asthma attacks, struggling with breathing....he's only had two days off this year up to now." (Mr I)

"Coughs and colds were more prevalent [before the FILT WHS], just purely because the central heating was having to be on 24 hours a day, to its maximum." (Miss MN)

Improvements in warmth may result in improved health which results in reduced absences from school, a finding which has been reported in studies elsewhere (see Thomson et al., 2013). Evidence on the negative impact of cold homes on children is compelling and salutary (see National Children's Bureau, 2012, references from the report have been included in this report's references). There is a theoretical argument that the impact of the FILT WHS interventions on households with children could be wide ranging, and include mental wellbeing and social inclusion. However, evidence provided here is limited to respiratory health and school attendance.

In summary, the HIA assessment was responsive and timely. The FILT WHS interventions ranged from low level (such as draught-proofing) to extensive installations (new central heating systems). However, all had a significant benefit in terms of wellbeing. The indication is that benefit was accrued in terms of warmth rather than financial gain through energy savings.

Impact and Cost **Effectiveness** 

#### 6.1. Introduction

This chapter of the report looks at impact and cost effectiveness of the FILT WHS. It assesses the extent of, and relationships between, the inputs (or resources) and the outputs and outcomes achieved. The chapter is split into the following three main sections:

- inputs and resourcing
- outputs and activities
- and outcomes and impacts.

In this chapter we will be primarily drawing on the following sets of data:

- An initial 'home assessments file' detailing all households that were visited by HIAs and the results of their assessment.
- Monitoring data on 1021 households detailing work completed, costs and reported outcomes. This is referred to as the 'works completed file'.
- A file detailing the total hardship funds paid to HIAs. This is referred to as the 'hardship allocations file'.
- HIA views and perceptions recorded in the online survey.

Due to the lack of a common identifier across the home assessment and works completed files, we have only been able to match 165 households/beneficiaries across each data set using postcode information. We have made clear in the text which data set is being referred to and where data refers to this subset of 165 this is highlighted in the text. Where additional sources have been used this is also made clear.

There were further issues with the data sets available which has limited the analysis we were able to undertake. The initial home assessments file is based on an energy usage survey HIA staff were required to fill in when assessing people's homes. The way in which open-responses were recorded in the dataset created difficulties for the evaluation when deciphering the number of cases which were referred on for remedial work or to other organisations. Therefore while we have provided a figure for the number of cases being referred on, this should be treated with caution.

There were also issues with the monitoring data and how different organisations recorded information. HIAs were asked to provide a description of the work carried out for each case/beneficiary and then state the outcomes they felt had been achieved as a result of the work undertaken. HIAs appear to have approached filling in this information very differently with notable variations in the level of detail offered, particularly regarding outcomes. For example some HIAs simply stated 'kept warm' for every case listed, whereas others offered a much greater level of detail in their response. We have attempted to code up the responses regarding both work undertaken and outcomes and the results are displayed in Figures 3 to 6. The challenges encountered when coding these responses should be borne in mind when examining the data presented.

The monitoring data also contains costs of the work carried out. The cost of work per case is listed along with the amount of hardship grant provided by FILT and any additional funds provided. There were several cases across HIAs where the total amount of funds listed (e.g. FILT plus additional sources) did not equal the cost of work undertaken. This could be due to discrepancies in the way additional funds have been recorded or down to actual money spent at the time of recording versus that spent overall. While reconciling the figures on a case-by-case basis proved unfeasible, the majority of the data appears to have been recorded accurately and as a result we have been able to provide reasonably reliable figures regarding the costs of work undertaken and additional funds levered in.

Finally, we have attempted to assess the benefits of interventions to clients who participated in the telephone and face-to-face interviews. It has proved problematic to decipher cost benefits from this data. In many cases it has been too soon to tell whether the intervention has had any impact. This is explained, along with further issues with the qualitative data, later in this section (see below).

#### 6.2. **Inputs**

This section looks at the inputs and resourcing of the FILT WHS, first by examining results from the online survey and then by considering cost data from both the hardship allocations and works completed files.

#### Staffing

55 HIAs participated in the FILT WHS. According to FILT 385 visiting staff (handypersons, caseworkers, and technical officers) were equipped and prepared by bespoke one-day training, between November 2012 and January 2013.

The costs of training reported by FILT were £30,130 to NEA for delivery of training and training materials plus £9,800 for venues and refreshments for the training (these costs were for 21 delivery days training 385 staff, with approximately another 20 staff trained through cascade within their own organisations).

In the first stage of the evaluation the 55 participating HIAs were invited to take part in an online survey designed to gather feedback regarding the FILT WHS. Forty nine HIAs responded to the survey which also addressed training received by staff. The survey indicated that the 49 responding HIAs had trained 279 FTE employees, as shown in Table 13 below. If this is grossed up to represent the 55 HIAs in total, based on the average number of staff trained per HIA, this would indicate 313 FTE employees trained by HIAs overall.

Table 13: What number of staff received training as part of the Warm Homes project? (FTE)

	Count	Per cent
1	2	4
2	10	20
3	6	12
4	7	14
5	7	14
6	6	12
7	3	6
8	1	2
9	1	2
10+	6	12
Base	49	

HIAs were asked about the main benefits of training for both their staff and their organisation. As indicated in Table 14 below, the majority of HIAs (94 per cent) saw staff 'acquiring new skills and knowledge' as a main benefit. Over half also saw 'increased motivation' among staff as a key advantage to training their staff.

The two HIAs giving 'other' as a response stated the following when asked what these other main benefits were:

"Enabled them to see more clearly what they should focus on when with clients."

"Confirmed knowledge already known."

Table 14: What were the main benefits of training for your staff?

	Count	Per cent
Acquired new skills and knowledge	46	94
Increased motivation	25	51
Improved prospects for the future	17	35
Increased confidence and self-esteem	15	31
Improved morale	11	22
Other	2	4
Base	49	

'Increased productivity' (82 per cent) and 'improved partnership working' (71 per cent) were the two main benefits of training staff perceived by HIAs for their organisations.

The HIA giving 'other' as a response stated the following when asked what this other main benefit was:

"Staff acquired new knowledge."

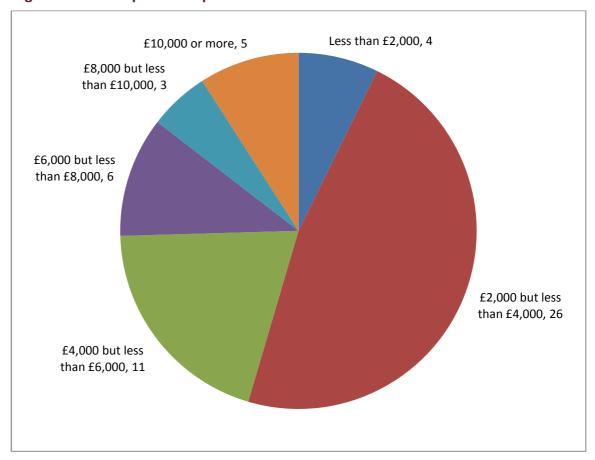
Table 15: What were the main benefits of training for your organisation?

	Count	Per cent
Increased productivity (e.g. ability to assess more homes)	40	82
Improved partnership working with other organisations	35	71
More motivated workforce	24	49
Improved staff retention	5	10
Other	1	2
Base	49	

# **FILT Funding**

A total of £257,250 hardship funding was paid to the 55 HIAs, as detailed in the hardship allocations file. Figure 2 below reveals how this funding was distributed across the HIAs, with the largest proportion receiving a funding allocation of at least £2000 but less than £4000. Of the hardship funding paid, according to the most recent figures available at the time of evaluation (specified in the hardship allocations file); £235,645.21 of grants had been spent or committed. The number of cases completed or in the pipeline was 1,166 with an average grant of just over £200. In addition to the £257,250 hardship funding a further £4,189.73 was contributed by HIAs.

Figure 2: Hardship amount paid to HIAs



## Funding Levered In

Based on the data available in the works completed file, for every £1 of hardship funding provided by FILT an additional minimum £2.10 was levered in from other sources. These sources included Warm Homes Healthy People funds, local Councils, charities and contributions from clients themselves. It is not possible to quantify the amount levered in from each source due to the way the data has been recorded, namely due to several sources being listed against a single case. It should be noted that the £2.10 levered in per £1 spent is a cautious estimate since it does not include for example, any extra benefits that may have been claimed after referral.

#### 6.3. **Outputs and activities**

This section assesses the outputs and activities of the FILT WHS, exploring how the HIAs spent their funding. Data from the home assessments file is used to estimate the number of referrals made, then responses from the online survey, along with data recorded in the works completed file, are used to examine the types of work carried out. The characteristics of the subset of households able to be linked from the works completed file to the initial home assessment file are detailed, then the costs of activities undertaken based on figures provided by FILT are listed.

### Home Assessments

According to figures provided by FILT, a reported 3728 home assessments took place at a total cost of £146,000. Each HIA was paid £40 for each assessment completed, up to a maximum number of assessments. Some HIAs completed further assessments, as they wanted to use the assessment tool to gather their own data. FILT estimate the average time to complete an assessment was between 20-30 minutes, and these were done by caseworkers and technical officers, hence the £40 reflects the recovering of some of the administration and management costs for HIAs.

### Referrals

Of the 3400 cases included in the home assessments file, we estimate 16561 were referred on for remedial work or to other organisations. As detailed at the start of this chapter, this figure should be treated with caution. As described, the open-ended data is unclear and a number of assumptions were made when deciding if a referral had been made or not. Assumptions tended to veer on the side of caution so it is conceivable that the figure of 1656 may be an underestimate.

HIAs were also asked about referrals in the online survey. They were asked to select the three most common types of advice and information given to clients. The majority (84 per cent) gave 'advice on keeping warm' as a response, while over two thirds said 'advice on energy saving options' and over half stated 'advice on benefits available'.

The two HIAs giving 'other' as a response stated the following when asked what other common types of advice and information they gave:

"Advice on Warm Home Discount (from energy provider)."

"Advice on what kind of things they could practically do to better insulate their home; advice on general maintenance and small repairs that might be required."

<sup>1</sup> This figure is based on an assumption that if a boiler service has not been done since 2011 then a referral was made.

Table 16: Which were the 3 most common types of advice and information given in people's homes?

	Count	Per cent
Advice on keeping warm	41	84
Advice on energy saving options available	33	67
Advice on benefits available	28	57
Advice on programming thermostat	19	39
Advice on switching energy provider	13	27
Advice on bleeding radiators	11	22
Other	2	4
Base	49	

HIAs were also asked in the survey to identify the five most common referrals they made at or following assessments. The majority (88 per cent) gave 'referral to Small Repairs/Handyman Service' as a response followed by over two thirds who said 'other in-house referral'.

Respondents who selected 'other' were asked to state what other common types of referrals they made. The following five responses were received:

"Referral to Cheshire East Council's Collective Switching Scheme."

"Decent Homes Funding."

"Department of Work and Benefits for full benefits assessments."

"Fire Service for Fire Safety Check/ Smoke alarm."

"All warm homes cases were passed to the local Help Direct service on completion for a follow up call."

Table 17: Which were the 5 most common referrals that you made at or following assessments?

	Count	Per cent
Referral to Small Repairs/Handyman Service	43	88
Other in-house referral (e.g. to energy team, caseworker)	34	69
Referral to local authority's Warm Homes Healthy People	22	45
Referral to local health providers (e.g. occupational therapist)	20	41
Referral to Local CAB and other benefits/debt advice	20	41
Referral to Local Authority	18	37
Referral to energy saving advice organisation (e.g. Energy Saving Trust, Green Doctor)	14	29
Referral to Energy Provider (e.g. British Gas, EDF, Shine)	13	27
Referral to Warm Front Scheme	11	22
Referral to Affordable Warmth Scheme	11	22
Referral to Age UK	8	16
Referral to Green Deal Scheme	6	12
Other	5	10
Referral to U-Switch	3	6
Referral to Warm Zone	2	4
Referral to Local GP	-	-
Referral to mental health service	-	-
Base	49	

#### Work Undertaken

There were 1,021 households who had some form of work carried out according to the works completed file.<sup>2</sup>

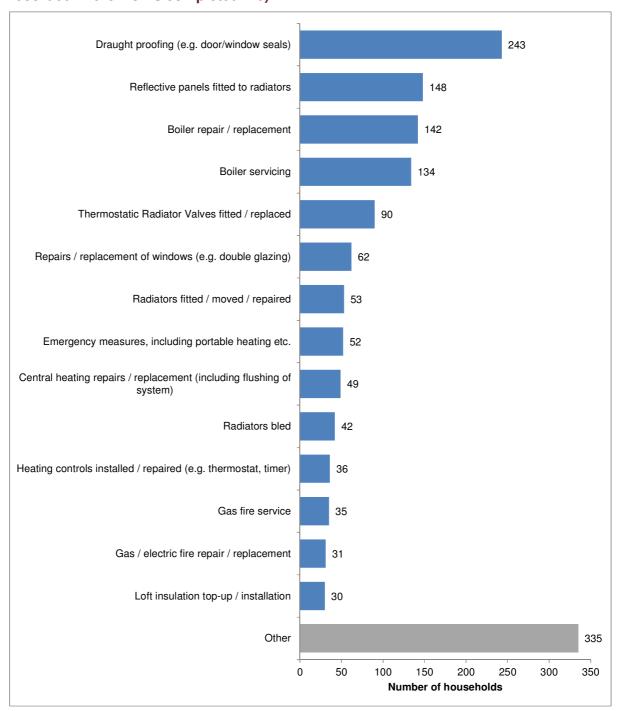
The types of work carried out in people's homes are illustrated below in Figure 3. As discussed at the start of the chapter, challenges were encountered when coding the responses on which this data is based, however the data presented provides a good overall picture regarding the types of work completed.

'Draught-proofing' was the most common type of intervention recorded with 243 households having this type of work carried out. The following interventions were also recorded for over 100 households: 'reflective panels fitted to radiators', 'boiler repair/replacement', and 'boiler servicing'.

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<sup>&</sup>lt;sup>2</sup> FILT report around 1162 interventions taking place, however not all of these were recorded in the works completed file.

Figure 3: Types of work carried out in people's homes (based on all cases recorded in the works completed file)



Base: 1,013, works completed file (8 cases in the works completed file did not have a description of work which was carried out, types of work receiving a response below 30 have been collated into 'other')

Of the 1,021 households recorded in the works completed file, 165 were able to be linked to the initial home assessments file detailing all households that were visited by HIAs and the results of their assessment. While it is not possible to discern whether this subset is reflective of the whole sample or not, there is no reason to suggest these households are systematically different in any way. Figure 4 below illustrates the types of work carried out in these households and although placed in a different order, the top five types of work completed are the same as those listed for the sample as a whole.

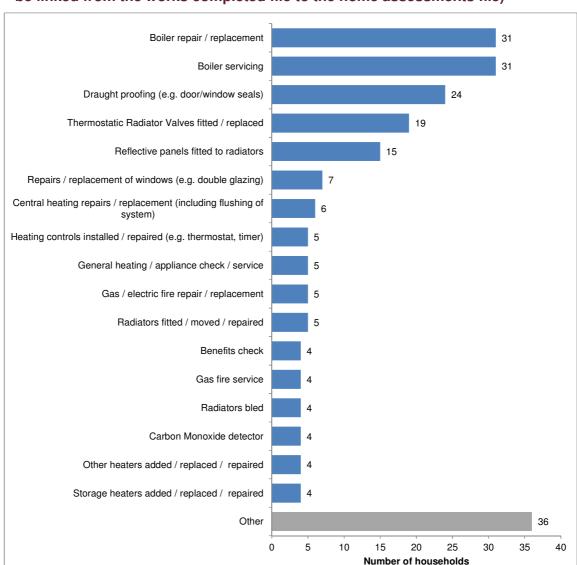


Figure 4: Types of work carried out in people's homes (based on cases able to be linked from the works completed file to the home assessments file)

Base: 164, works completed file (1 case in the works completed file did not have a description of work which was carried out, types of work receiving a response below 4 have been collated into 'other')

The online survey also focused on the work undertaken in people's homes. HIAs were asked to identify the five most common interventions made. Results are somewhat different to those presented in Figure 4 above. 'Draught-proofing' was only the fourth most common intervention listed in HIAs top five, with over three fifths instead placing 'boiler servicing', 'central heating repairs/replacement' and 'boiler repair/replacement' among their top five interventions.

The three HIAs giving 'other' as a response stated the following when asked what other common interventions they made:

"Gutter clearance to prevent water freezing on pathways."

"Repairs/ replacement of doors. We were doing a lot of the low-level work under a different scheme which is why we didn't use the funding for reflective foil, draught proofing measures etc.; otherwise this would easily have been the most common intervention."

"Bleeding radiators."

The discrepancies in the results could be explained by the way the information has been asked or recorded. The survey only asked for the top five interventions undertaken whereas HIAs were asked to note all forms of work carried out in the works completed file.

Table 18: Which were the 5 most common interventions made in people's homes?

	Count	Per cent
Boiler servicing	32	65
Central heating repairs / replacement	32	65
Boiler repair / replacement	30	61
Draught-proofing doors and / or windows	28	57
Thermostatic Radiator Valves fitted / replaced	26	53
Radiators fitted / moved	18	37
Reflective panels fitted to radiators	14	29
Repairs / replacement of windows (e.g. double glazing)	13	27
Emergency measures, including portable heating etc.	13	27
Gas / electric fire repair / replacement	11	22
Loft insulation top-up / installation	6	12
Other minor adaptations to homes (e.g. grab rails fitted)	4	8
Cavity Wall top-up / installation	3	6
Other	3	6
Jacket / insulation fitted to hot water tank	2	4
Chimney balloon fitted	2	4
Loft clearance and new hatch access / widening	1	2
Base	49	

### Characteristics of Beneficiaries

The initial assessments file contains information on the characteristics of 3400 households assessed. As stated previously we have been able to link 165 out of the 1021 households in the works completed file back to this data set. The majority of these households able to be matched (82 per cent) were one or two person households. In total, in these households there were 294 people, 20 children under 16 years, 91 adults between 16 and 60, and 183 adults aged above 60.

Table 19: Household size

	Number of households	Number with a child under 16	Number with a person over 60
1 person household	84	0	75
2 person household	50	1	45
3 person household	18	4	11
4 person household	5	3	3
5 person household	6	3	6
6 person household	1	0	0
Total	164	11	140

Base: 164 (1 household did not have any data for persons in household)

The majority of people lived in semi-detached, older houses.

**Table 20: Property type** 

	Count	Per cent
Bungalow	18	11
Flat	13	8
House	129	78
Mobile Home	3	2
Other	1	1
Total	164	100

Base: 164 (1 household did not have any data for property type)

Table 21: Property type (2)

	Count	Per cent
Detached	24	15
End-Terrace	17	11
Mid-Terrace	44	28
Semi-Detached	74	46
Total	159	100

Base: 159 (6 households did not have any data for property type)

**Table 22: Age of property** 

	Count	Per cent
Pre 1900	33	20
Pre 1930	41	25
Pre 1970	64	39
Post 1970	26	16
Total	164	100

Base: 164 (1 household did not have any data for property age)

# Cost per activity

Table 23 indicates the average cost of the different types of work carried out as provided by FILT.

Table 23: Average cost of work carried out

	Estimated average
Boiler replacement	1200
Gas fire replacement	380
Radiator installation	300
Loft insulation	200
Radiator replacement	150
Boiler repair	100
Boiler service	70
Gas fire service	70
Gas fire repair	70
Window repairs	50
Install TRVs	45
Temporary heating (e.g. portable heater)	40
Radiator repair	30
Radiator bleeding	30
Draught-proof door	30
Draught-proof window	30
Warm pack	20

#### 6.4. **Outcomes and impacts**

This section assesses outcomes and impact of the FILT WHS. Information provided by HIAs in the works completed file and through the online survey is considered, then an assessment of the qualitative data generated from the telephone and faceto-face interviews with clients is presented.

When recording the work that had been carried out. HIAs were also requested to state the outcome(s) achieved as a result of this work. As detailed at the start of the chapter there were clear disparities in the way data was recorded by HIAs and notable variations in the level of detail offered. It is also important to stress that this data is based on the HIAs perception of what the work achieved. This is also applicable to the responses from the online survey discussed in this chapter. Nevertheless the data provides some insight into the effect interventions have had on beneficiaries/households

This data on perceived outcomes recorded in the works completed file is summarised below in Figure 5.

The chief outcome reported was a 'warmer home' with HIAs reporting this as an outcome for over 400 households. The two next most common perceived outcomes were 'improved energy efficiency' (179 households) and 'reduced energy cost/improved financial position' (134 households). For almost 100 households a 'safer home' was also reported as an outcome, while for 67 'improved health/reduced risk of ill health' was reported and for 44 'improved general well-being' was documented as an outcome.

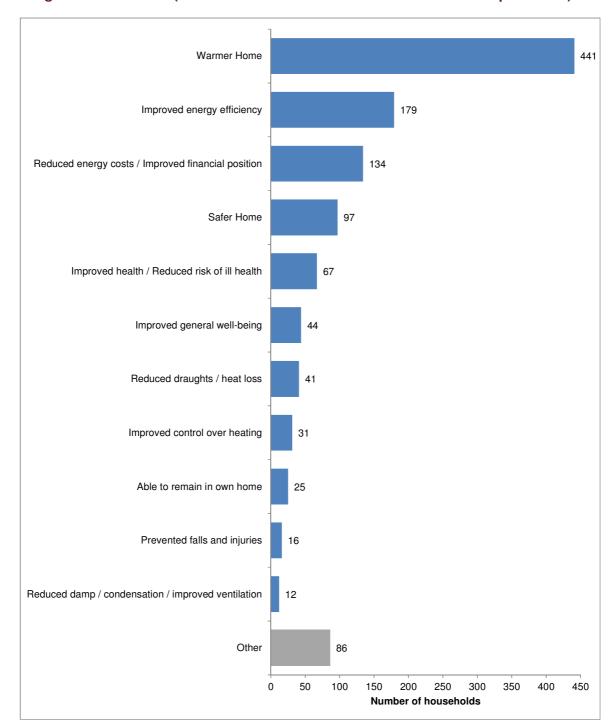
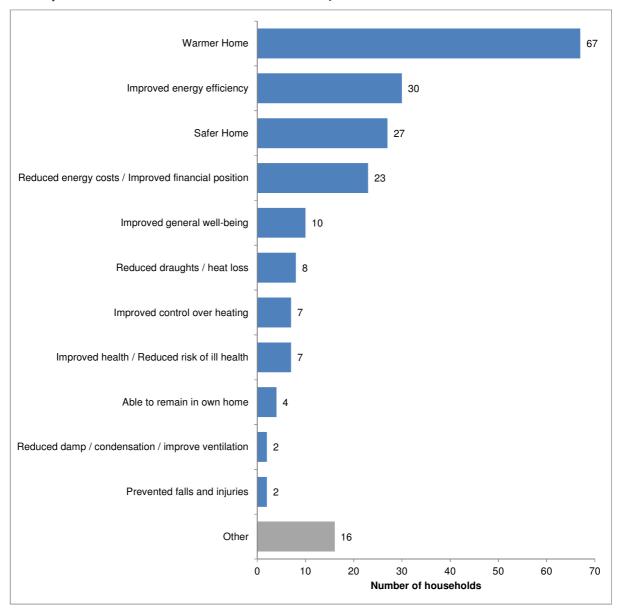


Figure 5: Outcomes (based on all cases recorded in the works completed file)

Base: 728, works completed file (293 cases in the works completed file did not have a description of any outcomes achieved. It is unclear whether this is due to there not being any perceived outcomes or if HIAs had not had chance to fill in the form)

Figure 6 below shows the outcomes reported by the households able to be linked from the works completed file to the initial home assessments file. Figure 6 shows that the top two outcomes recorded for this subset of households are the same two reported by the sample as a whole.





Base: 134, works completed file (31 cases in the works completed file did not have a description of any outcomes achieved. It is unclear whether this is due to there not being any perceived outcomes or if HIAs had just not managed to fill in the form)

The online survey also addressed outcomes of the FILT WHS. HIAs were asked to identify the three main benefits of interventions and referrals they thought their clients had benefitted from. Almost half of the 49 HIAs surveyed gave the 'prevention of Excess Winter Deaths' as a top three benefit, while 41 per cent of HIAs placed 'feeling warmer' in their top three.

Table 24: What do you think were the 3 main benefits of interventions and referrals for your clients?

	Count	Per cent
Prevented Excess Winter Deaths (e.g. through fewer deaths from flu, respiratory and circulatory diseases)	24	49
Feeling warmer	20	41
Improved general well-being	18	37
Reduced fuel poverty	17	35
Prevented / reduced exacerbation of conditions such as arthritis and rheumatisms	16	33
Reduced hospital admissions	16	33
Improved general health	11	22
Prevented falls and injuries in the over 65s	10	20
Feeling safer	6	12
Prevented / reduced incidence of minor illness (e.g. common cold)	5	10
Prevented / reduced mental health problems (e.g. by alleviating financial stress)	3	6
Reduced emergency readmissions	1	2
Base	49	

Respondents to the online survey were also asked which three interventions they thought to have the greatest impact on a client's health.

'Boiler repair/replacement' was seen by almost three fifths of HIAs as one of the top three interventions in terms of having an impact on a client's health. This was closely followed by 'central heating repairs/replacement' (52 per cent), while over one third saw 'draught-proofing' (38 per cent) and 'boiler servicing' (35 per cent) as in the top three interventions having an impact on health.

Table 25: From this list of interventions which 3 do you think have the greatest impact on a client's health?

	Count	Per cent
Boiler repair / replacement	28	58
Central heating repairs / replacement	25	52
Draught-proofing (doors and/or windows)	18	38
Boiler servicing	17	35
Thermostatic Radiator Valves fitted / replaced	11	23
Emergency measures, including portable heating etc.	11	23
Repairs / replacement of windows (e.g. double glazing)	9	19
Other minor adaptations to homes (e.g. grab rails fitted)	7	15
Radiators fitted / moved	6	13
Gas / electric fire repair / replacement	5	10
Reflective panels fitted to radiators	4	8
Loft insulation top-up / installation	2	4
Cavity Wall top-up / installation	1	2
Loft clearance and new hatch access/widening	-	-
Jacket / insulation fitted to hot water tank	-	-
Chimney balloon fitted	-	-
Other	-	-
Base	48	

Similarly, those surveyed were asked which three referrals they thought to have the greatest impact on a client's health. The vast majority (83 per cent) of HIAs placed a 'referral to the Small Repairs/Handyman Service' in their top three referrals while over two fifths placed 'another in-house referral' in their top three.

This appears to correspond with the interventions perceived by HIAs as having the greatest impact on health. Certainly many of the interventions identified above in Table 25 above are likely to have been undertaken by the Small Repairs/Handyman Service or by another in-house team.

Table 26: From this list of referrals which 3 do you think have the greatest impact on a client's health?

	Count	Per cent
Referral to Small Repairs / Handyman Service	39	83
Other in-house referral (e.g. to energy team, caseworker)	21	45
Referral to local health providers (e.g. occupational therapist)	17	36
Referral to local authority's Warm Homes Healthy People	10	21
Referral to Affordable Warmth Scheme	9	19
Referral to Local CAB and other benefits / debt advice	8	17
Referral to energy saving advice organisation (e.g. Energy Saving Trust,		
Green Doctor)	8	17
Referral to Local Authority	7	15
Referral to Warm Front Scheme	6	13
Referral to Age UK	5	11
Other	3	6
Referral to Energy Provider (e.g. British Gas, EDF, Shine)	2	4
Referral to Green Deal Scheme	2	4
Referral to Warm Zone	2	4
Referral to Local GP	1	2
Referral to mental health service	1	2
Referral to U-Switch	-	-
Base	47	

#### Qualitative data

We have attempted to assess the benefits of interventions to clients who participated in the telephone and face-to-face interviews. These have been summarised in the following two tables (Tables 27 and 28). Whilst many clients report benefits it has been more difficult to decipher any benefits which may have had a cost saving. A number of interventions had taken place relatively recently to the time of the interviews, or respondents had not experienced a period of cold weather since the intervention was installed, making it more difficult to determine whether the intervention has had any impact. In cases when other interventions not funded by the FILT WHS have taken place it has been problematic to untangle the impact of the hardship funded interventions alone. In addition clients who previously had no heating but have had systems repaired or installed have expressed concern about costs associated with now using fuel to heat their homes.

These issues, detailed further in the subsequent tables, have meant it has not been possible to identify any financial savings resulting from interventions and therefore stipulate any costs. Most of the cases listed do not provide specific enough evidence from which to indicate a financial saving. Of the few cases where more detail is available, a number of substantial assumptions would still have to be made in order to generate any figures. For example, one client says they have haven't had to visit the doctor or the hospital recently as the intervention has resolved her general health problems, however we do not know how often she was visiting the doctor previously so determining a cost saving would ultimately be based on speculation.

Nevertheless the qualitative data fully detailed earlier in the report does provide an understanding of how interventions have affected people's lives, and while we have been unable to assign costs to this data, results suggest, in some cases, interventions have clearly had a substantial positive effect.

Table 27: Benefits highlighted by those participating in telephone interviews

ID	Who lives in the home	Work done/Money awarded	Who paid for the work	Likelihood work completed in absence of FILT	Benefits linked to intervention: Health and Wellbeing	Benefits linked to intervention: Economic/Saving	Benefits linked to intervention: Social
					Daughter feels her mother has		
					benefited as she feels the cold more and her arthritis is		
					affected by it. However hard to		
		Yorkshire			decipher any real change;		
		Housing			mother has other health	Not sure whether fuel	
		contractors			problems Parkinson's disease;	bills will decrease but	
		(Bumford)	Client didn't		minor heart problem and	new radiators are more	
		fitted two	have to		daughter refers to the	efficient so would expect	
	Elderly mother	double	contribute		intervention as not being able	the bills to be a little bit	
Α	and daughter	radiators	anything	Unsure	to change them.	less	Not stated
					Client refers to not being able		
			265 pounds of		to live in the house as they		
			FILT funds		wouldn't be able to get bathed.		
			contributed		Also states that husband has		
			towards the cost		inflammation on the spine		
	Five members		of the boiler – client didn't have		which is worse when it's cold		
	of household		to pay anything		so the intervention probably helped him. Hard to determine	Thinks the boiler must	
	(client,		because funding		a real link though as client also	have reduced fuel bills	
	husband, and	They (HIA)	was also	Unlikely - no	refers to it not really being an	because it is more	
	three grown up	fitted a new	secured through	chance of funding	issue as they aren't in their	efficient – struggles to	
В	children)	boiler	the NHS	otherwise	eighties and are not really frail.	make sense of bills	Not stated
	,				Client describes the door		
					sealing as making a 'heck of a		
					difference' but says it is too		
		Reflective			soon to tell regarding the	Too soon to tell. Hopes	
		panels fitted to			reflective panels. Client's wife	that fuel bills will be less;	
	True me content	radiators,			has had a lung operation, she	previously high because	
	Two members	Internal door	The work was all		feels more comfortable but it is	they kept the heating on all the time and turned it	
	of household (husband &	seals fitted, radiators bled,	paid for in full		a bit too soon to tell if the intervention has had any health	up when their grandchild	
С	wife)	Boiler serviced	through the HIA	Unsure	impacts.	visited.	Not stated

ID	Who lives in the home	Work done/Money awarded	Who paid for the work	Likelihood work completed in absence of FILT	Benefits linked to intervention: Health and Wellbeing	Benefits linked to intervention: Economic/Saving	Benefits linked to intervention: Social
E	Female lives alone	Subcontractors serviced the boiler and gas fires, fitted TVRs (it appears she didn't ask for this work – additional benefit)	Client didn't have to make a contribution	Unsure	Client thinks she must have benefited as her rheumatoid arthritis gets worse in cold weather and she feels stiffer. Say she feels more confident now.	She is hoping next gas bill will be less. Hopes she is using a lot less gas as a result of the TRVs	Not stated
F	Male lives alone	Subcontractors serviced the boiler and replaced the hot water cylinder. They replaced a vent pipe and a valve	Client didn't have to make a contribution	Unlikely - Would not have been able to afford the work otherwise	None stated - refers to having his fitness but for others the situation could have been lifethreatening.	Not sure what impact it has had on household costs yet – recently had work done	Client refers to not welcoming people into his home before the work was done as he was ashamed at not having the money to fix the problem.
G	Client lives alone (elderly lady)	A contractor installed a gas fire	FILT contributed four hundred pounds towards the cost of the work - the client contributed one hundred pounds	Unsure	Client states they no longer suffer from 'chest colds' and that the warmth is soothing to the pain of arthritis. They also state that they haven't had to visit the doctor or the hospital for any of their problems as the intervention has resolved her general; health problems (diabetes, eye problems).	Gas bills should be less because by putting on the gas fire the whole central heating won't have to be put on to heat the rest of the house that's not in use, 'keep the heating in one roomand it's an efficient fire I can turn it low and still get heat coming out'	Refers to now being able to sit and watch television a bit later which is 'a bit of company' as she lives on her own. Friends and family are now able to visit for longer as they are more comfortable.

ID	Who lives in the home	Work done/Money awarded	Who paid for the work	Likelihood work completed in absence of FILT	Benefits linked to intervention: Health and Wellbeing	Benefits linked to intervention: Economic/Saving	Benefits linked to intervention: Social
יוו	the nome	awaiueu	lile Work	absence of file	Damp problem in property still	LCOHOIIIIC/Saving	intervention. Social
					not fully resolved. Not sure	The heater should be	
					about impact on health. Client	more efficient but it's	
					does not appear to think there	difficult to assess	
					has been much change	whether household	
		They (HIA)			'because I'm a bit bronchi	costs have decreased	
		fitted a new	Didn't have to		anyway' (although the client	as client has two other	
		night storage	contribute		hasn't made a connection, this	heaters in her flat and	
	Female lives	heater in	anything – work		may be due to living in a damp	electricity bills remain	
Н	alone	bedroom	paid for in full	Unsure	flat for such a long time)	high	Not stated
					Having the radiators on at a		
					constant temperature has		
					eased the child's asthma: and		
					he has not missed as many		
		A contractor			school days as he has in the		
	E manufacture of	installed a gas	The interviewe		past. Interviewee's wife will	Can billa bayra inarrangal	
	5 members of	fire, redid	The interviewee		never use less health and or	Gas bills have increased	
	household	piping for gas	knew how it was funded. The cost		social services due to the nature of her condition – the	as a result of having the radiators on all the time	
	(interviewee's wife who has	fire, and fitted Thermostatic	of all the work		intervention has had no	at a constant	
	MS and three	Radiator	was covered in		bearing on her condition, only	temperature – made	
1	children)	Valves	full	Unsure	her level of comfort	worse by a bad winter	Not stated
-	Criliareri)	vaives	Client didn't	Olisule	Ther level of conflict	worse by a bad winter	างอเ รเลเซน
			know how the			Fuel bills might have	
			work was		The client didn't recognise a	increased but this is	
		Small radiator	funded. No		link between intervention and	insignificant because of	
	Couple -	fitted by a	contribution. It		impact on health but	the difference it has	
	Husband and	contractor in	was paid for in		repeatedly referred to feeling	made – bills haven't	
J	wife	bathroom	full by FILT	Unsure	'happier'.	been considered	Not stated

Table 28: Benefits highlighted by those participating in face-to-face interviews

ID	Who lives in the home	Work done/Money awarded	Who paid for the work	Likelihood work completed in absence of FILT	Benefits linked to intervention: Health and Wellbeing	Benefits linked to intervention: Economic/Saving	Benefits linked to intervention: Social
АВ	Retired couple in late 70s/early80s	Immersion heater taken out, a new boiler in the kitchen, new electricity meter and radiators upstairs	Yorkshire Housing covered the cost along with a contribution of £500 from the clients.	Unlikely - looks like they would have struggled to get the money together	Client refers to not walking around shivering anymore.	None stated	Family could not stay as there was previously no heating upstairs and relatives found it too cold. Client also refers to not having to sleep on the settee anymore.
CD	Couple aged 40-50. English very limited. Interview interpreter their adult daughter. They have one 15 year old son living at home	New central heating system installed (never had central heating before). Client interview conflicts with the notes provided by Care and Repair. Client says they didn't know about C&R but notes say they are an existing client and it was a repair to the boiler which took place.	Work paid for in full by Care and Repair.	Unlikely - struggled to fund the work themselves or find funding elsewhere	Too soon to tell. Not used heating much yet. Will be able to tell in Winter.	Had electric heaters previously but yet to determine if central heating system is cheaper to run as not used in Winter yet.	None stated
	Man 82,	They had a new water heater		Unlikely - looks like they would have struggled to	Client refers to now being able to have baths and wash her hair without using the kettle all the time. Was previously taking a kettle filled with boiling water up and down the stairs		Client refers to her son's girlfriend visiting next week and being
EF	woman 73 and son 48	installed and valves on the radiators.	Care and Repair grant.	get the money together	which risked her suffering an injury.	None stated	able to have baths and showers.

ID	Who lives in the home	Work done/Money awarded	Who paid for the work	Likelihood work completed in absence of FILT	Benefits linked to intervention: Health and Wellbeing	Benefits linked to intervention: Economic/Saving	Benefits linked to intervention: Social
GH	81 year old man on his own.	Central heating system.	Client refers to the 'good neighbourhood' organisation paying for the work. He made a £100 contribution.	Unsure	Client says after working outside he is hardened to the cold so installation appears to have had little impact.	None - Doesn't check bills, just makes sure he is in front with them.	None stated
IJ	80 year old woman, lives alone.	New UPVC window fitted in dining room,	Paid by HIA in full, although client confused by which agencies she came into contact with.	Unsure	Client refers to heating coming on stronger but this could also be attributable to the radiators being cleaned recently (not FILT funding). Client requested window with lower level opening and feels safer now if a fire were to occur.	Too soon to tell as not used through colder months yet.	None stated
KL	77yrs, lives alone (husband passed away 5 weeks ago - had Alzheimer's)	Many problems resolved through 'Sheffield Stay Put' but interview focused largely on repairing of the under floor heating in the bathroom and kitchen (just this intervention had FILT funding).	FILT funds.	Unsure	Client states she doesn't feel as ill, cold or lethargic and has noticed a difference in her COPD. Husband was able to eat at the table again after the heating was repaired. Prior to this he was not eating properly and losing weight.	None -paying more now as using the repaired heating.	Client states an improvement in well-being due to being able to have a meal in the kitchen again rather than in bed and her husband being able to have a shower.
MN	36 years old and a single mother of two young children	HIA fitted draught excluders to all the windows and attempted to repair the patio doors, but were unsuccessful. Since then have returned to replace	HIA paid for draught excluders in full. Client contributed £90 to cost of boiler.	Unsure	House feels warmer, particularly due to the new boiler. Client feels coughs and cold now less prevalent however household rarely visited the GP before the work was done.	Feels the boiler is more economical and expects fuel bills to be lower but too soon to tell as draught excluders were fitted 6 months before interview and	Works as a child- minder and was having to wrap children up in extra layers but does not need to do this now.

ID	Who lives in the home	Work done/Money awarded	Who paid for the work	Likelihood work completed in absence of FILT	Benefits linked to intervention: Health and Wellbeing	Benefits linked to intervention: Economic/Saving	Benefits linked to intervention: Social
	the nome	the old boiler with a combi boiler	tile work	absence of FILT	wenbenig	boiler only one month before. Not used through cold months yet.	intervention. Social
OP	Male 72 years, lives with wife	Old ineffective storage heaters removed and a new central heating system installed along with an additional radiator in the downstairs WC and one in another room.	Client has a basic idea of how work was funded (FILT funds). He contributed £874 towards the work because he had to arrange for a gas supply to be put into the house  She thinks the	Unlikely - would not have been able to fund the work without assistance	Feels less stressed/anxious, does not have to 'shiver in his coat', however routinely sees GP for his health issues and the intervention has not affected this.	Unsure - changes in fuel bills will only be clear in the coming colder months	Feel less anxious about having grandchildren round now. Previously felt they were at risk of burns from the old gas fire.
QR	Single female	Reflective foil fitted behind all radiators.	work was free. Former carer at Age Concern now works for the HIA and had called in to see her and suggested someone come round to fit the panels.	Unlikely - has had other work done which she has paid for, namely new radiators but got foil due to suggestion from former carer so might not have thought to get this herself	None stated	None - Heating on a thermostat. Not noticed a reduction in energy usage or a difference in fuel bills.	None stated

ID	Who lives in the home	Work done/Money awarded	Who paid for the work	Likelihood work completed in absence of FILT	Benefits linked to intervention: Health and Wellbeing	Benefits linked to intervention: Economic/Saving	Benefits linked to intervention: Social
ID		Boiler repairs, replacement of window and doors	the work	absence of FILT	None - anticipates home being	Anticipates lower fuel costs due to a more efficient boiler,	Daughter and granddaughter visit occasionally, should now be more
ST	Male 67 years, lives alone	and a couple of additional radiators.	FILT funds.	Unsure	warmer over the colder months but he rarely visits GP anyway.	however too soon to tell.	comfortable when they visit.
		Reflective foil fitted behind several radiators. Also had a new boiler very	FILT funds used for the reflective panels, boiler paid for by Green Buy,	Unlikely - reflective panels suggested as result of a home's assessment so might not have thought to get this	Client states she thinks more heat is being reflected out although she doesn't spend much time in the room with the panels often but in another room with the new boiler which has made a lot of difference to	Pays for fuel on a card. Normally overpays and receives money back. Has recently received more money back than usual which could be due to the panels but could also be due to	
WX	Female, 93 years, lives alone	Gas fire reinstalled/refitted	Sheffield. Client not aware of how funded - son dealt with it. Appears to have had a number of interventions (funded through various sources) such as new UPVC double glazing windows.	herself	None - only uses gas fire in Winter as house generally warm. Health problems related to old age - intervention has had no bearing on how often she sees her GP.	Unsure - has not received a bill yet since the work was completed.	None stated  None stated

ID	Who lives in the home	Work done/Money awarded	Who paid for the work	Likelihood work completed in absence of FILT	Benefits linked to intervention: Health and Wellbeing	Benefits linked to intervention: Economic/Saving	Benefits linked to intervention: Social
Y	Female 79 years, lives alone	Replaced bath with a wet room, draught excluders and radiator foils	FILT funds. Other work completed at the time (white bathroom suite and tiles) which she contributed £300 to although this appears to be funded by another source	Unsure	Now able to shower with ease which has greatly affected her well-being. Felt she was beginning to smell. Now feels more independent.	Not noticed any difference in fuel bills	None stated
Z	Female 67 years, lives with husband	Fixed a leaking radiator and fitted radiator foils	FILT funds.	Unsure	Although still a separate problem with draughty doors they do feel warmer. Hard to tell if impacted on use of health services. Recently had an infection related to an on-going problem and regularly sees GP for health conditions.	Unsure as not received 'big' bill yet.	None stated
AZ	Elderly female, lives with son	Improvements to heating system	HIA paid in full	Unsure	None - hasn't noticed any improvement, still using heating in the Summer.	None stated	None stated

Key Messages and **Conclusions** 

#### 7.1. Introduction

This evaluation of the FILT WHS draws on a range of different data. These include the HIA monitoring data from the FILT WHS, an online survey of the FILT WHS HIAs, telephone interviews with HIA staff, and telephone and face-to-face interviews with the FILT WHS clients. This was analysed using standard statistical analysis, qualitative analysis and cost-effectiveness techniques. Detail of the findings from the various components of the evaluation is presented in preceding chapters and the appendices. The purpose of this section is to provide a summary of the key messages that emerge from integrating the different data and to provide some conclusions which reflect on the implications of the study findings.

#### 7.2. **Key Messages**

### Organisation of the FILT WHS

- Through the FILT WHS organisations were able to provide a unique service that combined a timely response with organisational structure and clear processes.
- The FILT WHS was delivered through a tripartite partnership with each partner providing an essential component of the service. This combination ensured speedy relief to a number of vulnerable people that other services had missed:
  - Foundations the national body for HIAs providing organisational rigour systems and structure
  - FILT providing a national charitable network and access to hardship funds
  - HIAs local service provision working through community knowledge, local partnerships and access
- The flexibility and "light touch" approach to the funding and administration allowed HIAs to work quickly with vulnerable households. There was evidence that the HIAs were able to plug gaps and intervene quickly, and provide a swift temporary solution as a bridge to bigger work e.g. providing temporary heating whilst waiting for a new heating system or boiler.
- The limitations in terms of grant size and timescales created challenges for HIAs. For example, it prevented HIAs being more strategic in their approach to identifying vulnerable households and some HIAs had to limit intervention to existing clients.

HIAs emerged from the evaluation as accessible and acceptable organisations for clients. The indication is they reached vulnerable households of which other agencies were not aware.

### Volume of work

- According to the data available the FILT WHS was able to conduct 3728 assessments and delivered measures in over 1000 of these homes. The reach of the scheme was impressive in terms of numbers of contacts and interventions particularly within the project timeframe.
- The volume of work was impressive in terms of the range of interventions. The impact of smaller interventions (draught-proofing, TRVs or reflective radiator panels) should not be underestimated. Data from across the evaluation indicated the small measures had a big impact on warmth and comfort.

# Capacity building

- The FILT WHS had a capacity building element for the HIAs in terms of:
  - staff training
  - assessment systems and skills
  - partnerships and referral options
  - referrals were made to a diverse range of agencies but in the main referrals were to in-house repairs and handy person schemes, health providers and advice agencies e.g. CAB and other debt advice.

# Delivery of the FILT WHS

- Examples were provided of HIAs plugging a gap in terms of people at risk who had been missed by statutory services, for example people discharged from hospital to a cold home (HIA reported).
- HIAs were mainly involved in providing assessment and interventions for people with cold related problems because they had no heating or faulty heating.
- HIAs responded swiftly and in a timely fashion. Most assessments were completed within two weeks and most minor interventions within four weeks. More substantial work (boiler replacement) took longer. Speed of response and lack of bureaucracy means the FILT WHS compares favourably to larger schemes such as Warm Front, Green Deal or ECO.

## Clients experience of the FILT WHS

- Many of the participants in the qualitative component heard about the HIA and the FILT WHS though chance rather than design. The source of knowledge was community based, that is through family, friends, local papers or local organisations such as community groups or a gardening service. A minority of those interviewed were notified about or referred to the FILT WHS by services e.g. environmental health, pension advice or social services. This highlights the importance of HIAs being local, community based organisations in terms of accessibility.
- Many interview clients had been enduring long term problems with heating their home. They had no idea where to access help and didn't have sufficient money to pay for the required solution. Without the FILT WHS it is difficult to know where they would have accessed help. It is highly unlikely that those interviewed

- would have had the knowledge, resources, health and resilience to endure a lengthy or bureaucratic process to access help such as Green Deal and ECO.
- Clients found the HIA a safe, trusted and sensitive source of help. People reported feeling they were treated with respect, and did not feel judged. This was important as some clients described feeling guilty about needing and asking for help.
- The HIAs provided a tailored approach for households in terms of what was installed and how they worked with them. In some cases the FILT WHS worker spent considerable time with the householder explaining how to work new equipment and making sure they could use it.

### Benefits of the FILT WHS

- Most clients expected to see a benefit in terms of energy bills. However, there was little evidence of this as for most the interventions were installed between January and March and clients had not experienced a full winter and in some cases work was completed after the coldest months
- Despite anticipating a lower bill it is likely that for the majority, benefits would be realised in terms of increased warmth and comfort, rather than reduced energy bills. This is because where heating was faulty and not used prior to the FILT WHS the bill would be low. After the FILT WHS when heating was used the bills would increase. Fuel price rises during 2012-13 may also mean that improvements in energy efficiency will not lead to reduced bills. Some of those interviewed were worried about the possibility of a larger bill.
- The economic analysis indicates that for every pound of the FILT WHS funding the HIAs were able to lever in at least an additional £2.10. This is an impressive financial benefit of the scheme but probably underestimates the additional benefit since it does not for example include additional benefits which may have been claimed after referral.
- The HIAs were able to put in place timely interventions into vulnerable people's homes. However it is difficult to demonstrate or quantify any cost saving accrued from health benefits or health episodes avoided (such as hospital admissions, falls, prevented accidents and exacerbations of underlying chronic conditions). However, the qualitative interviews provide clear narratives of where health benefits were realised and it is possible to see how negative health events would have been avoided. This is especially true where there was a history of falls, deteriorating or unstable respiratory or cardiovascular health, diabetes, hospital admissions or missed days at school.
- The client interviews provided examples of how, as a result of a warmer home and the FILT WHS interventions the householder had more control over their home environment. This had a reported impact on physical and mental wellbeing as well as ability to self-manage long term conditions. However, because this evaluation was not able to conduct before and after measurements or experiences it is not possible to quantify this impact.
- The majority of interview participants indicated how benefits were accrued from advice received through the FILT WHS and not just from affordable warmth or This advice included energy coaching following heating interventions. installation of measures which provided clients with confidence and knowledge of how to heat their homes adequately and safely.
- The evaluation provides examples of how the FILT WHS benefited the health and wellbeing of younger households as well as that of older vulnerable and frail households. Reported benefits for younger households and families included

- improved respiratory health for children with asthma, improved school attendance and reduction of stress and anxiety for adults and parents.
- The case studies illustrate how benefits (e.g. improved warmth and wellbeing) helped to promote social connections for householders who were previously socially isolated.
- The impact on mental wellbeing reflects findings from Christine Liddell's work on fuel poverty and mental health. Liddell identifies severe effects on mental wellbeing of living in fuel poverty due to a package of stressors including the effects of cold, low income and high energy costs and the associated stress, anxiety and stigma which have a cumulative impact on mental wellbeing. The impact of the FILT WHS on mental wellbeing and the benefits felt by clients may therefore also be cumulative.

#### The Future

- The evaluation raises questions regarding the sustainability of HIAs. They would appear to be "the only show in town" for some more vulnerable citizens. However, the ability of the HIAs to respond to this need is limited by financial constraints and a number of HIAs have recently been forced to close. The evidence presented in this report suggests that commissioners should look more closely at the benefits that the FILT and HIAs can deliver.
- HIAs are working in a complex environment and there is a strong indication that HIA interventions benefit health. The Abacus group from Sheffield Hallam University have developed a model to assist decision makers (see Figure 7 below) which HIAs may find useful in explaining how the health benefit from their work can be achieved when making a funding case especially to Health and Wellbeing Boards, Clinical Commissioning Groups and Adult Social Care Services.

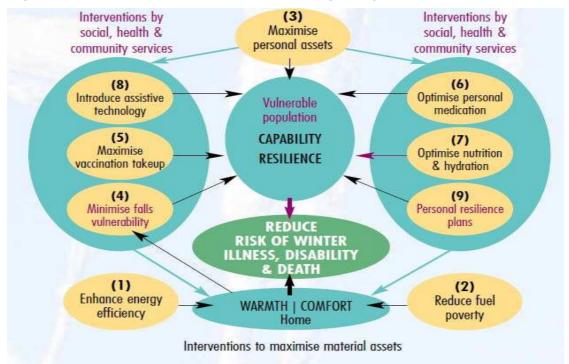


Figure 7: Excess winter deaths and illness: capability and resilience model

#### 7.3. **Conclusions**

This evaluation demonstrates that the FILT WHS provided a unique service to a large number of vulnerable people. Clients' vulnerability was extreme and complex in nature. The benefits experienced by clients were sizeable when compared to the average cost of the intervention (around £200) and the benefits and cost savings of such a scheme could potentially be realised across health, housing and social care. The case studies illustrate how the FILT WHS helped to maintain vulnerable clients in their homes thus helping to prevent the costs associated with residential care and possibly hospital admissions. This evaluation indicates how an initiative such as the FILT WHS could provide a key component of the delivery mechanism for the Cold Weather Plan nationally and locally. As excess winter deaths (EWDs) increase (it is estimated by the Office for National Statistics that 31,100 EWDs occurred in England and Wales in 2012/13 – a 29 per cent increase compared with the previous winter) it would be advisable for commissioners of health and social care services to consider the advantages and benefits that can be delivered by such a programme. The advantages could be realised in a range of outcome indicators across the current policy frameworks (i.e. NHS Outcomes Framework, Public Health Outcomes Framework and Adult Social Care Outcomes Framework). (See Appendix 4 for the relevant outcomes which the activity of HIAs could help deliver).

# References

ACE (2012). "National fuel poverty budgets." http://www.ukace.org/wpcontent/uploads/2012/11/ACE-Briefing-2012-05-National-fuel-poverty-budgets.pdf Accessed November 2013.

Alderson, M. (1985) Season and Mortality. *Health Trends*, 17, pp. 87-96.

Allmark, P. and Tod, A. (2006) How should public health professionals engage with lay epidemiology? Journal of Medical Ethics, 32 (8), pp. 460-3.

Barnes, M., Butt, S. and Tomaszewski, W. (2008) The Dynamics of Bad Housing: The Impact of Bad Housing on the Living Standards of Children. London: National Centre for Social Research.

Boardman, B. (2010) Fixing fuel poverty: challenges and solutions. London: Earthscan.

British Medical Association (2003) Housing and health: building for the future BMA. London.

Curwen, M. and Debis, T. (1988) Winter Mortality, Temperature and Influenza: Has the Relationship Changed in Recent Years? Population Trends OPCS, Vol. 54.

Cowley, S. and Grocott, P. (2007) Research design for the development and evaluation of complex methodologies: an empirical example and critical discussion. Evaluation, 13 (3), pp. 285-305.

Defra (2004) Fuel poverty in England: the governments action plan Defra. London: Defra.

Defra (1999) Home Energy Conservation Act 1995: Report to Parliament by the Secretary of State for the Environment, Transport and the Regions Defra. London: Defra.

Department of Energy and Climate Change (2012) Final Stage Impact Assessment for the Green Deal and Energy Company Obligation. London: DECC.

Department of Energy and Climate Change (2013) Sub-regional fuel poverty data: indicator low income high costs https://www.gov.uk/government/publications/2011-sub-regional-fuel-poverty-datalow-income-high-costs-indicator Accessed October 2013.

Department of Energy and Climate Change (2013) Fuel Poverty: a framework for action. On: https://www.gov.uk/government/publications/fuel-poverty-afurture framework-for-future-action Accessed October 2013.

Department of Energy and Climate Change (2013) Statistical Release: Fuel Poverty, England and the UK 2011, 16 May 2013.

Department of Health (2007) Keep warm. Keep well. Available http://www.dh.gov.uk/en/Policyandguidance/Healthandsocialcaretopics/DH 4076849 Accessed August 2008

Department of Health (2006) Our Health, Our Care, Our Say. London: Department of Health.

(2004)Department Health Choosing Health Available of on: http://www.dh.gov.uk/en/Publichealth/Choosinghealth/DH 066342 Accessed August 2008.

Department of Health (2011) Cold Weather Plan for England: protecting health and reducing harm from severe cold. London: Department of Health.

Farrell, C., McAvoy, H. and Wilde, J. (2008) Tackling Health Inequalities: An All-Ireland Approach to Social Determinants. Dublin: Combat Poverty Agency.

Gilbertson, J., Stevens, M., Stiell, B. and Thorogood, N. (For the Warm Front Study Group) (2006) Home is where the hearth is. Grant recipients views of the Warm Front Scheme. Social Science and Medicine, 63, pp. 946-956.

Gilbertson, J. Grimsley, M. and Green, G. for the Warm Front Study Group (2012). Psychosocial routes from housing investment to health. Evidence from England's home energy efficiency scheme. Energy Policy, 49, pp. 122-133.

Healthy Ambitions (date unknown) Asthma - Better for Less NHS Yorkshire and Humber Available http://www.healthyambitions.co.uk/Uploads/BetterForLess/25%20BETTER%20FOR %20LESS%20Asthma.pdf Accessed July 2012

Hills (2011) Fuel poverty: The problem and its measurement. Interim Report for the Fuel Povery Review. London: DECC.

Hills, J. (2012) Getting the measure of fuel poverty. Final Report of the Fuel Poverty Review. London: DECC.

Howden-Chapman, P. (2004) Housing standards: a glossary of housing and health. Journal of Epidemiology of Community Health, 58, pp. 162-168.

Joseph Rowntree Foundation (2001) The Impact of Housing Conditions on Excess Winter Deaths. Available http://www.jrf.org.uk/Knowledge/findings/housing/n11.asp Accessed 1st December 2006

Keating, W.R. and Donaldson, G.G. (2000) Cold Weather, Cold Homes, Winter Mortality In Rudge J, Nicol F (ed) Cutting the Cost of Cold. London: Spon Press Taylor & Francis Group.

Kreiger, J. (2010) Home is Where the Triggers Are: Increasing Asthma Control by Improving the Home Environment. Paediatric Allergy Immunology Pulmonology, 23 (2), pp. 139–145.

Kwak, K. (2003) Adolescents and their parents: a review of intergenerational family relations for immigrant and non-immigrant families. Human Development, 46, pp. 115-136.

Lawlor, D.A., Maxwell, R. and Wheeler, B.W. (2002) Rurality, deprivation, and excess winter mortality. Journal of Epidemiology and Community Health, 56, pp. 373–374.

Liddell, C. and Morris, C. (2010) Fuel poverty and human health: A review of recent evidence. Energy Policy, 38, pp. 2987-2997.

Liddell, C and Gurney C (unpublished paper) Improvements in household heating and their association with adult mental health and well being

Masoli, M., Fabian, D., Holt, S. and Beasley, R for Global Initiative for Asthma (2004) Global Burden of Asthma Available at http://www.ginasthma.org/pdf/GINABurdenReport.pdf Accessed July 2012

Marmot Review Team (2011) The health impacts of cold homes and fuel poverty. London: Friends of the Earth.

National Childrens Bureau (2012) Fuel Poverty and Child health and Wellbeing. Available on: http://www.ncb.org.uk/media/757610/ebr fuel poverty briefing 20june.pdf Accessed March 2013

National Social Marketing Centre (2006) What is social marketing? Available on: http://www.nsms.org.uk/public/default.aspx Accessed August 2008

Nibhanipudi, K., Hassen, G.W. and Smith, A. (2009) Beneficial effects of warmed humidified oxygen combined with nebulized Albuterol and Ipratropium in paediatric patients with acute exacerbation of asthma in winter months. The Journal of Emergency Medicine, 37 (4), pp. 446-450.

Press, V. (2003) Fuel Poverty and Health: a guide for primary care organisations, and public health and primary care professionals. London: National Heart Forum.

Public Health England (2013) The Cold Weather Plan for England 2013 On: https://www.gov.uk/government/publications/cold-weather-plan-for-england-2013 Accessed November 2013

Ritchie, J. and. Lewis, J. (2003) Qualitative research practice. London: Sage.

Rotherham Affordable Warmth and Energy Steering Group (2007) A multi-agency strategy for Rotherham 2007-2010. Rotherham: Rotherham PCT.

Rosenow, J. and Evre, N. (2012) The Green Deal and Energy Company Obligation will it work? Paper presented at the 9th BIEE Academic Conference - European Energy in a Challenging World: The impact of emerging markets. St John's College, Oxford. 19/20 September 2012

Razzouk, H., Blaive, B., Massot, O., Charpin, D. and Vervloet, D. (1998) Climatic factors and climatic therapy in asthma. Revue Française d'Allergologie et d'Immunologie Clinique 38, S272-280.

Somerville, M., MacKenzie, I., Owen, P. and Miles, D. (2000) Housing and health: does installing heating in their homes improve the health of children with asthma? *Public Health*, 114, pp. 434-439.

Stockton, H. and Campbell, R. (2011) Time to reconsider UK energy prices and policy. Joseph Rowntree Foundation. London. http://www.jrf.org.uk/sites/files/jrf/fuel-poverty-policy-summary.pdf. Accessed December 2011

Thomson, H., Thomas, S., Sellstrom, E. and Petticrew, M. (2009) The health impacts of housing improvement: a systematic review of intervention studies from 1887 to 2007. American Journal of Public Health, 99 Suppl 3, S681-692.

Thomson, H., Thomas, S., Sellstrom, E. and Petticrew, M. (2013) Housing improvements for health and associated socioeconomic outcomes (Review) The Cochrane Collaboration and published in *The Cochrane Library*, Issue 3.

Tod, A.M., Lusambili, A., Homer. Abbott, J., Cooke, J.M., Stocks, A.J. and McDaid, K.A. (2012) Understanding factors influencing vulnerable older people keeping warm and well in winter: a qualitative study using social marketing. BMJ Open 2012;2:e000922 doi:10.1136/bmjopen-2012-000922.

Wells, S., Graham, K., Speechley, M. and Koval, J.J., (2005) Drinking patterns, drinking contexts and alcohol-related aggression among late adolescent and young adult drinkers. Addiction, 100, pp. 933-944.

YHPHO (2012a) Asthma Primary Care Trust Summary: NHS Doncaster Available from <a href="http://www.yhpho.org.uk/default.aspx?RID=136388">http://www.yhpho.org.uk/default.aspx?RID=136388</a> Accessed July 2012.

YHPHO (2012b) Asthma Primary Care Trust Summary: NHS Rotherham Available from <a href="http://www.yhpho.org.uk/default.aspx?RID=136388">http://www.yhpho.org.uk/default.aspx?RID=136388</a> Accessed July 2012.

YHPHO (2012c) Asthma Primary Care Trust Summary: Regional Summary Available from <a href="http://www.yhpho.org.uk/default.aspx?RID=136388">http://www.yhpho.org.uk/default.aspx?RID=136388</a> Accessed July 2012.

# Appendix 1: Online Survey



# **FILT Warm Homes Survey**

The Foundations Independent Living Trust Ltd (FILT) is interested in feedback from HIAs regarding the recent Warm Homes initiative and would be grateful if you would take the time to fill in this short survey.

## Many thanks in advance

Deadline for submission of responses: Monday 17 June 2013

## **Warm Homes Service**

How APF	did people find out about the HIA Warm Homes service? SELECT ALL THAT PLY
	Via contact from you / already existing clients
	Via referral from local authority
	Via referral from voluntary and community sector organisation
	Via referral from GP
	Via referral from other healthcare professional
	Via recommendation from friend/neighbour
	Other
Othe	er (please state)

	Yes
	No
Plea	ase provide details:
Wh	y were people referred to your Warm Homes Service? SELECT ALL THAT
Wh <sub>!</sub>	y were people referred to your Warm Homes Service? SELECT ALL THAT A
	They were cold in their homes
	They were cold in their homes  They were suffering from an Illness / condition affected by cold
	They were cold in their homes  They were suffering from an Illness / condition affected by cold  They were struggling with fuel bills
	They were cold in their homes  They were suffering from an Illness / condition affected by cold  They were struggling with fuel bills  They had a broken down heating system / boiler
	They were cold in their homes  They were suffering from an Illness / condition affected by cold  They were struggling with fuel bills  They had a broken down heating system / boiler  Their home was in need of general repairs / maintenance

4.	proximately, what proportion of Warm Homes clients were new to your HIA? LECT ONE ONLY
	Less than 10%
	At least 10% but less than 20%
	At least 20% but less than 50%
	At least 50% but less than 75%
	At least 75% but less than 100%
	100%
	Don't know/not sure
5.	average how long did it take from initial contact to the Warm Homes Service, for ple to be visited and their homes to be assessed? SELECT ONE ONLY
	Less than one week
	At least one week but less than two weeks
	At least two weeks but less than one month
	At least one month but less than three months
	At least three months but less than six months
	Over six months
	Don't know/not sure
6.	average how long did it take from people's homes being assessed, for the work e completed? SELECT ONE ONLY
	Less than one week
	At least one week but less than two weeks
	At least two weeks but less than one month
	At least one month but less than three months
	At least three months but less than six months
	Over six months
	Don't know/not sure

	Draught proofing doors and / or windows		Thermostatic Radiator Valves fitted replaced
	Repairs / replacement of windows (e.g. double glazing)		Radiators fitted / moved
	Loft insulation top-up / installation		Central heating repairs / replacement
	Loft clearance and new hatch access / widening		Gas / electric fire repair / replacement
	Cavity Wall top-up / installation		Chimney balloon fitted
	Boiler servicing		Other minor adaptations to homes (e.g. grabrails fitted)
	Boiler repair / replacement		Emergency measures, including portable heating etc.
	Jacket / insulation fitted to hot water tank		Other
	Reflective panels fitted to radiators		
Oth	er (please state)		
Wh	ich were the 3 most common types of nes? SELECT THREE ONLY	advic	e and information given in peoples
Wh hor	ich were the 3 most common types of nes? SELECT THREE ONLY  Advice on switching energy provider	advic	e and information given in peoples'
Wh	ich were the 3 most common types of mes? SELECT THREE ONLY  Advice on switching energy provider  Advice on programming thermostat	advic	e and information given in peoples
Wh hor	ich were the 3 most common types of nes? SELECT THREE ONLY  Advice on switching energy provider	advic	e and information given in peoples'
Wh hor	ich were the 3 most common types of mes? SELECT THREE ONLY  Advice on switching energy provider  Advice on programming thermostat	advic	e and information given in peoples'
Wh hor	ich were the 3 most common types of nes? SELECT THREE ONLY  Advice on switching energy provider  Advice on programming thermostat  Advice on bleeding radiators	advic	e and information given in peoples'
Wh hor	ich were the 3 most common types of nes? SELECT THREE ONLY  Advice on switching energy provider  Advice on programming thermostat  Advice on bleeding radiators  Advice on benefits available	advic	e and information given in peoples
Wh	ich were the 3 most common types of nes? SELECT THREE ONLY  Advice on switching energy provider  Advice on programming thermostat  Advice on bleeding radiators  Advice on benefits available  Advice on energy saving options available	advic	e and information given in peoples

	ch were the 5 most common refessments? SELECT FIVE ONLY	errals	that you made at or following
	Referral to Small Repairs / Handyman Service		Referral to U-Switch
	Other in-house referral (e.g. to energy team, caseworker)		Referral to energy saving advice organisation (e.g. Energy Saving Trust, Green Doctor)
	Referral to Local Authority		Referral to Green Deal Scheme
	Referral to Local GP		Referral to Warm Front Scheme
	Referral to local health providers (e.g. occupational therapist)		Referral to Warm Zone
	Referral to mental health service		Referral to local authority's Warm Homes Healthy People
	Referral to Local CAB and other benefits / debt advice		Referral to Affordable Warmth Scheme
	Referral to Age UK		Other
	Referral to Energy Provider (e.g. British Gas, EDF, Shine)		
	m this list of interventions which 3 do	you t	think have the greatest impact on a
clie	nt's health? SELECT THREE ONLY  Draught proofing (doors and/or windows)		Thermostatic Radiator Valves fitted / replaced
	Repairs / replacement of windows (e.g. double glazing)		Radiators fitted / moved
	Loft insulation top-up / installation		Central heating repairs / replacement
	Loft clearance and new hatch access/widening		Gas / electric fire repair / replacement
	Cavity Wall top-up / installation		Chimney balloon fitted
	Boiler servicing		Other minor adaptations to homes (e.g. grabrails fitted)
	Boiler repair / replacement		Emergency measures, including portable heating etc.
	Jacket / insulation fitted to hot water tank		Other

	ш	Reflective panels fitted to radiators		
11.		m this list of referrals which 3 do you tl lth? SELECT THREE ONLY	hink h	ave the greatest impact on a client's
		Referral to Small Repairs / Handyman Service		Referral to U-Switch
		Other in-house referral (e.g. to energy team, caseworker)		Referral to energy saving advice organisation (e.g. Energy Saving Trust, Green Doctor)
		Referral to Local Authority		Referral to Green Deal Scheme
		Referral to Local GP		Referral to Warm Front Scheme
		Referral to local health providers (e.g. occupational therapist)		Referral to Warm Zone
		Referral to mental health service		Referral to local authority's Warm Homes Healthy People
		Referral to Local CAB and other benefits / debt advice		Referral to Affordable Warmth Scheme
		Referral to Age UK		Other
		Referral to Energy Provider (e.g. British Gas, EDF, Shine)		
12.		at do you think were the 3 main benef nts? SELECT THREE ONLY	its of	interventions and referrals for your
		Prevented Excess Winter Deaths (e.g. through fewer deaths from flu, respiratory and circulatory diseases)		Reduced emergency readmissions
		Prevented / reduced exacerbation of conditions such as arthritis and rheumatisms		Improved general health
		Prevented / reduced incidence of minor illness (e.g. common cold)		Improved general well-being
		Prevented / reduced mental health problems (e.g. by alleviating financial stress)		Reduced fuel poverty
		Prevented falls and injuries in the over 65s		Feeling warmer
		Reduced hospital admissions		Feeling safer

	anything about?
rega	re there any cases where you found yourself making decisions for clients arding what you viewed was needed as opposed to what they wanted? If so ase provide detail below?
Wha	Training at number of staff received training as part of the WHs project? (FTE)
	proximately, what proportion of your organisation's staff does this represent? LECT ONE ONLY
	proximately, what proportion of your organisation's staff does this represent?  Less than 10%
_ _	LECT ONE ONLY
_	Less than 10%
	Less than 10%  At least 10% but less than 20%
_ _	Less than 10%  At least 10% but less than 20%  At least 20% but less than 50%
	Less than 10%  At least 10% but less than 20%  At least 20% but less than 50%  At least 50% but less than 75%

WI	nat were the main benefits of training for your staff?
	Acquired new skills and knowledge
	Increased confidence and self-esteem
	Improved morale
	Increased motivation
	Improved prospects for the future
	Other
Oti	ner (please state)
WI	nat were the main benefits of training for your organisation?
	Increased productivity (e.g. ability to assess more homes)
	Improved staff retention
	More motivated workforce
	Improved partnership working with other organisations
	Other
Oti	ner (please state)
	erall how would you rate the training that your staff received? SELECT ONE
	Very good
	Fairly good
	Neither good nor poor
	Fairly poor
	Very poor
	Don't know/not sure

# **Partnerships**

_	or to the Warm Homes project did you have working relationships with any of th owing? SELECT ALL THAT APPLY			
	Local CAB and other benefits / debt advice			
	Local GP			
	Local health providers			
	Mental health service			
	Fuel poverty advice agencies			
	Voluntary sector			
	Other			
<b>~</b> !!				
As	a result of the Warm Homes project did you develop new working relations any of the following? SELECT ALL THAT APPLY			
As with	a result of the Warm Homes project did you develop new working relations n any of the following? SELECT ALL THAT APPLY			
As with	a result of the Warm Homes project did you develop new working relations any of the following? SELECT ALL THAT APPLY  Local CAB and other benefits / debt advice			
As with	a result of the Warm Homes project did you develop new working relations n any of the following? SELECT ALL THAT APPLY			
As with	a result of the Warm Homes project did you develop new working relations any of the following? SELECT ALL THAT APPLY  Local CAB and other benefits / debt advice  Local GP			
As with	a result of the Warm Homes project did you develop new working relations nany of the following? SELECT ALL THAT APPLY  Local CAB and other benefits / debt advice  Local GP  Local health providers			
As with	a result of the Warm Homes project did you develop new working relations nany of the following? SELECT ALL THAT APPLY  Local CAB and other benefits / debt advice  Local GP  Local health providers  Mental health service			
As with	a result of the Warm Homes project did you develop new working relations in any of the following? SELECT ALL THAT APPLY  Local CAB and other benefits / debt advice  Local GP  Local health providers  Mental health service  Fuel poverty advice agencies			

# **Lessons / Good Practice**

	Links and referrals with outside agencies and organisations
	Ability to provide a timely response
	Model of delivery
	Reporting and monitoring arrangements
	Other
Othe	er (please state)
	our opinion what was it about the Warm Homes project that did not work so
weii	? SELECT ALL THAT APPLY
weii	? SELECT ALL THAT APPLY  Size of grant too small
	Size of grant too small
	Size of grant too small  Help available was not appropriate/ adequate
	Size of grant too small  Help available was not appropriate/ adequate  Model of delivery

	Partnership relationships
	Size of grant
	Management issues
	Inadequate links to other funding
	Other
Oth	er (please state)
	Aspirations for the Future
	similar programme or similar funding became available in future, what would
you	similar programme or similar funding became available in future, what would do? (e.g. would you take part or would you do something differently?)
you	similar programme or similar funding became available in future, what would do? (e.g. would you take part or would you do something differently?)  ce the end of the funding are you managing to continue the service provided by
Sine	similar programme or similar funding became available in future, what would do? (e.g. would you take part or would you do something differently?)  ce the end of the funding are you managing to continue the service provided by m Homes project somehow?
Sinc Wai	similar programme or similar funding became available in future, what would do? (e.g. would you take part or would you do something differently?)  ce the end of the funding are you managing to continue the service provided by the Homes project somehow?  Yes

28.	Are you able to link your service to new fuel poverty and or carbon recfunding such as Green Deal, ECO etc.					
		Yes				
		No				

Thank you for your feedback. Please click the submit button below.

If you have any questions regarding this survey please contact Elizabeth Sanderson at CRESR (0114 225 3539).



# **Appendix 2: HIA Interview Summary**

The themes below have been used to present the findings here.

- Referrals in and out
- Interventions
- **Assessment**
- Plugging gaps: other funding accessed
- Lack of bureaucracy / more flexibility
- Preventing harm/illness
- Added value
- Problems.

Following a summary of key issues raised within themes, some case studies are provided that are examples of impact given by the HIA participants.

#### HIAs and referrals in

Number	HIA	Referrals	New referrals
1	Family Mosaic (FM) 3 linked projects:  • Handy person service • County-wide Adaptation and Support Service, • County-wide independent Living Service, advises on health and well-being).	Handy person service and Case Workers.	Approx. 30% new clients County Council WHHP County wide media
2	Aster Living Care and Repair	Area 1: working with the Council; volunteers from the local community door-knocked completed assessment questionnaires & referred to Aster C & R.      Area 2: partnership agreement with voluntary organisations e.g. local CAB; Age Concern; voluntary groups supporting the old, children and people with disabilities and those with longterm health conditions.      Plus: Agreement with hospital discharge workers, roadshows and talks.	The HIA was able to make new partnership arrangements with local groups that have remained after the scheme finished, as well as being able to promote its work to a larger group of people.
4	Cheshire East Borough Council manages the HIA - Cheshire Care and Repair  Mears Home Improvement North East	<ul> <li>Resident enquiries for specific works</li> <li>From in-house company (insulation measures)</li> <li>Occupational Therapists (in house)</li> <li>Fire Service</li> <li>Advertising through DECC work = new clients</li> <li>Mailshot to existing customers – didn't identify any new</li> </ul>	Advertising through DECC work = new clients  Substantial proportion of new clients 50% plus  None. Only existing clients benefited from the FILT WHS – they know how the
5	Moore Safe at Home	clients.  HIA technician assessment.	HIA works and have trust. Established good referral networks with partners.
5	Mears Safe at Home (commissioned by	Promoted to the Village and Community agents	Rather than using the HIA's existing client base,

Number	HIA	Referrals	New referrals
	Gloucestershire CC and Public Health)	e.g. by signposting vulnerable and disabled people  Gloucestershire Fire and rescue and the Police  Radio advertising - station aimed at over 50s  Briefed CC Public Health and the District Council  Approached organising bodies for voluntary bodies to emailed charities they represented.  No referrals from NHS services	most of the good work came referral activity.
6	Metropolitan Care & Repair Stafford	<ul> <li>Leaflets in LA &amp; hospitals</li> <li>LA's promotional events</li> <li>CAB referrals</li> </ul>	Some were existing clients, but new clients came through the CAB and Council.  Able to help a lot more people.
7	Six Town Housing HIA (HIA now closed)	<ul> <li>The Case Worker worked on disabled facilities grants selecting properties that she knew would benefit from energy efficiency measures.</li> <li>HIA's handyperson scheme to identify clients.</li> <li>A referral system with District Nurses.</li> </ul>	The majority of clients were new.
8	Swan Housing Association	<ul> <li>Majority of clients known to the HIA and were having some type of adaptation work done;</li> <li>Also referred by:         <ul> <li>the HIA's technical team and handyperson, caseworker visits;</li> <li>Careful not to publicise the service through the LA as the HIA anticipated being overwhelmed with requests – they didn't want to raise expectations which they couldn't meet.</li> </ul> </li> </ul>	Small proportion of new clients engaged when contacted by the client wanting particular work done.

Number	HIA	Referrals	New referrals
9	Homelife Carlisle HIA (Carlisle City Council)	<ul> <li>Marketing and leafleting other organisations e.g.</li> <li>advertised the service via Occupational Therapists and other health professionals, press release</li> <li>HIA website</li> </ul>	Mainly new clients because the HIA is new. Most of the clients were elderly people.
10	Yorkshire Housing	<ul> <li>Self-refer e.g. for handy person visit, via HIA's Advice and Support Workers, existing referral list, LA.</li> <li>Intelligence from the private sector stock condition survey,</li> <li>leaflets and attend events.</li> <li>No specific large-scale advertising done</li> </ul>	Identified new clients

# Use of the FILT WHS funding and referrals on

HIA	Referrals on	Interventions
1	Various e.g. one safeguarding alert; local organisations; referrals to energy help lines; disability teams for adaptations.	<ul> <li>Window repairs work;</li> <li>path clearance;</li> <li>unblocking gutters (water on the ground can be a hazard);</li> <li>emergency heating etc.</li> <li>Specialist work e.g. plumbing</li> </ul>
2	Various e.g. Carers' organisation; organisation doing fire checks; handyhelp service for small repairs/draught proofing; the Council to obtain grants; to charities, partner organisations to switch fuel provider etc.	Small interventions e.g. provide temporary heating, repairs to heating systems that clients weren't able to afford; help people struggling with fuel bills to apply for winter grants; draught proofing; reflective panels; radiator bleeding. Sometimes simple jobs were required which allowed people to keep warm.
3	Work done mainly in-house  Didn't refer clients to NHS services - usually receive referrals from them to do minor adaptations, install grab rails and stair rails.	Most of the funds were used for heat and other repairs or contributions towards new central heating systems.  Used Department of Energy and Climate change funds to employ a company to provide insulation measures (cavity wall and/or loft insulation).
4	Mainly to the HIA's handy person service, local builders for gas servicing and plumbing Signposting for benefits advice, loft insulation services, other organisations (e.g. Newcastle Warm Zone) to meet clients holistic needs.	The handyperson service: draught proofing for clients, Other work included fitting window seals and door seals, minor window repairs, external door repairs, and fitting reflective panels behind radiators.

HIA	Referrals on	Interventions
5	Winter technician CAB for benefits checks Social Services for adaptations 'Beat the Cold' for tariff advice No referrals to NHS services Social Services and OT at LA	Heating repairs and heating replacements. External contractors were used Draft proofing
6	Adult Help Desk (Social Services) for Aids and Adaptations (hand/grab rails etc.)	Older people were not having their gas fires serviced to save money - this was the most common intervention. The HIA had in-house gas safe staff that could do this work at a very reasonable price.  Aids and Adaptations (hand/grab rails etc.).
7	Referrals were made to Adult Care Services – existing strong link.  One client referred to Royal British Legion	Stair rails, grab rails and energy efficiency measures e.g. TVR boiler & hot water repairs, door repairs, and new letter boxes put in to prevent draughts.
8	Benefit referrals; energy referrals to Warm Front; other contractors e.g. for electrical issues; OTs; adaptation teams; a signposting agency for a wide range of support; Falls Prevention Team (local NHS services).	Floors (insulation and draught proofing) of older properties; replaced radiators; thermostatic radiator valves (improve thermal efficiency of home); emergency temporary heating.
9	In-house handy person service & benefits advice service, Occupational Therapists, CAB and Law Centre for debt advice, including fuel debt, Age UK, Individuals encouraged to speak to their GPs but not referred. Referred people for smoke alarms and fire safety visits.	The HIA referred clients to the County-wide 'Hotspot Scheme' (WHHP) to do boiler servicing and repairs.  Additional work such as home visits which included benefits and debt advice, security assessment, holistic assessment.  Rural and isolated clients given information about their entitlements. Some people were assisted to be connected to the gas network.
10	Handy persons service was able to do small measures immediately or within a day or two e.g. radiator reflectors, draught proofing.  Other charitable donators to be able to match-fund work – secure funding for larger schemes Other organisations e.g. Health, Fire and Rescue.	Small measures e.g. radiator reflectors, draught proofing.  Smoke alarm.  Repairable boilers, draught proofing, small number of insulations, radiator replacements, thermostatic radiator valves (TRV) all around the whole house.  No temporary interventions – all permanent solutions.

## Assessment e.g. risk and health

HIA	Assessment e.g. risk and health
1	The FILT funding criteria was used to establish vulnerability – either a low income; young people with large families; people with significant disabilities; and the elderly.
	All FM staff trained by National Energy Action to assess the whole household circumstances of individuals.
	Client assessment of vulnerability (low income; young people with large families; people with significant disabilities; and the elderly).
	Over 900 energy usage surveys were completed.
2	Clients were assessed by HIA. Using in Area 1 an assessment form produced by the Council. In Area 2 the clients were asked numerous questions to assess/address their needs e.g. questions about income, household type, type of housing, caring responsibilities and what they might need help with.
3	Used the Department of Energy and Climate Change (DECC) definition of vulnerable, which is quite broad, including people over 60 years, disabled, people, children under 5 years, expecting mothers etc.
	During assessments the health component is considered more than wellbeing. If an individual doesn't meet DECs definition of vulnerable, they are highly unlikely to receive funding/support.
4	Inquiry form for those who responded to the mailshot to see if they were eligible for the support.
	The HIA's administration team assessed potential beneficiaries using the FILT criteria e.g. work/benefits situation.
	HIA technicians who do the work in people's homes were able to identify vulnerable people and put them forward as potential clients.
	The HIA doesn't usually have the time to go through all aspects of clients' needs which the FILT survey did allow them to do.
5	Each client was visited to establish whether they were vulnerable, this included an assessment of the individual's health conditions, income etc.
	A lot of health conditions are visible during the visit. Discussion (based on application form) about health conditions also took place.
6	The HIA's operatives (handy people) were going into vulnerable people's homes and whilst they were there, if they identified the individual as requiring further support they would complete a FILT survey.
	The HIA's definition of vulnerable is - Vulnerable, depending on local circumstance. It is broadly defined and more inclusive.
7	Clients were assessed by the Case Worker by survey; a series of questions including mobility issues e.g. need a stair rail or grab rail. Question included on health being made worse by a cold home. The client's general wellbeing was assessed by the Case Worker who had existing case work and awareness about the individual's wider circumstances.
8	Case Workers and the handypersons visiting the individual's home were able to assess the wider circumstances of the household. The FILT survey (identifying structural issues; conditions; energy usage) and questions about household income were used to assess need.
	Another HIA form was completed, which is likened to a risk assessment. This identifies the support an individual is already receiving, personal care issues etc.
	When clients initially phoned, they were asked a series of questions, e.g. about tenure, benefits situation etc. to assess whether they would meet FILT criteria, but most information came out during the home visits, for example, whether there were fuel poverty issues.

HIA	Assessment e.g. risk and health
	Just doing one assessment had the potential to generate a number of additional pieces of work for the HIA's caseworkers, handy people, technical staff etc.
9	During the home visits the Project Worker was able to do more thorough benefit checks and in some cases she found that some people who weren't in receipt of benefits should've been. In these cases, once eligibility for benefits had been established, the HIA was able to do work whilst the client waited for their claim to be processed.
	People were asked about what health problems they had, as well as wellbeing.
	Elderly people were quite reluctant to accept help, so they had to be reassured that they were entitled to certain benefits.
10	Clients were noticeably vulnerable not only by criteria. Several Fuel Use Surveys (reinforced good practice) were done by telephone, mainly home visits.
	The HIA assessed clients. The Fuel Use Survey (added value) directed the HIA to issues around affordable warmth. This was additional to the risk assessment undertaken by the HIA into falls prevention.
	"When we visited we looked at a holistic view of that person's needs to continue living independently".
	The Fuel Use Survey helped identify measures that people didn't know about/weren't accustomed to.
	The HIA attempts to be as accessible as possible for clients, for example, they don't use a call centre or when a client phones up they can speak to a member of staff rather than an automated system of menus. All the calls are handled locally, clients are visited in their homes, and offices are centrally located.
	The Fuel Use Survey directed a greater dialogue with clients which would've been shorter if only the HIA's risk assessment had been used.

# Plugging gaps: other funding accessed

HIA	Other funding
1	Various pots including FILT funds and local charities brought together to pay for bigger
	jobs.
	'We helped some of the people that would've fallen through the net'.
	Additional way of resolving issues for clients that would've gone unmet or taken a lot more time whilst attempting to secure additional funding.
2	FILT work plugged gaps in funding e.g. when huge renovation schemes funded by LA grants fell short or when there had been a delay in drawing remainder LA grants to complete bigger work, FILT funds provided a top up. Therefore, small additional FILT funding allowed bigger work to take place and be completed.
	Repair Grants from the local Council, Foundation's Health through Warmth funding and funding was pursued through various charities.
	The HIA has been able to help more people, particularly where small funds have been used to plug shortfalls in funding larger work, "it wouldn't have gone ahead if we hadn't had this last bit of funding, big work 18-19,000 pounds of works that were just hanging on waiting for last bit of money, so it makes a big difference".
	Provide temporary heating whilst attempting to sort out bigger jobs to provide permanent heating.
3	Alternative funding was sought for any works more than £500, mainly from :
	- Department of Energy and Climate change
	- The Council financial assistance policy
	- Local charities
	- Npower Health through Warmth Scheme.
4	Health through Warmth
	Very short space of time to deliver FILT to be able to build up robust links with charities.
	Quick and easy way to do a quick fix until they are in a better situation to do a bigger repair themselves
	Provided a valuable form of income in light of LA cuts.
5	Warmer Homes Healthier People
	County funds
	FILT
	Client contributions
	Didn't tap into local charity funds as this wasn't needed at the time.
	Another funding stream that could be accessed which meant that the works could be done a lot quicker - sometimes applying for charitable funds can be a lengthy process with limited reward.
6	A couple of clients had broken down heating systems, which was costly work. In the short-term heaters were bought for them.
	Another client wanted windows but the HIA fitted curtains due to the limit of £500.
	Some temporary fixes due to limited funds e.g. draught excluders
	The HIA has a free referral from Social Services, so if clients needed something to move around the house or bathe safely, the HIA could provide this freely as the Social Services budget could fund such work
	Fundraising from local charities
	Some clients would contribute towards costs of a larger job.
	"We identified customers who did need FILT money spending but we also did identify further needs for them that perhaps we wouldn't have come across without that funding'.
	A couple of clients had broken down heating systems, which was costly work. In the

HIA	Other funding	
	short-term heaters were bought for them.	
7	Case Worker helped clients to access various benefits previously and could draw on this knowledge to identify potential beneficiaries of FILT funding.	
	Various charities approached for funding e.g. Royal British Legion funding for the client who had worked in the forces, to get his repair work done.	
	After spending the first 3000 pounds in the first three weeks the Case Worker applied for a further 3000 pounds which was approved. She was able to spend the money very quickly because of the speed at which she was able to identify clients due to her existing casework on clients.	
8	Majority of clients known to the HIA and were having some type of adaptation work done; FILT funds were used to further improve their properties.	
	Only the HIA's own funds (hardship) were used, or clients contributed over and above the FILT 500 pounds, because the FILT funds presented should a quick window of opportunity, the HIA were unable to obtain any match funding or any additional funding. The lead in time and the time within which the work had to be identified and completed was very tight.	
9	Project Worker was able to do more thorough benefit checks and in some cases she found that some people who weren't in receipt of benefits should've been. In these cases, once eligibility for benefits had been established, the HIA was able to do work whilst the client waited for their claim to be processed.	
	Counties WHHP which was called the Hotspot Scheme - there was a backlog in the work the county's subcontractors had to carry out as part of this scheme, so the HIA assisted them by ordering the work for their own subcontractors.	
	Other WHHP money through AGE UK grants and a disability association for working age people.	
	Help getting Warm Home discounts from the energy suppliers – in some cases clients were encouraged to switch providers.	
	C Warm Homes project - Loft insulation and cavity wall insulation.	
	Trying to help people to access Eco and Green Deal – no success yet.	
	Local charities – British Legion (for new windows).	
10	Other charitable donators to be able to match-fund work – secure funding for larger schemes.	
	Match-funded small grants with other charitable donations for larger works e.g. boiler or system replacements.	
	Some clients were supported who fell just outside other funding (e.g. ECO Energy Company Obligation) funding requirements.	

# Lack of bureaucracy / more flexibility

HIA	Lack of bureaucracy
1	Some of the FILT criteria was better than that of other funding providers (e.g. WHHP)
2	Less bureaucracy and not being too restricted by funding criteria in terms of whom and how a client should benefit.
	Proved useful having the funding in-house so that it could be allocated directly and helpful not having very strict criteria which can sometimes prevent very deserving people from receiving support, for example, the case of the client who lost his job and wasn't receiving any benefits was able to be supported.
3	A small repair can be done very quickly, but if it links to larger improvements this can extend timetables.
	The HIA has been able to extent the help they could give to people - previously involved a loan, whereas the FILT funding has supported bigger jobs.
	The Handyperson service is for basic jobs, and the team are not skilled for example, to carry out gas safety work. In the past, people would be asked to contact a gas engineer themselves, but now the HIA can get a gas safe engineer to the household to provide a quote and once the HIA knows how much the work is quoted at they can consider providing further help (financial assistance).
	The flexibility, "it wasn't prescribed so tightly" that only a few people could qualify and benefit.
	The FILT WHS 'more focused on getting the jobs done rather than obtaining mountains and mountains of monitoring information'.
	'Making it a simple system works'
4	The HIA had to hit the ground running, but they were used to this approach and it fitted very well with HIA operations.
5	Assessment was based on FILT criteria, so assistance couldn't be provided for replacing an old boiler but if the client didn't have TRVs on their radiator then the HIA could provide.
	Easy to access and administer funds - additional amount also secured. The HIA held the money which could be easily accessed. No need to fill in lots of application forms to access the money.
6	"Minimal paperwork, I could make decisions there and then and the interventions could be completed really quickly and it made a real difference to people's liveswe identified customers who did need FILT money spending but we also did identify further needs for them that perhaps we wouldn't have come across without that funding".
	The lack of bureaucracy helped.
	Another client wanted windows but the HIA fitted curtains due to the limit of £500.
7	Some temporary fixes due to limited funds e.g. draught excluders.
<b>'</b>	Hence, some delay in getting the work done in-house, but this is countered by the cost-effective approach to making funds go further.
	Everything ran smoothly. FILT funding was easy to administer especially once the clients had been identified.
	More people were supported due to the fund and staff (handyperson) kept in employment.
8	'It wasn't so prescriptiveit was very quick, so a case worker could go in, make an assessment, handyperson could go in, make an assessment, collect eligibility for funding and then do the works there and then'.
	The buy in from staff for this speedy, low cost intervention to help clients allowed FILT objectives to be achieved. The fact that FILT funds could be used 'in a number of imaginative ways opened up opportunities to help more people.

# Preventing harm/illness (Small measures / big impact)

HIA	Preventing harm/illness
1	Relieved anxiety, for example, one client had six children with no heating.
	Educating people to not go from a warm room to a cold room (risk of strokes and heart attacks).
	Falls prevention due to considerable work done fitting handrails and ice clearance.
	Alleviating respiratory problems created by a cold house.
2	A lot of people had heating that didn't work but couldn't afford to have it fixed. They were at risk of becoming ill due to the cold, but the HIA helped resolve such situations speedily. A few clients had mental health issues, being able to keep them warm makes a big difference to their mental state-of-mind.
	A few clients were being discharged from hospital and returning to homes without heating.
	Some disabled people on dialysis didn't have any heating.
	Others were sleeping downstairs in rooms with limited heating whilst waiting to have stair lifts fitted.
3	Vulnerable people were targeted, including those who were likely to be in contact with the NHS. Using the money to ensure a warm and safe home should prevent/limit use of NHS services for cold related illnesses.
	Clients will be able to continue living in their homes which are potentially warmer, safer and securer. There is a likelihood of them not having to use NHS services, therefore making potential savings.
4	Warmer home leads to peace of mind.
	People signposted to other organisations that they weren't aware of.
	Improved a lot of people's feel good factor' and therefore their health and wellbeing.
	Technicians also looking at other things when they are in homes such as falls prevention.
5	The work was able to prevent ill health, particularly as there is considerable fuel poverty and elderly people can't afford to get work completed.
	Example provided of clients actually staying in hospital whilst works have been completed - no heating at all or only partially heated home so clients confined to particular part of their homes.
	Draught proofing done where heat has been escaping, for example, out of windows preventing cold-related illness.
6	The HIA was able to put in timely interventions but it is difficult to prove the links between interventions and impact on health.
	Prevent falls and illness. Increased wellbeing.
	The HIA could help people they couldn't have helped previously. For a short period, the funding was able to make a real difference to people's lives and it also allowed the HIA to identify wider issues experienced by individuals i.e. Benefits situation, household situation etc.
7	The grab rails and stair rails have prevented accidents.
	The Case Worker provided an example of visiting a household without a gas fire where she saw a child lying on the settee absent from school with a chest infection. As a result of FILT funds, the family now has heating and a thermostatic radiator valve to help control fuel usage and keep bills to a minimum.
8	The client had no heating in the kitchen and she was using rugs to block the draught which created a risk of falls. So, there were a number of issues which were dealt with by over boarding the floor, which in turn meant the draught was stopped, the rugs could be removed, preventing heat loss and potential falls – multiple benefits were derived which the client wouldn't have had the money to pay for herself.

HIA	Preventing harm/illness
	Reduced heating costs - feeling home is warmer – feel better about themselves – improved general wellbeing.
	Reduction in high risk of trips and falls, which could've resulted in hospital admissions.
	A client who had their broken window repaired was likely to feel safer, less worry, reduction in draught. Replacing that unit addressed physical and emotional problems.
9	People were asked about what health problems they had, as well as wellbeing.
	Worked very well - some people had fires leaking carbon monoxide - it saved lives.
	'[The FILT] WHS is a great way in to do a holistic assessment of somebody and when you visit you find a whole load of other issues that they wouldn't necessarily have known about – that they can get a stair lift or grab railsor just that people care about them".
	Improved severe respiratory problems, increased health awareness of cold, alleviating stress and worry.
10	The HIA realised that they should be working more closely with the health service for this type of work to identify where hospitalisations occur in terms of areas etc.
	A lot of people didn't understand that TRVs worked – a number of clients hadn't considered them because they didn't understand them. TRVs save them money, keeps them warmer in the rooms they need to be in when they need to be in there and it's more flexible for their lifestyle.
	The HIA addressed categorised hazards of excess cold - "If you extrapolate the likelihood of harm from the Housing Health and Safety rating system then you could claim to have stopped people from coming to harm using that as an evidence base".
	"If you've got excess cold in a property, you address that excess cold, you safeguard people from harm, there's no doubt about that".
	Some people use their homes better, so instead of sitting in one room they were able to better move round, there were rooms that people didn't use because their radiators didn't work.
	Might have been worth putting thermometers in people's homes (before and after) to monitor the heat.
	Difficult to evidence a hospitalisation that didn't happen, however, there is some likelihood that a number of strokes probably haven't happened, saving the NHS money and preventing damage to the independence of the householder.

#### **Timeliness for client**

HIA	Timeliness for client					
2	The HIA had the pot of money themselves rather than it being held by an agency, so they were able to react quite quickly, for example, a client was sent into hospital with hypothermia, but was due to return to her home without her radiators being fixed. The HIA was able to fix the radiators on the same day preventing the client from returning to an unheated house and putting her health at risk again.					
	The HIA helped resolve such situations speedily.					
3	A small repair can be done very quickly, but if it links to larger improvements this can extend timetables.					
4	The majority of the handy person work was quick fix.					
	Quick and easy way to do a quick fix until they are in a better situation to do a bigger repair themselves.					
	A quick turnaround because the money was available - two week turnaround time from the first visit.					
	Quick turnaround for clients because funds were paid to the HIA promptly allowing the HIA to, in turn, pay contractors quickly.					
5	The funding was available immediately, so work was completed within three/four weeks					
6	The HIA was able to put in timely interventions but it is difficult to prove the links between interventions and impact on health.					
7	The interventions were put into place straight away, for example, the draught proofing and reflector panels work was referred to the in-house handy person who was able to do the work more cheaply, allowing FILT funds to support more people.					
8	"It wasn't so prescriptiveit was very quick, so a case worker could go in, make an assessment, handyperson could go in, make an assessment, collect eligibility for funding and then do the works there and then".					
	Very quick assessment, identification of intervention and delivery. The only cases where this didn't happen were where significant works had been identified and the funds were ring fenced for a few clients who passed away. These funds had to be allocated very quickly to other clients, which the HIA was able to do.					
10	Handy persons service was able to do small measures immediately or within a day or two e.g. radiator reflectors, draught proofing.					
	Quick, timely response, but one/two cases were allowed to run over the deadline as the HIA was waiting for match funding from charities.					
	"It was at the right time when the benefit could be felt immediately" for example, when thermostatic radiator valves were fitted, households got a better degree of comfort in the same climatic conditions.					

#### **Added Value**

HIA	Added value					
1	Funding and capability: Already had good networks in place but the ADDED Value was in being able to demonstrate to other funding providers that the organisation was capable of bringing in other funds.					
	Staff training: All HIA staff trained by National Energy Action to assessed the whole household circumstances of individuals					
2	<b>Training and assessment:</b> The training proved useful, for example, how to do energy assessments, and the knowledge and skills developed remained in-house after the funding finished.					
3	<b>Accessibility</b> : Under 50s with children requested a number of works, but the HIA were clear about how much of it they could assist with. Over 50s and the over 60s more so, were more grateful of the help. When the technical team explained what they could assist with and the impact of suggested measures, this age group was generally more receptive.					
	The HIA is part of local government. Client perception is the HIA is more accessible because they are seen to be doing something. The HIA looks after the person and the property they live in, 'we try to make it better for them to live in so they don't have to go into the NHS'.					
	<b>Client satisfaction:</b> Each job the Handyperson services do is followed up with a client satisfaction survey. So far client satisfaction has been at a very high level (90% plus).					
	<i>Trust:</i> Builds trust between HIA and client because the HIA is able to provide support in some form rather than none.					
4	<b>Relationships and partnerships:</b> Created a new relationship with the energy centres and welfare rights. Established good referral networks with partners.					
	<b>Holistic assessment and care:</b> The FILT surveys were thorough (benefit checks, income maximisation, and energy efficiency) and allowed the HIA staff to establish holistic needs of clients and then refer them on as appropriate.					
5	Brilliant! Especially in light of scarce funding being available.					
	New partnerships: Made contacts with different funding streams and different organisations for referrals, e.g. CAB, Fire Service, Beat the Cold etc. Referrals made back to the HIA as a result of developing effective referral networks.					
6	<b>Public awareness raised:</b> Of the HIA's services, but might inadvertently have also raised public expectation about what the HIA can provide for free.					
	<b>Referrals:</b> Established and maintained better links with charitable organisations. Consequently, referral systems have grown.					
7	Speed of delivery vs. value for money and as many people benefiting as possible.  Work: was brought in for the HIA and kept the handyperson in work. Strengthened links: with district nurses and other agencies worked with.					
8	<b>More rounded service quickly</b> - Needs were identified and dealt with quickly, preventing a dragged-out process where the HIA would have to look for alternative sources of funding (e.g. via a referral to LA financial assistance) to do the work.					
9	<i>Trust and care:</i> It helps being part of the LA because people trust this organisation. The HIA were able to show that the Council cares about its residents.					
	The HIA are also working with Health, and because of reassurance of client confidentiality, people are able to share things that they might not be able to with their OT.					
	<b>Strengthened links:</b> With OT – they saw the value of the HIA and the HIA receives more referrals now.					
	Strengthened relationship with Age UK -the charity generated work for the HIA because					

HIA	Added value						
	they didn't have their own HIA service.						
	Private tenants and landlords – HIA spoke to landlords about improving their homes and did some works. Now engage with private landlords, which hadn't happened before.						
	<b>Training:</b> Very informative, for example, the Project Worker didn't know about the Warm Homes discount – 'that training helped me to know all of the different kinds of help that was available'.						
	<i>Identify gaps in service provision</i> : e.g. There isn't a loft clearance service in the area, so the intention is to develop one.						
10	Enabled the HIA to:						
	promote the usefulness of the HIA						
	help people more						
	demonstrate better value to commissioners						
	deal with more problems for a client than the one they have raised, e.g. if someone asks for an adaptation, the HIA can look into fuel poverty and whether that home will sustain their independence for the foreseeable future						
	• strengthen partnerships e.g. by focusing on working with agencies (e.g. for referrals) in particular postcodes/wards with fuel poverty issues						
	strengthen existing referral systems						
	have dialogue with clients about fuel poverty						

#### **Problems**

HIA	Problems				
1	An individual agency within the organisation couldn't apply, so:				
	The Business Manager put in the bid but didn't have anything to do with the service on a day-to-day basis.				
	"They recorded their stuff and we recorded ours. So every time we wanted to do a return we had to get all the information from them before we could put our own return inyou will not believe the hours trying to work out who was owed what, when the money went init would have been so much easier if you'd just said invoice us for this amount".				
2	The funding came at short notice. The HIA would've liked to set up better and more formal referral partnerships, enabling the sharing of information such as through an IT system. There wasn't any time to do this.				
	The tight timescales placed a lot of pressure on the HIA to establish partnerships, referral networks and begin delivery immediately. Staff were stretched. Also, when doing preventative work, there is a need to do a promotion before winter not during winter.				
4	Very short space of time to deliver FILT to be able to build up robust links with charities.				
5	A lot of clients wanted old systems replacing but this wasn't possible because the funding aim was to 'reduce winter deaths'.				
	Limit on amount per client (but were able to access other funds).				
6	FILT was an ideal opportunity to market the work of the HIA, but the FILT work was short-term. The HIA had increasing demand as the deadline was approaching. People were still ringing after the FILT work finished, but there was limited access to other funding.				
	The short-term life of the funding was a limitation.				
	Next time - more notice required to prepare for it and run a campaign to publicise what is available.				
7	The HIA work for private individuals who do not qualify for benefits, has now closed. Further FILT funds will not be applied for. A small element of handyperson work still exists which is supported by Age Concern, but there has been difficulty in drawing these funds. FILT funds were accessed with ease.				
	Impacts of this closure are anticipated to be far-reaching.				
8	Short timeframe – short window of opportunity took over all the other activities within the agency because the HIA wanted to help as many people as they could.				
	Behind the scenes there were a lot of administrative tasks, for example, agreeing rates with a number of contractors.				
	The HIA has adopted the FILT survey as part of what it does but there isn't any funding to support continuity. It would help if the scheme was a rolling programme throughout the year.				
9	Very labour intensive – absorbed all the Project Worker's time.				
	It was difficult not knowing whether the HIA was going to get the funding - lack of lead-in time. Would like to plan (e.g. staff) for it better next time.				
10	The timescales for delivery were tight – a wider window of tight would've allowed the HIA to work more strategically with the LAs identifying the wards from previous years where there had been excess hospitalisations.				
	The short timeframe within which the money had to be spent was a hindrance; it could've been used more strategically and the resource could've been directed most where it has the most intrinsic value.				

#### **Case studies**

HIA	
1	We were contacted directly by Mrs G who had seen an East Sussex CC advert that detailed information about the Winter Home Healthy People scheme and the winter home check service that web are managing. She was also assisted by Steps, a service run by In Touch, Family Mosaic.
	Mrs G was in a desperate state as her emersion heater had sprung a leak and water would potentially damage the flat below her, she was emptying buckets into her bath a problem that was exasperated by the fact that due to her arthritis she could not turn her mains stop cock off to stop the tank filling up constantly.
	Mrs G owns her property, lives alone and is aged 84. She is in receipt of Means Tested benefits with minimal savings.
	We were able to arrange for a heating and plumbing engineer to visit within 3 hours of receiving Mrs G's call to cap of the emersion heater and allay Mrs G's stress, whilst onsite the engineer discovered that the system was so old that it could not be replaced like for like and that a new header tank would also need to be installed.
	The estimate was submitted the next day and we set about gaining additional funding to ensure Mrs G was not left without hot water for any length of time. Fortunately we were able to raise additional funding through Foundations (Managing body for Home Improvement Agencies) and Mrs G insisted on paying £200 toward the repairs, the remainder was paid for through the Winter Home Check scheme.
	We also undertook a WHHP check and found several ways to support Mrs G in the interim whilst the more major repairs were organised.
	We repaired her kitchen tap, supplied heaters and snug pack to keep her warm and undertook draught proofing to reduce cold air flow.
	All works have now been completed and Mrs G is extremely grateful for the assistance she was given.
2	FILT funds were also used to support a family that had a change in their financial circumstances due to loss of employment and a lack of income whilst waiting for benefits to come through. Wider social benefits were achieved by contributing to fuel costs and food for the family. The children who had been confined to their duvets were provided a warm environment to do their homework.
3	One example is provided of a single lady in her late 60s living in a house in a very rural area with no gas, so she was heating the house with portable gas and electric portable heaters. She was asthmatic. The heating was costing a lot so she was turning the heaters off and her asthma was getting worse. The HIA Installed an oil fired central heating system - the £500 (FILT) was used to reduce the cost of the loan (Council) that she would have to pay back. She should be living in a warmer house now and spending less money on her fuel bills.
4	One example of a client who had boilers and gas fires serviced, and TRVs fitted to radiators – her home is warmer. This is work she couldn't afford.
	Another example of client who had been conned by a plumber who didn't do any of the work paid for – the client lost confidence and felt vulnerable. She was eligible for the FILT WHS and had the work done.
6	Provided an example of a disabled couple with heating system that didn't extend into the second of their downstairs rooms, so they lived in one room in cramped conditions - moving around was even more difficult. The HIA was able to extend the heating system into the other room. They could then use both downstairs rooms - They felt it completely changed their lives and prevented ill health and falls as they have more room to move about.
	Another example, a lady had a UPVC door which the HIA mended for free. It could have affected her health adversely due to the draught coming through in winter.
	A mother with a disabled child had moved into a different house with light fittings in the ceiling which had been removed creating voids and consequently draughts in the child's

	bedroom. The HIA plugged the holes - A quick and small, cheap fix.					
7	Example of referral from Social Worker - household with three children, no stair rail, and mother had MS. She was referred to Adult Services by the Case Worker for a stair rail, and used FILT funding for a replacement gas fire, air bricks, and thermostatic radiator valves.					
	Another example provided – old lady with a back door in poor condition which let in the cold. FILT funding used to sort this.					
	Another client with no hot water who couldn't afford for it to be fixed benefited from FILT funds.					
	Old lady sleeping downstairs because she couldn't use the stair lift anymore, however the downstairs room was cold due to a broken window which she couldn't afford to have repaired. All the prices quoted were extortionate and this work was done by the HIA's handyperson very cheaply. This made a significant difference to the client, especially during winter.					
8	An example provided of one case where the client had no central heating; he had a wall mounted gas fire that had been condemned, so he had no heating. The HIA provided him (loaned) with emergency heating and then assisted him by replacing his old fire. The HIA used its own top-up (hardship fund) together with FILT funds to do this work.					
	The HIA raised issues which clients couldn't necessarily see, but with explanation they were able to get buy-in from the client - An example provided of a client whose kitchen floor was made of floorboards which had half inch gaps between them, and the void created a draught. The client had no heating in the kitchen and she was using rugs to block the draught which created a risk of falls. So, there were a number of issues which were dealt with by over boarding the floor, which in turn meant the draught was stopped, the rugs could be removed, preventing heat loss and potential falls – multiple benefits were derived which the client wouldn't have had the money to pay for herself.					
9	Clients given room thermometers during home visits. An example is provided of a client, with children, who had severe respiratory problems sitting in a cold room (10 degrees). The Winter Warmth grant and Warm Homes discount were accessed. The Project Worker also provided the client with information about how cold houses can affect people.					
	Ensuring that people have the right benefits maximises income, so people can put the heating on.					
	Another client's energy provider had made a mistake calculating her bill and when she received the huge bill the household restricted its use of heating. The Project Worker was able to sort the bill out by approaching the energy company herself – sorting out such problems improve the client's mental health by alleviating stress and worry.					
10	An example provided of an individual who went to bed at 7pm because he couldn't afford to put the radiator on - once work had been done, the home was used better.					



# **Appendix 3: Client Characteristics and Case Studies**

#### 1. Client interview: Characteristics

ID	Client Sex/Age	Housing type and tenure	Household	Morbidity and other problems	How they heard about the FILT WHS
Stage 1					
A	F/Nearly 90	3 bed bungalow / private owned 40 years	Lives with her daughter	Mrs A has Parkinson's Disease and heart problems	Daughter picked up leaflet in town
В	F/Pensioner	Detached house / private owned for 25 years	Lives with her husband and 3 adult children	Mr B has "inflammation of the spine"	Advert in free local newspaper
С	M / Pensioner	3 bed detached house private owned	Lives with his wife	Mrs C has had a lung operation and feels the cold.	Relative
D	F / Pensioner	Dormer bungalow / private owned	Lives with her husband	Mrs D has limited mobility and struggles on stairs and getting in and out of the bath. She has a failing memory. Doesn't sleep well and feels cold.	Age UK
E	F / Pensioner	4 storey Victorian house / private owned	Lives alone	Mrs E has rheumatoid arthritis and goes out as much as possible because she feels cold. Only uses 2 storeys.	Gardening service

F	M / ?	Semi- detached ex Council house.	Lives alone	Mr F is socially isolated, is very private and didn't want people to know he was struggling. Low income	Internet
G	F / Pensioner	House / private owned	Lives alone	Minor illnesses and symptoms. Lots of coughs and colds. Felt cold in the house.	HIA Leaflet
Н	F/ ?	Flat / private rented	Lives alone	Feels a bit chesty. Bedroom excessively damp with mould and wet wall paper hanging off the wall.	Environmental health officer
I	M / ?	2 bed Victorian end-terrace / ? ex Council house	Lives with wife and 3 children	Mrs I's wife has MS	Council worker who was doing maintenance work.
J	F / Mid 70's	Bungalow /? private owned	Lives with her husband	Spondylitis, emphysema, chronic bronchitis and mobility problems. No heating in the bathroom. So cold there it takes your breath away.	Referred by the local Council.
Stage 2					
AB	Couple / Mid-70's	Semi- detached bungalow, one bed, dormer conversion.	Couple live in the home.	Mrs AB: arthritis, raised blood pressure (BP), heart condition. Both have mobility problems following car accident. Low income, live on pension.	Building Society (Mrs AB approached about equity release)
CD	Couple / Mid 40's	Victorian mid-terrace house. Bought under right to buy 22 years ago.	Couple live with 15 year old son. 2 adult daughters live nearby	Mr CD has chronic health problems including diabetes, raised BP and kidney disease. Mr and Mrs CD are first generation Bangladeshi immigrants who speak little English.	Through a friend, by chance
EF	Couple / 83 and 74	Ex-council house with 2 bedrooms.	Couple live in the home with adult son on a low income.	Mr EF has a heart condition and become increasingly frail over the last 18 months. Mrs EF has mobility problems, hip replacement and history of falls.	From an advisor who they saw about pensions credit.
GH	M / 81	Ex- council 3 bed	Lives alone	Widowed 20 years previously. Supports	Through a community group

		semi-		daughter who has	
		detached house.		depression and lives nearby. Mr GH has diabetes and vascular problems in his legs. His mobility is limited.	
IJ	F/80	4 bed terraced house / private owned	Lives alone	Previous heart attack, history of falls.	Through a nephew who works for an HIA
KL	F/77	Detached house / private owned	Lives alone, widowed 5 weeks prior to interview	Mrs KL has osteoporosis, diabetic, chronic respiratory problems, high blood pressure and heart failure. She is partially sighted. Her husband had mitral valve disease, was partially sighted and Alzheimer's disease for 7 years prior to his death	Through social services
MN	F/36	3 bed semi- detached house / private owned	Single parent. Lives with 2 young children.	Worried about safety and child health because of cold.	Through a friend
OP	M / 72	3 bed semi- detached house / private owned	Lives with his wife	Mr OP has diabetes. He and his wife feel very cold, worried and worn down by the temperature.	Through a friend
QR	F/81	3 bed bungalow / private owned	Lives alone	Widowed 3 years ago. Struggles to maintain the house, needs modernisation. Socially isolated, previous broken hip, pancreatitis, gall stones and septicaemia.	Previous carer now works for an HIA
ST	M / 67	3 bed detached house / private owned	Lives alone	No health problems but damp and cold house. Worried about paying fuel bills	His neighbour is an HIA advisor
UV	F / Pensioner	3 bed, end terraced house (Right to buy)	Lives alone	Diabetes, arthritis and mobility problems, mental health problems, socially isolated except for her sister visiting. Partially deaf and struggles to hear conversation.	Contacted HIA because she needed a stair lift.

wx	F/93	3 bed terraced house / private owned (Right to buy)	Lives alone with son nearby	Thyroid problems, leg pain, limited mobility and walks with a stick	Through a neighbour whose chimney collapsed and debris came into Mrs WX's house. HIA came to help.
Y	F /79	2 bed semi- dethatched bungalow / private owned	Lives alone	Arthritis in both hips causing mobility problems. Recent fall at home.	Through a friend
Z	F/67	3 bed terraced house /private owned	Lives with her husband	Emphysema and rheumatoid arthritis. Mr Z has COPD	HIA contacted directly. HIA had previously helped with stair lift being installed
AZ	F / Pensioner	House in a rural area	Lives with her son	Diabetes, kidney failure and has a wheelchair	HIA knocked on the door

## 2. Client Interview: Impact of the FILT WHS

ID	FILT WHS intervention	Impact of FILT WHS
Stage 1		
Α	Fitted two double radiators	Mrs A doesn't feel the cold as much. Arthritis feels better.
		Expects fuel bills to be lower.
В	New boiler	Previously very cold in the house and didn't know what to do to make things better. Improved comfort and warmth. Alleviated worry. Expected fuel bills to be lower but didn't really understand them.
С	Reflective panels to radiators, door seals, radiators and boiler services.	Improved warmth and comfort, less draughts. Hope fuel bills will be less.
D	Wet room fitted (not FILT WHS), windows fitted and banister rail.	Feels warmer, safer, more confident and more in control.
Е	Thermostatic radiator valves. Serviced boiler and gas fires.	Feels warmer, increased confidence and control. Didn't know what she would have done without FILT WHS. Expects fuel bills to be lower.
F	Boiler services, hot water cylinder replaced, Valve and vent pipe replaced.	Warmer and less embarrassed. More likely to ask people to come round to the house.
G	Gas fire installed, loft insulation, window replaced.	Eased illnesses and symptoms. Encouraged more visitors as house was warmer so less socially isolated
Н	Fitted a new storage heater.	Feels warmer but room is still damp. Feels less "chesty". Expects fuel bills to be lower as hopes heating will be more efficient.

I	New gas fire installed, renewed gas piping for the gas fire, fitted thermostatic radiator valves	Mrs I feels much more comfortable and the home is warmer. The warmth has eased one of the children's asthma and he is not missing so much school. Gas bills have increased because use heating more now and the winter was bad.
J	New radiator fitted in the bathroom.	Much warmer and more comfortable in the bathroom. Doesn't see the link between warmth and health. Expects heating bills to be higher but thinks it's worth it because she is warmer.
Stage 2		
AB	Immersion heater removed, boiler replaced, new electricity meter and upstairs radiator installed.	Struggled to work the new boiler and worried about using new equipment Home was much warmer, arthritis eased and so slept better. Improved mobility so reduced risk of falls. Slept better. Dried washing more easily. Worried fuel bills would increase.
CD	Central heating boiler repair and serviced the gas fire. Uncertain about what had been done or how it had been funded.	The house feels much warmer. Great impact on Mr Cd who had felt the cold because of his health. They were worried the heating bills would be high as they were now using heating. Previously the heating system hadn't worked.
EF	New water heater and thermostatic radiator valves fitted	The house feels warmer and Mr and Mrs EF can now bath, wash and do the washing up in comfort and safety. Previously they had used kettles of hot water. Less socially isolated as can ask family round for meals as they can wash up now. Less worry and anxiety.
GH	A new central heating system was installed. Mr GH struggled to understand who the HIA were.	The house is much warmer and more comfortable. He has less discomfort in his legs.
IJ	New windows were fitted and maintenance to the radiators. Some uncertainty about what else is being done but she hopes to be eligible for a new boiler.	Feels much warmer and safer in her home. She is worried about paying her fuel bills.
KL	Repair to the under floor heating, additional lighting outside and electrical repairs inside, a hand rail was installed for safety.	There was immediate and great impact in terms of comfort, wellbeing, peace of mind, warmth and safety. Previously Mr and Mrs KL have been very cold. She had been worried and anxious about her husband's health and her own because it was so cold.
MN	Draft excluders fitted to windows, boiler replaced.	Less drafts and warmer so more comfortable. Feels better working as child minder from home now house is better heated. Work is more secure and children are safer.
OP	Old storage heaters were removed and new central heating system installed. Radiator fitted to downstairs toilet.	Better access to hot water for washing. Expect bills to remain the same but haven't used the new heating much as the weather hasn't been cold. Less stress and worry because of cold. Better contact with family as can have grandchildren round and safely.

QR	Reflective radiator panels fitted and radiators serviced.	Referred to have new radiators fitted - but this wasn't done under FILT WHS. More comfortable and warm because of the new radiators.
ST	Boiler mended and serviced, some additional radiators fitted, windows and door replaced.	He has more control over his heating and fuel use. He expects fuel bills to be cheaper and his family to visit more as its warmer. He also expects to be less worried about cold and bills.
UV	Radiator reflecting panels fitted.	Increased comfort and warmth, feels less anxious.
WX	Uncertain about what was done. Gas fire was reinstalled and refitted.	Unsure of the impact because the weather hasn't been bad. Uncertain whether her bills will be lower, but she does expect to be more comfortable.
Y	Bath replaced with a wet room. Reflective radiator panels and draught excluders (windows) were fitted. A white bathroom suite and tiles were also installed. May have been referred to an exercise class but unsure if this was the HIA	Mental health improved, found washing stressful and didn't feel clean. Now more comfortable and independent.
Z	Radiator repair and reflective radiator panels	Improved warmth to the home. Not sure if it impacts on her health. Unsure of the impact on fuel bills.
AZ	Reflective radiator panels	House is hard to heat. Doesn't know if the work will make an impact as it's not been too cold yet. Still needs a new boiler.

#### 3. Client case studies

## Stage 1. Telephone interviews with clients

## Case study 1: Mrs A

#### **Profile:**

Mrs A is an elderly woman who lives with her daughter in a three bedroomed bungalow. It was built in 1973 and is not very energy efficient. "it very cold, it takes a lot of heating in winter". The fuel bills are very high. Mrs A has Parkinson's Disease and heart problems.

#### **Problem:**

The heating system was old. They had single radiators that weren't sufficient to heat the house, especially the large sitting room.

#### What was done:

Mrs A's daughter picked up information from an HIA display stand in town and phones them up. The HIA worker came to assess them at home using a questionnaire.

"I agreed.....I just took their advice because they're the experts".

Contractors came and fitted two double radiators. The work was done fairly quickly. "They were very nice, very efficient, they didn't cause any mess whatsoever".

The work was fully funded and Mrs A didn't have to pay anything.

## What was the impact:

There was an immediate improvement in the warmth of the room.

"It was a big improvement on what we had previously".

Mrs A especially benefitted, "she's nearly ninety, she does feel the cold more".

"[the new radiators] are not going to cure me but as far as the heating goes, it's been beneficial".

In addition, her arthritis feels better when it's warm. They expect the fuel bills to be less next winter.

## Case study 2: Mrs B

## **Profile:**

Mrs B is a pensioner who lives with her husband and three grown up children in a 25 year old detached house with a "freezing conservatory in winter". The house has some cavity wall insulation but when heating is off it does get cold very guickly, otherwise it can get hot when heating is on. Her husband suffers from inflammation on his spine.

#### **Problem:**

Client's boiler had broken down.

#### What was done:

Mrs B saw an advertisement about the HIA in a local free newspaper and rang them because her boiler had broken down. The HIA Case Worker did a home visit the day after the client called for assistance and also sent a company round who confirmed that the boiler couldn't be repaired. The day after a new boiler was fitted by the same contractors who had already visited the client's home. FILT funds contributed £265 towards the cost of the boiler and the client didn't have to pay anything because additional funding was secured through the NHS. Mrs B described the work as "Perfect, absolutely perfect!...It took him (the contractor) a full day to do it and he never stopped the job".

## What was the impact:

The boiler was fitted during winter when it was very cold- a few days before Christmas, therefore a valuable and timely response. Mrs B's husband has inflammation on the spine, "and it is worse if it is cold...so it probably did help him". She added "if I get cold as well, I don't half feel it, so it was a good thing for me as well".

The new boiler alleviated worry, especially because it was around Christmas time and the client couldn't do anything to prepare for it, "I was frozen and when you're frozen cold all you want to do is sit with your coat on". Mrs B felt the boiler must have reduced her fuel bills because it is more efficient but said that she struggles to make sense of her bills.

## Case study 3: Mr C

Profile: Mr C lives with his wife in a three bedroom detached house. It is 36 years old and gets very cold in winter. Mrs C had had a lung operation and now felt the cold.

Problem: The house was cold and heating system needed a series of small maintenance jobs to improve efficiency.

What was done: A relative told Mr C about the HIA scheme who then phoned them and told them about their needs. Someone came out to assess them and provide a quote for the work. The client wasn't asked any questions about health and well-being, although this may have been because he was an existing client whose household circumstances they were aware of.

They had the following work done, reflective panels fitted to radiators, new internal door seals fitted, radiators bled and boiler serviced.

The work was done within four weeks from first contact. The reflective panels were fitted in a day. Another worker came out 2-3 days later to bleed the radiators and service the boiler. The work was all paid for in full through the HIA.

What was the impact: Mr and Mrs C were very pleased with the work. They felt it was done efficiently and at the right time. "I cannot sing my praise enough". The door seals stopped a draft and so had an immediate beneficial effect, especially as Mrs C feels the cold.

"The door sealing made a heck of a difference but the reflective panels I think it would be too soon to tell really".

The seals stopped the draught from coming in – immediate difference.

They hope that the fuel bills will be less. Previously bills had been high because they kept the heating on all the time in order to keep warm. They also and turned it up when their grandchild visited.

## Case study 4: Mrs D

#### **Profile:**

Mrs D lives in a dormer-bungalow with her husband. She has a problem with sleepless nights, aggravated by the cold, so she sleeps on the settee. She has problems with mobility and struggles on stairs and can't get in and out of the bath. She also has a failing memory.

#### **Problem:**

The home has an old boiler that doesn't work properly. It is very cold upstairs as there was no heating. The window frames were rotten.

What was done: Mrs D heard about the HIA through Age UK. She contacted the HIA who visited her at home where they asked her about her home, income and other circumstances. Some interventions were paid by FILT and others by local Authority grants, but the client couldn't remember the details. A wet room was put in because she couldn't get in/out of the bath. She had a few windows fitted as well as a banister rail. The plan is to have a new boiler shortly. The work was carried out quickly and cleanly by Council contractors between two and three months from contact. She is very happy with this as a response.

## What was the impact:

Generally the house is warmer, safer, and more comfortable and costs less to heat. Mrs D's general well-being has improved. She is less reliant on husband, and is warmer and happier.

"When you're on your own sometimes, I wouldn't dare go and stand in the bath...I have to wait for my husband to be there and then I couldn't sit down, I could only just stand under the little shower".

She believes the banister rails help to prevent falls and feels more confident and in control. She is 'very grateful'; despite the fact she is still waiting for the HIA to gather funds from various sources to pay for a new boiler.

## Case study 5: Mrs E

## **Profile:**

Mrs E lives alone in an old four storey Victorian house. It has tall ceilings and is cold, particularly during winter. She mainly uses two storeys of the house. She has rheumatoid arthritis. She feels cold in the house and goes out a lot "that's a way of keeping warm...the effort of going into town".

#### **Problem:**

Mrs E wanted the boiler and gas fires serviced as she couldn't afford to pay for this herself.

#### What was done:

She found out about the HIA through their gardening service, which she has been using for some time. The HIA had previously talked to the client about her age and needs so had an awareness of her circumstances. An HIA worker did a home visit and asked questions about heating and loft insulation.

Subcontractors attended on time on an allocated day to service the boiler and gas fires, and fit Thermostatic Radiator Valves (TVRs). She hadn't asked for this work so saw it as an additional benefit.

"Two very efficient young men came round and did the whole thing very quickly, I was most impressed. They serviced the boilers and put thermostatic valves on all the radiators....it was an admirable job".

Mrs E did find the TRVs a little bit too stiff to move because of her arthritis but her family adjusted the valves when they visited.

The work was fully funded and Mrs L paid nothing. It was done during a cold spell so was very timely.

What was the impact: Mrs E finds the house warmer and is expecting to use less gas and get smaller bills. She also thinks her health as benefited.

"My rheumatoid arthritis does get worse in chilly weather and I do feel stiffer.....I think I feel more confident now".

She generally feels more confident and in control.

"It's a good thing to have done because its more efficient and I don't like the idea of things not functioning properly and using up resources which they don't need to use".

## Case study 6: Mr F

#### **Profile:**

Mr F lived alone in a semi-detached ex Council house. He is a private man and didn't want anyone to know he was struggling. The house is not particularly cold and there is lots of insulation in the roof.

#### **Problem:**

Mr F's oil fired boiler needed repairing and the hot water cylinder had a fault. He didn't have any money. He hadn't got any hot water and was using a wood burning stove to heat water to wash. He expected the repair to be expensive, so was trying to save for the work when he came across the Care and Repair (C&R) website, I didn't expect to qualify!

#### What was done:

When Mr F realised he met the funding requirements, he contacted the HIA. He found it by luck and "there are many people who are struggling who don't know it's there" and many people aren't on the Internet.

C&R team sent a private company to assess what work needed to be done. Subcontractors serviced the boiler and replaced the hot water cylinder - "this work would've run into thousands".

The work was done within a week of the assessment, "they were efficient, good professionals....they put dust sheets down".

They did what was expected and more. Also he didn't have to make a contribution as the work was paid for in full.

## What was the impact:

Mr F feels embarrassed about taking help from the HIA as part of the FILT WHS. He feels less isolated now. He wasn't seeing people because he was embarrassed about struggling to keep clean and because he didn't have the money to fix it. He says he stopped inviting people round so the fact he was struggling was invisible to others.

"I become a little bit of a recluse because you get used to being able to turn the hot water on to have a shower, but if you've got to heat water in a kettle on top of a fire....then wash out of a bowl, you don't sort of feel fresh and clean".

Mr F thought the vulnerable and people on a low income should be approached proactively about their heating and health, "a red flag".

"There's loads of people like me, we won't speak up and ask for help".

He felt lucky because he wasn't frail. If he had been frail his heating problem would have had a huge health impact. A lot of people don't have a fire as a backup if central heating fails.

"Luckily I'm not frail at the moment.....for somebody else it could've been a big problem.....I'm lucky I've still got my fitness, for some people it could be life threatening".

## Case study 7: Mrs G

#### **Profile:**

Mrs G is an elderly woman living on her own in a house built in 1904 -described as "very draughty and cold".

## **Problem:**

Mrs G contacted the HIA to have a new door fitted.

## What was done:

When a handyperson came to fit the new door suggested that Mrs G have a gas fire fitted in the front room because it was very chilly. A Case Worker then visited Mrs G to do a home assessment and asked how she coped without a fire, what her bills were like, if she was comfortable when siting in the living room and how warm she felt. Mrs G told them "I have to sit with a blanket around me if I sit in the living room".

A contractor then installed a gas fire – it took approximately two months to do this work from the initial assessment but this was because Mrs HB had to choose a gas fire. contributed four hundred pounds towards the cost of the work and the client contributed one hundred pounds. She described the installation process of her gas fire as "efficient with no mess". Mrs G also benefited from loft insulation and window replacement using other funding.

## What was the impact:

The work was done during cold weather and the house is warmer. "Sometimes I used to be suffering from chest colds....and sometimes when I wanted to sit and watch television a bit later I couldn't do it because I was very cold and now I could sit comfortable for a bit longer, especially when you're on your own and nobody else, the television is a bit of company".

Mrs G also felt that the intervention had eased minor illnesses and symptoms of conditions.

"when it's chilly and the house is cold I seem to have a cough or a cold or arthritis in the joints, so that extra warmth is very comforting and soothing to the pain" and may have helped to prevent other problems "It has done away from my general problems (diabetes's, eye problems) .... I haven't had to visit the doctor or the hospital for any other problems".

The intervention also resulted in visitors staying longer in her home "I've had people come in (previously) and I've had to give them a blanket over their knees even when the central heating is on'. Friends, sister and children didn't visit for long because of the cold, now 'they are happy to come and to sit for a while and enjoy".

However Mrs G felt that her gas bills should be less because by putting on the gas fire she would not have to put the whole central heating on to heat the rest of the house that's not in use.

## Case study 8: Mrs H

#### **Profile:**

Mrs H lives alone in a flat built post war. The flat has electric heating, is very cold during winter and has problems with damp and condensation.

#### **Problem:**

Mrs H had problems of damp in her bedroom and had moved he bed away from the wall which was excessively damp, and had wall paper hanging off and was black and mouldy.

#### What was done:

Mrs H's landlord had sent workers/decorators round but Mrs H wasn't happy with the outcome so she called Environmental Health. Environmental Health sent out someone who was shocked by the condition of Mrs H's bedroom and put her in touch with the HIA. The HIA Caseworker who visited was quite thorough in the questions she asked and she had a look at the condition of the bedroom. The HIA fitted a new night storage heater in Mrs H's bedroom which was fitted within two days of initial assessment. She commented "I couldn't believe it....they were very good, cleaned up after, and didn't make much mess at all".

Mrs H didn't have to contribute anything and the work was paid for in full by the HIA.

## What was the Impact:

The heater was fitted during winter when it was needed most.

"It couldn't have been any better... I was very pleased... I'm feeling happier with the bedroom. After they put it in, I didn't get much condensation in my bedroom. It's more efficient than my other one (heater)".

"The heat just seemed to come out all day and all night although I didn't have it on high but my old one was hot in the morning.... then by the evening the heat's gone".

Although Mrs H is very happy with her new radiator, she still needs the damp problem to be resolved.

Mrs H is not sure about the impact on her health, and explained "I'm a bit bronchi anyway" (and hasn't made a connection, this may be due to living in a damp flat). She feels the heater should be more efficient but it's difficult to assess whether household costs have decreased since Mrs H has two other heaters in her flat and electricity bills remain high.

## Case study 9: Mr I

## **Profile:**

Mr I lives with his wife and three children in a Victorian two bedroom end terrace. The house is north facing and does not get much sun - described as "freezing during winter". Mr LC's wife has Multiple Sclerosis (MS).

#### **Problem:**

The house was very cold which made his wife's MS symptoms feel much worse. The heating was poor in one particular room and needed improvement.

#### What was done:

A Council worker had come out to do other work in the house commented on how cold it was, she told them about the Warm Homes Scheme, so Mr I contacted the HIA. The HIA did a home visit within a week of being contacted. During the HIA assessment all the radiators, gas supply and gas fires and the boiler checked. A contractor installed a gas fire, redid piping for gas fire, and fitted Thermostatic Radiator Valves. Work was done quickly,

"It was absolutely superb, he didn't leave any mess and the only stuff he left was stuff I asked him to leave".

The cost of the work was covered in full and Mr I commented that more work undertaken than he had asked for "they fitted the TRVs", "he did the fire, he actually mounted the fire surround for us".

## What was Impact:

It was winter so the work was done when the household needed it most.

"There's been a big improvement all around....there's nothing that was done that wasn't needed, but the stuff that was done that the guy who did it for me he went above and beyond".

Mr I's wife also feels more comfortable as a result of the interventions because she is warmer, "she's not carrying as much pain". However, there hasn't been any change to her health due to the nature of her condition.

Having the radiators on at a constant temperature has eased one of Mr I's children's asthma.

"He's not missed as much school as what he did in the past having asthma attacks, struggling with breathing....he's only had two days off this year up to now".

Mr I feels that his gas bills have increased as a result of having the radiators on all the time at a constant temperature but bills also higher as a result of a particularly bad winter.

## Case study 10: Mrs J

#### **Profile:**

Mrs J is an elderly woman who lives with her husband in a 50 year old bungalow described as "very cold in winter". They are an elderly couple in their 70's. Mrs J suffers from emphysema, chronic bronchitis and mobility problems.

#### **Problem:**

Mrs J had central heating fitted by Warm Front two years ago but no radiator was provided in the bathroom. Mrs J was finding that the cold in the bathroom was taking her breath away and had bought a portable blow heater to try and heat the bathroom but the blown dry air was also affecting her breathing.

#### What was done:

Mrs J contacted her local council and was referred to HIA Caseworker whom she contacted on 22<sup>nd</sup> February 2013. The caseworker didn't do a home visit because it was a small job – only a very small radiator needed - but assessed the client over the phone asking questions about the clients health problems and wider circumstances (including being on pension credit and registered disabled). The Case Worker asked the client why she had waited so long to ask for help and the client explained - "I felt I was being greedy....want something for nothing".

Quotes were obtained for a radiator to be supplied and fitted in her bathroom and the work was completed and paid for using FILT WHHP by 14/3/2013. Mrs J had to wait a little while for the radiator to be installed because plumbers had to assess the work required. A couple of workmen refused to fit the radiator because it was deemed too close to the toilet which posed health and safety risks but there was no other suitable place to fit it so eventually the work was done by another contractor.

Mrs J described the workman as "wonderful....he explained everything and he even cleaned up everything afterwards".

#### What was the impact:

The intervention was timely as the radiator was fitted during the cold weather.

"It took that terrible chill of it.....it was like a new world to us'. It was lovely walking into a warm bathroom. 'It's been so cold...freezing for five years......I've already had pneumonia twice and pleurisy three times and I've got spondylosis now and arthritis in my spine".

Mrs J didn't recognise a link between the intervention and an impact on her health but repeatedly referred to feeling "happier". She felt that her fuel bills might have increased but this is insignificant because of the difference the new radiator has made.

## Stage 2: Face to face and telephone interviews with clients

## Stage 2: Case study 1:

#### **Profile:**

Mr and Mrs AB are a retired couple in their late 70's. They live in a semi-detached bungalow with a one bed-room, dormer conversion upstairs. Mrs AB has arthritis and has a history of falling. She has a problem with her sight and required eye surgery. Mr AB has raised blood pressure and a heart condition and is on tablets for this. Both had limited mobility, made worse by the residual effects of a car accident a few years previously. They had various adaptations in the home to help with this. They lived on a pension and their family had a low income and couldn't help them financially.

#### **Problems:**

The hot water heater was broken as was the thermostat, immersion heater and timer for the central heating. The immersion heater worked intermittently and may have been unsafe.

## "We switched on the immersion heater and we just kept our fingers crossed hoping it would still work"

There was no central heating upstairs. One of the "Big 6" energy companies had quoted to mend/replace the heating system but the cost was prohibitive. They had been offered a finance deal but refused as too expensive. They heard about the HIA from a building society they had approached about an equity release scheme.

The home was so cold that they did not have visitors to stay the night.

"She [their daughter] stayed once ad she said, "I'm not coming here no more"".

## What was done:

The immersion heater was removed, the boiler replaced and new electricity meter and upstairs radiator installed. They were very happy with the work that was done and the fact the whole house was now warm.

"Fantastic job, they were clean, they moved everything every day when they finished work, they were excellent".

However, they did struggle to understand how to work the new boiler

"We are still learning, there's all these little buttons there. I always think the more buttons there are the more things can go wrong".

Without HIA intervention they would not have been able to afford the work. They contributed £500 but had very little savings left.

"Afforded it ourselves? Impossible, not when you are on a pension".

#### What was the impact:

There was an immediate improvement in the warmth of the house. Mrs AB needed to get up in the night to ease the pain from her arthritis. She was now able to move around the home at night in the warmth, reducing the risk of falling. However, they did still like the window open in the bedroom at night and believed this was better for your health.

## "I couldn't sleep, I like my window open in the bedroom, I couldn't sleep with central heating on anyway".

The new heating meant they could "take the chill off" the home at night and when Mrs AB was moving around at night. Previously she had started sleeping on the settee so she could move more easily at night and not disturb her husband.

"It's had a big impact really, because like I said, the heat, we had no heating upstairs at all, so it's made a heck of a difference. I don' have to sleep on the settee any more".

The HIA interventions meant they could dry their washing more easily and the clothes in the bedroom didn't get damp.

They did have some worries regarding how to use the new equipment and the implications for the fuel bills this coming winter.

## Stage 2: Case Study 2 (Conducted via an interpreter)

## **Profile:**

Mr and Mrs CD are a couple in their 40's. They are a first generation Bangladeshi immigrant couple living in a Victorian mid-terrace property with their 15 year old son. Two adult daughters live nearby. Mr and Mrs CD speak very little English. Mr CD has diabetes, high blood pressure and kidney disease and many years of chronic ill health. They live on incapacity benefit. They have lived in the house for 30 years house and bought it from the council 22 years previously.

## **Problems:**

The house has never had working central heating. There was a gas fire installed 8 years previously but the only other heating in the house was portable convection heaters. The husband feels the cold because of his chronic health problems. He spends a lot of time in bed due to illness and trying to keep warm.

"He [Mr CD] uses duvets because he's always cold.... even in summertime he feels cold as well. He does feel it more, even when we're warm, he still feels cold" (Mr and Mrs CDs daughter)

They struggle financially and were also quite isolated because illness and language. They found it difficult to understand how to get help.

"Struggling, yeah. He [Mr CD] has everything to pay, it's very hard, eat and pay bills".

"How will they know that they're entitled for the stuff when it comes up"? (Mr and Mrs CDs daughter)

Not many people visited the house partly because it was cold.

"Not much visitors come. They said it was cold, they always said get central heating done, get central heating done, but they struggle with money and it was too hard". (Mr and Mrs CDs daughter)

#### What was done:

Mr and Mrs CD were introduced to the HIA by chance, through a friend. The HIA was nearby and they called in to assess the home. The HIA said they repaired the central heating boiler and services the gas fire to a cost of £340. Mr and Mrs CD were confused about what has actually been done and reported that they had had a new central heating system installed. They didn't really understand how it was funded.

## What was the impact:

The work was finally completed in May so they had not tested it through a winter. However as Mr CD felt the cold so badly, they had already experienced a benefit. They liked to put on the heating in wet cold weather and felt the house was much warmer.

They also found the new working boiler easy to use, where they had struggled to use it before.

"It's simple, the man showed her so she knows [how to work the heating]. (Mr and Mrs CDs daughter)

They were very happy with the work and the fact someone from the HIA could speak their language. It helped them understand what was happening, although there was still some confusion.

They were now worried about how much the heating would cost them now it was working. As they had never had a working heating system they had no idea how much the bill would be. This meant that they did not have the heating on for long periods of time.

"They're scared of the bill being too much" (Mr and Mrs CDs daughter)

## **Profile:**

Mr and Mrs EF are a retired couple aged 83 and 74 respectively. They live in an ex-council house, semi-detached with three bedrooms. MR EF had been working as a window cleaner up until 18 months previously. He had given up because of a heart condition and was now reliant on his wife.

"I have been looking after Frank since he came out of hospital because he can't do a lot really, he can't do any housework or anything. He gets out of breath when he starts doing things". (Mrs EF)

Since his heart diagnosis he had felt the cold a lot more.

"We have it on, in winter it's on all the time really, because Mr EF has to have it warm.

.....I usually turn it down at night time, but when it's bitterly cold I've left it on, just on low yeah". (Mrs EF)

Mrs EF had limited mobility due to arthritis and had previously had both hips replaced. She had recently fallen at home. They lived on their pension and had relied on his wage to supplement this. They struggled financially. One son lived with them but he was also on a low wage.

#### **Problems:**

The water heater was not working. This was separate from the central heating. They had no hot water for washing up, bathing or general hygiene. And relied on boiling kettles. Mrs EF was struggling to carry kettles of hot water up the stairs to the bathroom to wash. Mr EF was too frail to do this but Mrs EF was at risk of falling and scalding herself.

"I mean I had to do all this because Frank's not really supposed to go up and down stairs very much.... and I've got two hip replacements and such like". I(Mrs EF)

Someone had serviced the water heater and quoted £800 to mend it which was prohibitive.

There was a relatively new central heating boiler but no thermostatic radiator valves on the radiators.

#### What was done:

They were told about the HIA by someone advising them about pension credit. The advisor had given them a leaflet about the HIA.

"It was just by reading in this leaflet, because I'd never heard about [The HIA], and it's wonderful isn't it, I mean it's amazing. I mean we couldn't have afforded to have it done, so we'd have had to, I don't know we'd just have had to do without hot water and just boil the kettles or something".

"To know that we could get help financially was amazing. Well I don't know, I don't know, we couldn't get a loan out because we're not working or anything, we hadn't got enough saved up, so I don't really know, I don't know what would have happened".

## (Mrs EF)

A new water heater was installed and thermostatic radiator valves to all the radiators.

## What was the impact:

Mr and Mrs EF were immediately able to bath, wash and wash up in comfort and safety. The risk of scalds and falls was also reduced. Being able to wash up made reduced social isolation, as they felt able to have the grand children round at mealtimes.

The house was more comfortable and warm, but also increased wellbeing due to Mr EF's heart condition. They were expecting the bills to reduce because relying on kettles for hot water was expensive.

## **Profile:**

Mr GH is an 81 year old man living in an ex-council semi-detached house with three bedrooms. He and his wife had bought the house on a right-to-buy scheme. He has diabetes and vascular disease in his legs. His mobility in the house was limited, especially on stairs. He needed to pull himself up the stairs using the banister. He had fallen recently.

His wife died 20 years ago as did his granddaughter (aged 13). Since then both Mr GH and his daughter have struggled with their bereavement and his daughter has had long term mental health problems as a result.

A district nurse calls daily to check his blood sugar and give him his insulin. His only other support and social contact is a neighbour.

#### **Problems:**

The house had no central heating. Mr GH had relied on one gas fire in the living room and a few portable oil filled radiators, but these had all broken.

#### What was done:

Mr GH was referred to the HIA by a community group. A new central heating system was installed. Mr GH contributed £100.

## What was the impact:

He hadn't used the heating much because it wasn't winter. He described himself as a "Hot" person who doesn't need much heat, although he does feel the cold more now he is older.

"I worked outside for years so I'm a bit hardened to it. I was in the army and everything, so you harden yourself, a man hardens himself to it. It's cold of a night but it's alright" (Mr GH)

He has turned the thermostatic controls down.

He does find the house warmer now the central heating is installed, and is more comfortable moving around. He has less discomfort in his legs.

He didn't like the fact the piping and new boiler for the heating system weren't boxed in. He was worried that they were unsightly and would reduce the value of the house when passed on to his children after his death. Mr GH did struggle to understand who the HIA were, what work had been done and who to contact about any problems about the fitting or working of the heating system.

#### **Profile:**

Mrs IJ is an 80 year old woman who has lived for the last 48 years in a four bedroom, terraced house which she owns. It's an old house, over 200 years old. She has various chronic health problems including heart disease, and had a heart attack a few years previously. Mrs IJ has also fallen recently.

#### **Problems:**

The house is damp and has poor insulation. The roof has leaked in the past and left damage which she has struggled to afford to repair. The cellar has also flooded and the window frames were all rotten and draughty. The state of the house, the cold and damp had created much distress and worry in recent years.

"It's terrible. It's freezing because I'm just trying to save gas. They are telling you wrap up, they are telling you do this, keep one room, but what about the rest of your rooms, what about your bedroom where you're going to go into the night"? (Mrs IJ

Mrs IJ also found it hard to turn the radiators on. She worried about the cost of heating the home whilst living on a pension.

"Oh God! I cry, sometimes I cry because when I put in so much in gas, it's like which the government just give you a certain amount, and say that they give you £140 or, but you must live off that £140 and you have to pay electricity, you have to pay gas, you have to pay television, you have to buy food and plus life insurance, house insurance. It's like nothing"! (Mrs IJ)

#### What was done:

Mrs IJ has a nephew who works for an HIA in another area. He told her about the local HIA. She is confused about who actually came to see her, who did the work and what work was done. New windows were definitely fitted and paid for in full by the HIA. She is hoping to get help to get a new boiler this winter. Some maintenance was done to the radiators which mean they are easier to turn on and off and monitor the temperature. It's not clear who did this radiator maintenance or whether it was as a result of HIA referral.

#### What was the impact:

She feels much warmer in the house now, but also safer. She remains worried about how to pay her fuel bills.

**Profile:** Mrs KL is a 77 year old widow with multiple health problems including osteoporosis, diabetic, chronic respiratory problems, high blood pressure and heart failure. She is also Her husband had mitral valve disease, was partially sighted and partially sighted. Alzheimer's disease for 7 years prior to his death (he died 5 weeks before the interview but after the HIA intervention). She lives in a detached house. The HIA worker had said to the person doing the FILT WHS intervention:

"She's stressed, she's tired, she's up all night with a very sick man, because he had Alzheimer's and his heart muscle wasn't working, he had COPD and something else. He had a mitral valve replacement which wasn't doing its job properly, but it was the Alzheimer's I think.

Mrs KL had been extremely stressed due to her husband's condition and problems with the house. She was also increasingly worried about money and the deterioration of the house.

"I said to Mr KL there's things going wrong in this house that it's just falling around a bit, because I wasn't able to get, I don't go to work now, and we'd just had the roof done, the roof was leaking horrendously and that took all our savings. So I kept saying to L oh God I hope, we used to be running about with buckets and the electric lights were dicey because there are some in the roof but they didn't work. Well this guy came, looked at those, said oh my God, you've got raw ends here, look and he said look". (Mrs KL)

"I didn't have the money to have it [the heating] fixed and it would have taken a few hundred pounds. Yeah, we used to always put so much aside, but as he got ill and needed more care and I don't get my care free, as he needed more care so we watched our bits of savings disappear, as you do, you just do" (Mrs KL)

#### **Problems:**

The roof was leaking which had required the household savings to repair; the electric lights in the roof were hazardous with wiring exposed. The under floor heating was not working and they couldn't afford to mend it.

"Mr KL was so cold, he was so cold. He was sat and he was so cold because there's no radiator, and as you can see we have a big conservatory and there's no radiator there, and it's coming from the kitchen to the bedroom, it's just like being in an ice house.... For example that, that's been so cold out there you could see your breath. because that was the outside wall." (Mrs KL)

The lack of heating meant there was no heating to allow them to have a bath or wash properly because it was so cold. Also, Mr KL was confused and would open to door to strangers and wonder off if he opened the door himself. They also couldn't cook much or use the kitchen as it was so cold. They sometimes ate in bed to try and keep warm. Mrs KL had lost nine stone through worry and not eating properly.

The family had also complained that the house was cold but weren't in a position to help.

"I thought, I'll put another jumper on Les, put another jumper on him and then put a cardigan on him and we were wearing jumpers and cardigans and vests and all sorts of weird and wonderful things. And the family said that it was cold". (Mrs KL)

#### What was done.

Mrs KLs initial contact with the HIA was made through Social Service.

Since then she has had various works done through the HIA including the under floor heating being mended, an extra light (this was helpful because the respondent is partially sighted, so wasn't banging into things anymore), a hand rail that was hidden by the hedge to

make sure the house didn't stand out as having vulnerable old people living in it). This work would've cost £450 privately - which the respondent didn't have.

The HIA contact made a huge impact upon Mrs KL as she felt he was trustworthy, sympathetic, understood her and listened.

"He's really, really good, he's like a little angel for some of the old 'uns and I said yeah, he's been my little angel, I said he's been really, really good when I was absolutely stressed out over these damn tiles and the no heating. What's the matter sweetheart? You're going to the vets today, so just stop the crying. You're not having [problems] anymore, they've all gone. Yes, all gone". (Mrs KL)

## What was the impact:

There was immediate impact on their life in terms of comfort, wellbeing, warmth, safety, hygiene and nutrition.

"Well, we were cold and the warmth, the difference, we could sit in the kitchen and have a meal instead of sitting in bed and having it; how much of an impact is that?

Mr KL could have a shower and a bath. Well, he couldn't get in the bath, but his carer said we'll have to bring the thingy heater in, the gas heater in, she said because he can't have a shower in here, it's too cold.... it's huge and so that made a difference for me because I could shower in there". (Mrs KL)

"I do know that it made a difference to our wellbeing and Les was sitting at, Les only liked to eat at the table so he wasn't eating very well in the chair. He used to sit in the chair. Once we sat at the table he was different, because he likes things laid out properly with the salt and pepper and everything. There was less mess. We just sat down and ate, which was much better for us, but he was losing weight because he was not eating and the doctor organised a vitamin for him, but then I realised it wasn't really that, it was just we weren't sitting together at the table as a family. I would say that it improved our lives tremendously. It's got to do. If you're warm it improves your life..... certainly being cold affects your health. My diabetes wasn't settled because I wasn't eating properly and now I eat properly because it's warm because I'll sit in the kitchen and eat. Yeah, actually it's like a stone. When you throw it in a pond there's ripples that come out and that's exactly the ripple effect that having something like [the HIA] can have on the lives of people". (Mrs KL)

Mrs KL was very keen to pass on information about the impact the work had had on her and her husband before he died. She was also grateful for all the help in understanding how to work the heating properly.

"You could actually write down that it changed things quite a lot for the family, because she wasn't having to force her Alzheimic husband into clothes that he didn't want to wear. Because it was warm she felt it was comfortable for him and he did say it was warm, and he said I'm not going to have my cardi on today, I'm not having a cardi on today, am I? I said no darling you're not. You're going to be sat in the kitchen, have your breakfast, give you your tablets and then I think maybe a little snooze because he woke up at six, after they'd been to catheterise him, and then a little snooze and then we can watch telly together because it's going to be warm in the front room for the first time for bloody ever, because we can get the radiator on. And he did say to me once, it's very hot in here isn't it? I said yes, I know how to turn this down now so I can do it". (Mrs KL)

#### **Profile:**

Miss MN is 36 years old and a single mother of two young children. She lives in a 3 bedroom semi-detached house, which is owner occupied. She moved into their current home approximately seven years ago. The house windows are old and let draught in and some of the doors are old and wooden. The patio door is broken and lets the draught in too.

The family was generally in good health apart from the odd cough and cold.

#### **Problems:**

Miss MN's friend told her about the HIA. Miss MN then contacted them due to gaps in the windows letting draughts in. She thought she might be eligible for help. The HIA did a home visit to assess what could be done with regard to the windows and other energy efficiency concerns.

"It has been quite cold, but it's just because the windows are quite old and draughty." The doors, some of the doors are the old wooden doors rather than the uPVC, and obviously this door's broken, so that lets the draught in as well.... when it's cold you could literally blow-dry your own hair through the inside of the window, so it was pretty draughty".(Miss MN)

#### What was done:

Draught excluders were fitted to all the windows and the HIA attempted to repair the patio doors, but were unsuccessful. Since then they have returned to replace the old boiler with a combi-boiler. Mrs MN wasn't referred on for any other help.

The work was done quickly, efficiently. The HIA workers double checked she was happy with all the work before they left, clearing everything away. Miss MN didn't have to contribute towards having the draught excluders fitted, but she had to contribute £90 towards the cost of the new boiler.

## What was the impact:

The main benefit in terms of comfort, wellbeing and cost was from the new boiler.

"The house is a lot warmer; it's running a lot more economically". (Miss MN)

The combi-boiler had been fitted just before this winter so Miss MN and her children are able to experience the benefits in the colder months.

"It's brilliant, with two children knowing the house is going to be constantly at a nice temperature, it's not going to be bringing me bills that are astronomical" (Miss MN)

She expected the fuel bills to be lower.

"Before the house was dropping down to cold then you heat it all back up again, now it's staying at a steady, medium temperature". (Miss MN)

The draught excluders have stopped the cold air from coming in all the time. Whilst they have made a difference Miss MN said they don't fix the problem and felt that the windows ideally needed to be replaced as they were old, wooden and rotten. However, it did have some improvement and benefitted wellbeing.

"It has stopped the draught from being quite so unbearable.....it has made it warmer". (Miss MN)

As Miss MN works from home as child-minder, there was a benefit in terms of comfort and safety of the children, as well as making her work more secure. She had previously kept the children in her care in extra layers of clothes.

## 'It's just made everything a lot more comfortable'. (Miss MN)

It is too early to be sure what impact the interventions have on health because the colder months are only just approaching; however, there was an indication of improved mental wellbeing and peace of mind. This was partly because of comfort, partly the cost saving and also she had previously been constantly worried the boiler would break down.

"Certainly as a parent, peace of mind knowing that it's activated and it stays on all night and their a nice steady temperature.....Often their covers (bed) have been kicked off, it's just nice to know they're not going to get a cold because of it, they're not going to get poorly as a result of it".

"The relief of having it done is massive, especially before the winter". (Miss MN)

Miss MN anticipated that there would be health benefits and already noticed that prior to the HIA FILT WHS interventions:

"Coughs and colds were more prevalent, just purely because the central heating was having to be on 24 hours a day, to its maximum". (Miss MN)

#### **Profile:**

Mr OP is 72 years old man who lives in a 3 bedroom semi-detached house, which he owns. He lives with his wife. They moved into their current home in 2006, seven years previously. It had two storage heaters, which became less effective over the years. As a result Mr OP had bought calor gas heaters which required him to buy up to eight gas bottles every winter to keep the house warm. These were very expensive. Mr OP has diabetes. He and his wife were feeling the cold and having to wear layers around the house. Mr OP was feeling increasingly worried and worn down about this situation.

"We first bought [the house] in April 2006, it had storage heating which was basically two storage heaters in there, one small one here, one in the back room and just one on the landing. And we said we'd give it a try after purchasing the property with the storage heating, but over the years as you get a bit older it gradually got less effective for me and I started to feel the cold a bit more. In so much as I felt it was warm when you got up but by half past nine, ten o'clock in the morning that was your heat finished, and consequently we had to buy Calor gas heaters, and every winter I was buving between six and eight gas bottles to try and keep the place warm". (Mr OP)

## **Problems:**

Mr OP and his wife were struggling to heat the house with faulty storage heating and expensive calor gas heaters. He felt uneasy about asking for help as he didn't want to take 'something for nothing'. He continued to feel guilty about this.

He felt uneasy and guilty about taking up funds and services even though he was entitled to them. This was because he had never asked for anything he hadn't been able to work and pay for.

"Never claimed a penny in all my life". (Mr OP)

The storage heaters were ineffective,

"I used to sit there with jumper, coat, a blanket over my legs". (Mr OP)

His friend had told him about the HIA

## What was done:

The HIA did a home visit, and went through the household's financial situation. This first contact was good.

"[The HIA] were very warming, very helpful, there's no way they looked down on us that we were asking for a bit of assistance and anytime I phoned them they were very accommodating and very helpful and sort of took the pressure off that might have been building up". (Mr OP).

The old storage heaters were taken out and a new central heating system was installed by a contractor. An additional radiator was installed in the downstairs WC and in another room, at no additional cost.

Mr OP was proactive in obtaining three quotes. He encouraged the HIA to contact a local plumber to do the work. The HIA were responsive to his request. Getting a local plumber to do the work has had further benefit, for example, the plumber has been called out for a home visit to show Mr OP how to control the temperature of the new system. This might not have been possible had the work been contracted out to a business further afield.

The work was done quickly (over four days), with minimum disruption/mess and in time for the coming colder months

Mr OP has a basic idea of how the work was funded. He contributed £874 pounds from his small saving towards the work because he had to arrange for a gas supply to be put into the house. He wouldn't have been able to afford to have this work done without FILT assistance.

Mr OP was not referred on for any other help/advice. He was able to contact the person who did the work as it was a local contractor. This contact helped his peace of mind regarding working the new equipment.

"He did say he's only at the end of the phone. He lives quite local. He's always—he said don't worry about anything, I'm only at the end of a phone". (Mrs OP)

## What was the impact:

It took some time to get used to using the new heating system - the plumber had come out to show them. As a result Mr OP hadn't used the new heating system much since it was installed (July 13), but he intends to in the coming colder months. It was therefore difficult to estimate or measure the full impact of the work on his ability to control comfort in his home. However, some benefits had been experienced as a result of the FILT WHS interventions. Both Mr and Mrs OP now have access to warm water for baths and showers as, and when, required. Also Mr OP feels less anxious and stressed as well as more comfortable.

"I feel good about coming home and picking me paper up, in that I don't have to sit there and shiver in my coat" (Mr OP)

Being warmer has improved his wellbeing.

"Anything in life that takes pressure off and takes depression away, and things get you down, is going to be good for your wellbeing and everything". (Mr OP)

The changes in fuel bills will only become clear in the coming months, but Mr OP expects his bills to be the same, if not lower.

Both get out and about regularly and have visits from family. They now feel less anxious about having grandchildren around because previously they feared that they were at risk of burns from the old gas fire.

"They came over Saturday and, you know, my daughter-in-law had a look round and said it feels a bit more comfortable in here and, you know, when you've got the gas fire there the little lad used to run in and out, and we used to worry about them touching it something like that, you know. That worry's gone away. It all adds to your life, you know". (Mr OP)

Mr OP routinely sees his GP for his health conditions. The intervention has not changed his use of these services in any way.

## **Profile:**

Mrs QR is an 81 year old widow whose husband died three years ago. She has lived in her three bed bungalow for approximately 20 years. The home is now a bit run down and requires decoration and modernisation. There is a strong smell of damp and a huge crack in ceiling. She can't afford to have any maintenance work to improve the property and she also says she can't deal with the upheaval.

She has become increasingly isolated since her husband died. The neighbourhood isn't very friendly.

Mrs QR fell and broke her hip last year. She struggles to get around and do housework and shopping. Despite this she doesn't have a carer or cleaner. She also has had a recent medical history of pancreatitis, gall stones & septicaemia. Despite this NHS contact no one has noticed she lives in a cold, damp house.

#### **Problems:**

The Support Officer (SO) for the HIA had previously been a carer for Mrs QR and they had kept in touch. The SO had informed Mrs QR about the potential help from the HIA. She had called to see her and noticed that the property could be improved and made more energy efficient and comfortable. She asked if Mrs QR would be interested in having reflective radiator panels. Mrs QR was interested and also asked about a grab rail and a chain on the door to reduce risk of falling and improve personal safety.

#### What was done:

The SO was very friendly, helpful and responsive and she actioned all of Mrs A's needs.

Radiator reflective panels were fitted behind all the radiators, as well as none FILT WHS funded works i.e. the grab rail and door chain. The reflective panels were fitted within two weeks by someone Mrs QR knew. He also checked to see if the radiators needed bleeding and realised dirt had collected in the bottom of the radiator. Mrs A had to pay a plumber to rectify this. She ended up having new radiators fitted but not under the FILT WHS.

## What was the impact:

Mrs QR would probably never have asked or contacted the HIA if the Support Officer hadn't popped round for an informal home visit. She had no awareness of what she was entitled to in terms of help.

It is difficult for Mrs QR to identify any benefit from the FILT WHS interventions in terms of comfort, warmth or fuel cost as she ended up having new radiators.

"I can't notice a lot of difference....it's got to benefit me in some way. It might be warmer and the bills not quite as bad". (Mrs QR)

## **Profile:**

Mr ST is a 67 year old man who lives alone in a three bedroom semi-detached house. He has lived in this property for approximately 17 years. He has no problems with the house, apart from rising damp.

#### **Problems:**

The house has rising damp. The main problem was that old boiler was not very efficient, and rain was coming in through the wooden door. He had previously struggled to pay his fuel bills, more so since retiring. Mr ST was cutting back in other household expenses to help him to pay his fuel bills. For example he was burning plywood (free off-cuts) on the fire to avoid buying coal

"The window and door wanted replacing, and the boiler wanted replacing....It wasn't too bad as regards losing heat, but the rain used to drive in through the door because it was a wooden door, you know, and now it's a uPVC it's fine". (Mr ST)

An HIA Advisor told Mr W about HIA services as she lives next door.

## What was done:

The HIA did an assessment and informed Mr W that quotes would be obtained. He wasn't referred on to any other advice or assistance.

FILT WHS funded essential boiler work and the replacement of a window and door. He is generally pleased with how the work was done but did say some work was poor for example, the window architrave. He was able to sort this out himself. He has previous experience and expertise in this area, so was able to sort out problems himself, which other people wouldn't necessarily have been able to do.

The boiler work was done over two days, but Mr ST had to do some preparatory work in order for this to be done. As he had been in the building trade, so knew how to do this. He is disappointed about the standard of the pipe-work from the boiler, but intends to box this in himself.

The cost of the work was covered by FILT in full, but Mr ST couldn't remember the exact details about the funder

He is satisfied with the HIA contact and assistance

## What was the impact:

The work was done quickly (around April/May) a few weeks after the initial assessment. This means the installation is in time for the winter months.

The main benefits from Mr ST's perspective were:

'The fact that I got hot water as and when I need it and the fact that the back door doesn't let rain in and it's easy to keep clean' (Mr ST)

He is also aware that he has more control over heating and fuel use with the new boiler, even though he hasn't had the central heating on much.

"The settings are much more refined than the old boiler, so you can regulate it to suit". (Mr ST)

Mr ST has been provided with a couple of additional radiators within the FILT WHS funding. This has:

"Helped enormously....one was in the downstairs toilet which didn't have any heating - it was damn cold in there in winter and they renewed a leaking radiator in the bathroom". (Mr ST)

Whilst he hasn't experienced it yet, he expects the fuel bills to be cheaper due to having a more efficient boiler.

"It's a much more efficient boiler. So my gas bills are going to be lower, you know, because it's a combi". (Mr ST)

Also the UPVC door prevents heat from escaping and needs less maintenance.

"It's warmer because the double glazing unit is a thicker unit than was previously there". (Mr ST)

He expects the house to be warmer when his daughter and granddaughter visit.

Mr ST thinks there will be an improvement to his mental wellbeing with less worry.

"Mentally yes, because I know it's there [the boiler], it's going to see my lifetime ....and the door, it's a lot less maintenance to worry about" (Mr ST)

The benefits and comfort are particularly important for Mr ST because he rarely goes out.

"I like being at home. I'm not fussed about holidays...apart from the shopping; I've no reason to go anywhere". (Mr ST)

#### Profile:

Mrs UV lives alone in a three bed end Victorian terraced house. It is damp in the cellar but has had a damp proofing course done. She has diabetes and mobility problems that restrict how often she goes out. She relies on a stair lift. She does sometimes meet her sister but does little else socially. She takes regular medication for her nerves.

#### **Problems:**

Mrs UV initially contacted the HIA because she needed a stair lift fitted. She also had multiple problems with her home which was cold and damp. She recently had a new boiler fitted which her mum helped pay for. The state of her health and the house was making her depressed and she felt down and was anxious.

"Sometimes I can hardly walk and that with arthritis and that, but I'm getting there because them stairs are like that and I don't have to move, that's the finest thing now. Sometimes with the house and that, what's not been going, I think about packing it up and things, but you get through it don't you"? (Mrs UV)

#### What was done:

The HIA assessed Mrs UV's house and asked if she required radiator reflecting panels to improve the efficiency of the radiator. They also referred her for meals on wheels.

The worker was very friendly and helpful. Radiator reflection panels were fitted in several rooms including the kitchen. The work was done two weeks after assessment. There was no mess, and the workers were helpful.

"Well, I've got a stair lift and they [The HIA] were telling me things .....The lady that come she was very nice her, and she went it's a bit draughty there near windows, near doors". (Mrs UV)

In comparison she had been quite distressed when the new boiler was fitted. This was not FILT WHS but work she had paid for. The workmen had made quite a mess and she had struggled to understand what they were doing.

"Well, I had a great big damned hole where they took my boiler out and it looked a right mess. I cried me, after, I cried me after because nothing went right. It got me down, to tell you the truth". (Mrs UV)

Mrs UV didn't have to pay for the intervention and thought it had been paid for by the government.

## What was the impact:

Mrs UV intends to use the meals on wheels facility in the future. The help she received has allowed her to remain at home, rather than pursue a move into a bungalow. She felt the rooms did feel warmer but had also recently had a new boiler so wasn't sure if that was why.

"When heating comes on now it's lovely, at night, it's lovely and warm. Others I used to have to wrap up and because I was always cold. When you get older love you'll realise what I'm saying! It's terrible to be cold all the time". (Mrs UV)

She thought her fuel bills had reduced as she recently received some money back for over payment.

Mrs UV feels more comfortable in her home, and reports an improvement in her wellbeing as a result of improvements to her home, that is, both the new boiler and FILT WHS intervention (radiators reflective panels). The interventions haven't had an obvious impact on her health, although she feels less anxious. Her recent experience of having a new boiler fitted left her severely depressed because of the terrible state the workers created during and after the work she was visibly upset during the interview and tried hard not to break down. The fact the FILT WHS workers had been reliable and tidy was therefore important in terms of quality of service but also impact on her health.

## Stage 2: Case Study 12

#### **Profile:**

Mrs WX is a 93 years old woman who lives alone in a three bedroom terraced property. which is owner occupied. She has lived in her home for approximately 60 years. She is highly dependent on her son who is responsible for sorting out and arranging home repairs and improvements. Mrs WX has a poor memory and couldn't accurately recollect dates when the work was done. She has thyroid problems and she recently started to have pains in her legs; she takes steroids for this. She recently started to use a walking stick

Her younger son visits regularly and she rings him when she needs help.

#### **Problems:**

No problems with house were reported. It was generally warm. Mrs WX only uses the gas fire during winter; otherwise she relies on her central heating. She appears to have had a number of interventions (funded through various sources) such as new UPVC double glazing windows. It appears that her son has some link with HIAs via his occupation.

Mrs WX was approached by the HIA when her neighbour's chimney collapsed and some of the debris came into her home. The HIA came round immediately and cleaned and blocked off the gas fire/chimney area immediately.

#### What was done:

Mrs WX doesn't remember much about the HIA visit because her son sorted all the arrangements, although she recalled that the work was done quickly, without any mess. Mrs WX's gas fire was reinstalled and refitted. The HIA told Mrs WX that she would further benefit from having her gas fire reinstalled because they cemented all around the chimney as well. This saving her some money because it would've needed doing at some point.

She was not referred to any other advice or help

She didn't have to contribute towards the cost of the work.

#### What was the impact:

The having the gas fire fitted didn't make any difference to Mrs WX's health or wellbeing because she only ever used it during the winter months, as the house is generally warm. She hasn't had to do without the gas fire due to the timeliness of the work (the work undertaken during spring/summer).

She felt reassured that her sons would deal with the work created by the neighbours collapsed chimney. She was also unsure about whether her gas bills will be lower as she hasn't had a bill yet.

Having the gas fire fitted hasn't had any impact on her health or wellbeing but she expects to feel more comfortable when the colder weather comes.

#### Profile:

Mrs Y is a 79 years old woman who lives alone in a two bedroom semi-detached bungalow. She has lived in her current home for 58 years, which is owner occupied. Her family helps her to pay fuel bills. if she needs help. She has arthritis which causes mobility problems. Mrs Y recently fell at home. She tends not to go out much and relies on a neighbour for shopping and walking her dog.

#### **Problems:**

Mrs Y was unable to get in and out of the bath and relied on having a strip wash in the sink. She hated this, found it cold and unpleasant and didn't feel clean. The bathroom was draughty. It was affecting her wellbeing and causing her stress. Mrs Y wanted a shower put in her bathroom, but she had no faith in other plumbers. Her friend told her about the HIA. She had been worried about contacting a plumber because a friend had recently had plumbing work done and it had gone wrong and the workmen had made a mess.

#### What was done:

The HIA did a home assessment and asked her lots of questions. They were very friendly and put her at her ease. The work was done at the beginning of this year. The plumbers were very tidy. efficient and hard working.

"I couldn't say a wrong word about the lads I had in... I can't say I've had one person in my house I didn't like. They've all been very nice, very manly, and as I say these plumbers used to even make me a cup of tea....They explained everything to me before they did it" (Mrs Y)

The HIA replaced the bath with a wet room. They also fitted reflective radiator panels, draught excluders to the windows and a white bathroom suite. She contributed £300 towards the bathroom suite.

"I got a man that came out and put tin foil behind my radiators. He put some extra stuff around the window that opens in the kitchen, the one that the draught's all coming through". (Mrs Y)

Mrs Y thinks they referred her to a therapist who supports her with chair-based exercise. She is unsure whether this referral was through the HIA, but it did happen around the same time. She didn't have to contribute anything towards the wet room, draught excluders, and radiator panels.

## What was the impact:

Previously, she would dread going into the bathroom to have a wash but this has changed.

"Oh having this shower. It's lovely I can get out of bed in the morning. I can go in and put my shower on. Its electric shower, just put it on and go. I've got a seat that comes from the wall down and I just bring my seat down, have my shower and that saves me, you know, it's great.

It was, I think I used to dread going in the bathroom to get a wash. You know, you used to have to go in and stand at the sink and wash down with a flannel, you know. I used to dread it"! (Mrs Y)

The work has made a big difference to her wellbeing, as she really disliked having a strip wash and it made her feel uncomfortable.

## "I had a feeling I was beginning to smell" (Mrs Y)

Being able to have a shower herself with ease, whenever she likes, has made her feel more independent. She doesn't have to wait for her water to heat up anymore.

Mrs Y has not noticed any difference in fuel bills

## **Profile:**

Mrs Z Mrs V is a 67 year old woman who lives with her husband in a three bedroom terraced house, which is owner occupied. There are no problems with the house apart from it being cold during winter. She has emphysema and rheumatoid arthritis in her back. As a result she uses the NHS frequently, especially her GP. She had an infection related to her emphysema.

#### **Problems:**

Mrs Z finds the house cold in winter. The doors are old and let the draught in.

#### What was done:

The HIA contacted Mrs Z directly. She thinks they got her details from the Council because they previously fitted a stair lift in her home. The HIA did a home visit and assessed her needs. They were 'very friendly'. Although her main problem over the last three years has been with the doors, the HIA sent a plumber to fix a leaking radiator and they fitted reflective radiator panels. The work was done very quickly after referral. It only took a few days. Mrs Y thought they were very efficient.

"When they came out and put the stuff behind the radiators and. I had a leaky radiator in one of the bedrooms and they got a plumber out to do that". (Mrs Z)

She was told that the work was funded by HIA funds and she didn't have to contribute to the costs of the work.

## What was the impact:

The draught is still coming in through the doors, but Mrs Z thinks that they were irreparable due to the age of the doors.

"I think the doors, you know, they've moved; according to what the lads were saying the doors have moved, the hinges have gone - I mean they put new hinges on and moved it again but it really hasn't helped. It was sticking a lot, it doesn't stick anymore mind. But we still feel the draught through them doors". (Mrs Z)

She is unsure about the impact of the FILT WHS interventions on her health. However she and her husband do feel a lot warmer. Mrs Z said the radiators now get very hot and radiate heat more effectively.

"Well the radiators are, you know, they get really hot now and it does come into the house where I think they were going out the walls, you know". (Mrs Z)

The household felt the benefit immediately, especially because it was done during the colder months.

## "It's more comfortable to sit in now". (Mrs Z)

She is unsure what impact the interventions will have on her fuel bills as she hasn't had a winter bill yet.

## **Profile:**

Mrs AZ is an elderly woman who lives in a rural area. She finds the house very hard to heat and it never seems to get warm. Mrs AZ has diabetes, kidney failure and is in a wheelchair. She lives with her son but neither of them have a car so she finds it expensive to get around by taxi.

## **Problem:**

## The house was always cold

The heating system was old. They had single radiators that weren't sufficient to heat the house, especially the large sitting room.

"Oh I'm cold all the time, I mean the heating's been on since a long time this morning and I'm still freezing"

#### What was done:

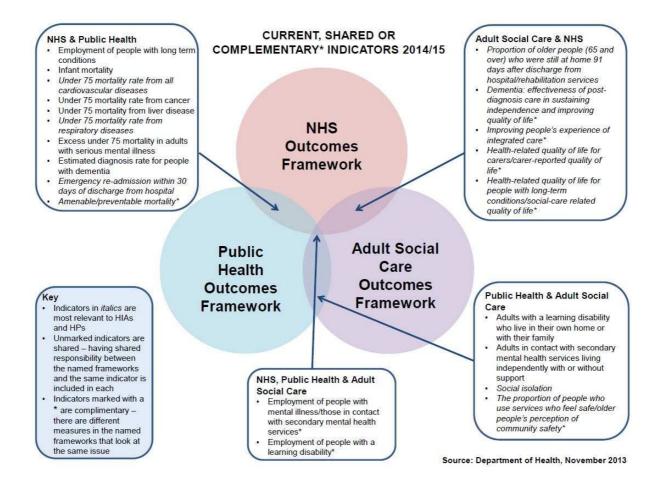
Someone came knocking at the door asking if they could help with her heating. She didn't know if they were knocking on everyone's door or just hers. She was happy with the work they did (reflective radiator panels). She didn't have to pay anything for the work.

## What was the impact:

She hasn't noticed any improvement yet. It was done in the summer but she still has the heating on in the summer. Mrs AZ would like help replacing a boiler but can't remember who did the work so she can't ask them.



# **Appendix 4: Outcome** Frameworks Diagram



The advantages and benefits of the FILT WHS could be evidenced in a range of outcome indicators across policy frameworks.