Warm Homes
Healthy People
Status Report 2018/19
Background and introduction

The Councils in Suffolk have been working as a consortium since 1994 to deliver cost effective solutions to address fuel poverty, energy efficiency, carbon reduction and health improvement programme. The projects delivered with a range of partners have relied on external funding to deliver practical solutions to thousands of households who have benefitted from loft insulation, cavity and external wall insulation, improved heating and other related support. Initially branded as Suffolk Energy Action Link (SEAL) the programme became Suffolk Warm Homes Healthy People in 2012 when the funding shifted to health priorities.

Warm Homes Healthy People (WHHP) is a Suffolk wide, multi-agency partnership project, including all the Suffolk Councils, Clinical Commissioning Groups (CCGs), Hospitals, Voluntary sector and communities.

The vision is to provide practical support, signposting and referrals to achieve the following:

- Raising awareness of fuel poverty, its prevalence and effects.
- Reduce the number and severity of households in fuel poverty
- Reduce cold home related ill health
- Reduce the number of excess winter deaths
- Reduce home energy consumption & energy bills
- Reduce carbon emissions by making homes more energy efficient

Core funding originates from annual contributions from each local authority and Public Health Suffolk. Other sources of external funding are essential to deliver solutions and have included Central Government, National Energy Action (NEA), Scottish Power, Affordable Warmth Solutions, Smart Energy GB and more recently the local CCGs. The nature of this stop start funding often means the exact offer to residents can change on a yearly basis.

WHHP delivery is managed by East Suffolk Council on behalf of all the Suffolk Councils. Suffolk County Council is a lead partner for the large funds including the Warm Homes Fund. Governance is jointly provided by Suffolk Housing Board and Suffolk Climate Change Partnership with regular reports to the Health and Wellbeing Board.

This report sets out the current situation in Suffolk in respect of the situation our residents are living in and the struggles they face to meet rising energy costs especially in rural areas; the impact this has on their health and wellbeing and then looks at the solutions evolving in a challenging environment to try and address these problems.

Information on historic programmes delivered by the project is available from whhp@eastsuffolk.gov.uk.
Across England it is estimated that 2.35 million households are living in fuel poverty. Under the new Government definition of fuel poverty, introduced in 2014, a low income high cost indicator is used. A household is considered to be living in fuel poverty if:

- They have fuel costs that are above national average
- And, were they to spend that amount, they would be left with a residual income below the official poverty line

There are 3 important elements in determining whether a household is fuel poor:

- Household income
- Household energy requirements (the amount needed to spend on fuel to keep warm)
- Fuel prices

An estimated 96% of fuel poor households live in poorly insulated homes, 21 million homes in the UK have Energy Performance Certificates below (EPC) band C.

On average a fuel poor household has to spend an extra £371 per year extra to stay warm (compared to an average household).

**Suffolk perspective**

Approx. 43,330 households are estimated to be living in fuel poverty in Suffolk. These figures represent the worst levels of fuel poverty in the East of England (see appendix A).

- Suffolk 12% of the population.
- Norfolk 9.5%,
- Essex 6.8%
- Cambridgeshire 7.5%

Within Suffolk, Mid Suffolk has the highest proportion of households in fuel poverty at 10.2 % and Ipswich has the highest estimated number of households living in fuel poverty at 5,239. For more detailed figures of fuel poverty in Suffolk by district and borough see Appendix A.

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1 End Fuel Poverty Coalition, 2017
**Health Impact**

Fuel poverty can lead to significant ill health and this manifests itself, at the extreme end, in excess winter deaths (EWD); defined as the difference between the number of deaths which occurred in winter (December to March) and number of deaths during the preceding four months (August to November) and the subsequent four months (April to July).

In the 2016 to 2017 winter period, (latest available ONS figures) there were an estimated 34,300 EWD in England and Wales. All of the English regions observed significant increases in the excess winter mortality index between winter periods 2015/16 and 2016/17.

Most excess winter deaths and illnesses are caused by respiratory and cardiovascular problems during moderate outdoor winter temperatures of 4–8°C depending on the region. The World Health Organisation (WHO) estimate at least 30% of excess winter deaths can be directly attributed to cold homes (WHO, 2011).

Cold homes are currently a bigger killer across the UK than road traffic accidents, alcohol and drug usage combined. Furthermore, for each excess winter death there are on average 8 hospital admissions.

The elderly have a much higher winter mortality rate with 56% of cold weather related deaths coming from those over the age of 85, a further 27% of cold related deaths were in people aged 75 – 84.  

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2 Office of National Statistics, 2013/14  
3 National Energy Action, 2015
**The Suffolk Picture**

In 2016/17, Public Health England recorded there were 557 excess winter deaths; an increase of 243 EWD on previous year. Approximately 167 deaths can be **directly attributed** to living in a cold home. Figure 3 shows the number of excess winter deaths in Suffolk from 2013 to 2017.

Additionally National Energy Action (NEA) has estimated that for every excess winter death there is an average of 8 hospital admissions. This means the hospitals that serve Suffolk saw an estimated 4456 avoidable hospital admissions attributed to their patients homes being too cold. This is a 1944 increase from the previous year.

Longer term data from Public Health England shows that between 2013 and 2017 there were 1853 excess winter deaths in Suffolk, so up to 14,000 hospital admissions relating to cold homes. Of these deaths, WHO would consider 555 as being directly attributed to the patients living in homes that were too cold. Further information in Appendix B.
The Challenges

Rural issues

Rural poverty is hidden poverty, as explored in the Suffolk Community Foundation Report “Hidden Needs”. Any project aiming to reach rural residents who could benefit from funding, faces the challenge of finding and engaging with those residents. Often, but not exclusively, they are older residents; digital channels, utilised for so much mass marketing, may not be appropriate; literacy may be an issue; disconnected communities and loss of local shops, bus services and facilities, all add to the challenges.

Expensive fuel

Suffolk has an estimated 136,129 households off the gas grid, that’s 39% of the total number of homes in Suffolk.

Map 1 below shows the percentage of households off the gas distribution network, in Suffolk. The number and percentage of off gas households in Suffolk is shown by individual district and borough in appendix C.

Map 1. Percentage of homes in Suffolk off the gas grid.
National Energy Action’s “In From The Cold” report highlights the challenges face by households off the gas grid:

- Off gas households are more likely to be in severe fuel poverty: because they heat their homes with potentially more expensive fuels such as electricity, fuel poor households off the gas grid experience, on average, excess fuel costs of £670 per year, more than double the average fuel poverty gap of the on-gas fuel poor (£302).

- Ofgem (2015c) found households that use electric heating tend to be on a lower income, with around a third in England having incomes of less than £14,500.

- The worst properties are more likely to be located off the gas grid: 70% of F/G rated fuel poor properties (the least energy efficient housing) are off-gas. Over 70% of F/G properties have expensive and hard to treat solid walls and, on average, these homes face excess fuel costs of up to £1,345 per year. This is more than triple the average fuel poverty gap across A to D rated properties.

- Off-gas properties are more likely to be located in rural areas: the extent of off gas properties increases with increased settlement dispersal, with only around 5% of urban areas off-gas (Baker et al., 2008).

- Fuel poverty is more prevalent in rural locations than urban areas and rural households face a number of other pressures, including declining service provision and reduced employment opportunities.
Goals

Warm Homes Healthy People strives to:

- Reduce ill health due to cold homes.
- Reduce pressure on the health and social care system.
- Make the homes of our clients more energy efficient.
- Reduce energy costs and alleviating fuel poverty.
- Contribute to carbon reduction /climate change targets.
- Ensure our client’s homes have suitable heating.
- Provide advice and signposting to a range of related services.

These outcomes can be visualised as:

- Energy advice
- More energy efficient home
- Lower energy bills
- Decreased carbon emissions
- Client supported to adequately heat their home
- Increased health & wellbeing
- Decreased excess winter deaths
  Decreased hospital admissions, re-admissions and delayed discharge
  Less pressure on local health and social care
General Support - Helpline

WHHP has a local helpline and received 2927 phone calls over the year 2018/19, averaging 240 calls per month. Of these over 800 were requests or referrals for help. Referrals came from a wide range of sources.

Appendix D gives the breakdown of the caseload dealt with by the project by referrer, client profile, and outcome.

Home Energy Surveys

A key core service is the home energy survey which we have established as the best way to form a supporting link with our residents, identify problems they may not be aware of and find solutions and reassure them of the legitimacy of the project through local authority endorsement.

Our 10 surveyors across Suffolk carried out 344 surveys.

<table>
<thead>
<tr>
<th>Local Authority</th>
<th>Number of Surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Babergh District Council</td>
<td>23</td>
</tr>
<tr>
<td>Forest Heath District Council</td>
<td>13</td>
</tr>
<tr>
<td>Ipswich Borough Council</td>
<td>39</td>
</tr>
<tr>
<td>Mid Suffolk District Council</td>
<td>33</td>
</tr>
<tr>
<td>St Edmundsbury Borough Council</td>
<td>16</td>
</tr>
<tr>
<td>Suffolk Coastal District Council</td>
<td>25</td>
</tr>
<tr>
<td>Waveney District Council</td>
<td>195</td>
</tr>
</tbody>
</table>

Emergency fuel payments

In Suffolk elderly residents who receive a winter fuel payment but don’t need it are able to donate it to those that do. Suffolk Community Foundation led the campaign in partnership with Ipswich Citizens Advice, Hopkins Homes, The East Anglian Daily Times, Suffolk County Council, Ipswich Town Football Club, East of England CO-OP, Ipswich Building Society, Rural Coffee Caravan and Warm Homes Healthy People. This winter was the 8th year running, and £125,000 was raised by the project. This resulted in over 636 fuel payments being awarded to those over the age of 63, totalling £66,211.42. Residents who otherwise wouldn’t have been able to adequately heat their home.

Warm Homes Healthy People awarded 39 fuel payments to households comprising younger people, totalling £6095.27.
**Summary:**

Warm Homes Fund from Affordable Warmth Solutions, enabling the installation of first time gas and oil central heating systems.  **£4.3M**

NEAs Warm and Healthy Homes fund to replace boilers for clients with health conditions finished in 2018. Since then individual bids have had to be made client by client to Npower’s Health Through Warmth fund, accessed through the Foundations Independent Living Trust. Over  **£500k**

NEAs Warm and Safe at Home Fund (WASH) in a project we called Reducing Avoidable Discharge Delays (RADD). This fund enabled us to assist hospital patients with any heating measures leading to quicker discharge or admission prevention.  **£10k**

**Details of these funds are provided below and on the next page:**

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**Affordable Warmth Solutions – Warm Homes Fund**

The Warm Homes Fund (WHF) of £150m fund was established by National Grid using part of the proceeds from the sale of the company’s majority stake in its gas distribution business. It will fund the installation of affordable heating solutions in fuel poor households which don’t use mains gas as their primary source of heat.

With Suffolk County Council as the lead authority, the consortium of Suffolk Councils was successful in securing £4.3 million, for a project running from 2017 to 2021 designed to install over 500 first time central heating systems.

**Progress: To end of March 2019 94 gas central heating installations have been completed and 14 oil systems.**

This project will enable us to make a practical, long lasting difference to improve residents living conditions and make their homes more affordable to heat.
National Energy Action’s Warm and Healthy Homes Fund (WHHF) 2017/18

Funding for those with long term health conditions

The Consortium had secured £375,000 of funding under this initiative in 2017 (including a £50,000 match fund from Public Health Suffolk), and was again selected as a delivery partner for a further award of £116,000 in late 2017. With £13,000 of match funding and £5424 of charitable funding an additional 40 replacement boilers were installed for vulnerable households.

Table detailing NEA funding and associated measures delivered in 2017/18

<table>
<thead>
<tr>
<th>Total NEA Funding</th>
<th>WHHP Match Funding</th>
<th>Charitable Funding</th>
<th>Boilers Installed</th>
<th>Boilers Repaired</th>
<th>L.I</th>
<th>C.W.I</th>
<th>D.P</th>
</tr>
</thead>
<tbody>
<tr>
<td>£116,000</td>
<td>£13,000</td>
<td>£5400</td>
<td>40</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

L.I – Loft Insulation      C.W.I – Cavity wall insulation   D.P - Draught proofing

The £10k funding can be used to assist hospital patients with:

• Fuel payments, including heating oil.
• Engineer call out fee, to diagnose heating faults
• Small heating system repairs
• Loan heaters

The fund will be ongoing to support any patients in need of intervention.
Health services are understandably people focused. Fuel poverty and energy projects are inevitably property focused. Joining these two linked issues is a nationally recognised challenge.

Suffolk Public Health funds a full-time Health Liaison manager to build these links. The post holder has achieved considerable success, being awarded honorary contracts in two Suffolk Hospitals.

**Highlights include:**

- Research project with East Coast Community Health to evaluate the health impact of warm homes interventions. *See appendix E*

  One of the favourite quotes

  “...it was freezing, it was an absolute icebox in there, since these radiators have been installed, it is hard to say how much of an improvement, oh it’s unbelievable”

- Work on Cardiac and Respiratory wards, to promote the support WHHP offers as early as possible after admission. By doing this the risk of any delay once the person is medical optimised is greatly reduced.

- Weekly winter visits to Ipswich and West Suffolk Hospital Discharge Planning Teams to pick up stranded patients and intervene to deliver heating solutions so they could go home.

- Added Key safe installations to offer to support earlier discharge of vulnerable patients. 56 were fitted the same day, or the day after referral.

- Distribution of winter warmth packs containing a hat, gloves, scarf, hot water bottle, thermometer and UK Power Networks power cut pack.

- Giving out Winter Warmth Packs at Ipswich Hospital 2018

- Team Invited to the House of Lords

- Warm Homes Healthy People Administrator Lisa Collings wins Heat Hero Award
Next steps

Work with Health

Transformation funding has provided the opportunity to expand the role of WHHP within hospitals and the community; launched in Ipswich and East area the Stepping Home pilot is developing new referral routes to address housing related causes of discharge delay.

(NB: In Sept 2019 the project will be extended into West Suffolk)

WHHP role to extend to James Paget Hospital in South Norfolk. Talks are already underway to arrange an honorary contract for WHHP HLM.

Funding

The Warm Homes Fund runs for the next two years and gives excellent capacity to be able to install first time central heating. However, there is currently a gap in funding for those requiring boiler replacements. Future work will focus on securing some form of boiler funding for those with long term health conditions.

Additional funding opportunities are being explored in partnership with Groundworks.

Promotion of WHHP

A short film was produced that highlight the work of WHHP and the impact of intervention on householders. Health partners from both Ipswich and West Suffolk Hospital were interviewed around the effect of our partnership on hospital patients and the system as a whole.

Click here to view.
Appendices

Appendix A - Number of households in fuel poverty

Estimated number of households in fuel poverty by county (data from the Department for Business, Energy & Industrial Strategy (BEIS), 2017)

<table>
<thead>
<tr>
<th>County</th>
<th>Estimated Number of Households</th>
<th>Estimated number of households in fuel poverty</th>
<th>Proportion in fuel poverty (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suffolk</td>
<td>321,092</td>
<td>43,330</td>
<td>12</td>
</tr>
<tr>
<td>Norfolk</td>
<td>384,390</td>
<td>36,389</td>
<td>9.5</td>
</tr>
<tr>
<td>Essex</td>
<td>600,922</td>
<td>40,874</td>
<td>6.8</td>
</tr>
<tr>
<td>Cambs</td>
<td>259,373</td>
<td>19,544</td>
<td>7.5</td>
</tr>
</tbody>
</table>

Estimated number of households in fuel poverty in Suffolk, broken down into district & borough (BEIS sub regional fuel poverty data, 2017)

<table>
<thead>
<tr>
<th>District/ Borough</th>
<th>Estimated number of households</th>
<th>Estimated number of households in fuel poverty</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Babergh</td>
<td>38,826</td>
<td>3,737</td>
<td>9.6</td>
</tr>
<tr>
<td>Forest Heath</td>
<td>26,191</td>
<td>2,265</td>
<td>8.6</td>
</tr>
<tr>
<td>Ipswich</td>
<td>59,136</td>
<td>5,239</td>
<td>8.9</td>
</tr>
<tr>
<td>Mid Suffolk</td>
<td>41,582</td>
<td>4,258</td>
<td>10.2</td>
</tr>
<tr>
<td>St Edmundsbury</td>
<td>47,324</td>
<td>4,070</td>
<td>8.6</td>
</tr>
<tr>
<td>Suffolk Coastal</td>
<td>55,416</td>
<td>4,818</td>
<td>8.7</td>
</tr>
<tr>
<td>Waveney</td>
<td>52,617</td>
<td>4,919</td>
<td>9.3</td>
</tr>
</tbody>
</table>

Estimated proportion of households in fuel poverty in Suffolk
# Excess winter deaths index for East of England, 3 years, all ages.
August 2014 - July 2017

<table>
<thead>
<tr>
<th>Area</th>
<th>Recent Trend</th>
<th>Count</th>
<th>Value</th>
<th>95% Lower CI</th>
<th>95% Upper CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>-</td>
<td>97,016</td>
<td>21.1</td>
<td>20.7</td>
<td>21.5</td>
</tr>
<tr>
<td>East of England region</td>
<td>-</td>
<td>11,498</td>
<td>21.9</td>
<td>20.7</td>
<td>23.1</td>
</tr>
<tr>
<td>Bedford</td>
<td>-</td>
<td>365</td>
<td>27.7</td>
<td>20.1</td>
<td>35.7</td>
</tr>
<tr>
<td>Cambridgeshire</td>
<td>-</td>
<td>973</td>
<td>19.3</td>
<td>15.6</td>
<td>23.2</td>
</tr>
<tr>
<td>Central Bedfordshire</td>
<td>-</td>
<td>343</td>
<td>17.9</td>
<td>11.9</td>
<td>24.2</td>
</tr>
<tr>
<td>Essex</td>
<td>-</td>
<td>3,078</td>
<td>23.3</td>
<td>20.9</td>
<td>25.7</td>
</tr>
<tr>
<td>Hertfordshire</td>
<td>-</td>
<td>2,165</td>
<td>24.4</td>
<td>21.5</td>
<td>27.4</td>
</tr>
<tr>
<td>Luton</td>
<td>-</td>
<td>241</td>
<td>17.3</td>
<td>10.4</td>
<td>24.7</td>
</tr>
<tr>
<td>Norfolk</td>
<td>-</td>
<td>1,746</td>
<td>18.8</td>
<td>16.0</td>
<td>21.6</td>
</tr>
<tr>
<td>Peterborough</td>
<td>-</td>
<td>277</td>
<td>18.7</td>
<td>11.9</td>
<td>26.0</td>
</tr>
<tr>
<td>Southend-on-sea</td>
<td>-</td>
<td>476</td>
<td>27.0</td>
<td>20.4</td>
<td>33.9</td>
</tr>
<tr>
<td>Suffolk</td>
<td>-</td>
<td>1,621</td>
<td>22.7</td>
<td>19.5</td>
<td>26.1</td>
</tr>
<tr>
<td>Thurrock</td>
<td>-</td>
<td>215</td>
<td>18.4</td>
<td>10.8</td>
<td>26.6</td>
</tr>
</tbody>
</table>
### Table showing percentage of off gas household in Suffolk

<table>
<thead>
<tr>
<th>District/Borough</th>
<th>Total number of properties</th>
<th>Number of properties off gas</th>
<th>Percentage off gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ipswich</td>
<td>62,048</td>
<td>14,333</td>
<td>23.1</td>
</tr>
<tr>
<td>East Suffolk</td>
<td>119,351</td>
<td>42,940</td>
<td>36</td>
</tr>
<tr>
<td>Mid Suffolk &amp; Babergh</td>
<td>84,167</td>
<td>45,405</td>
<td>53</td>
</tr>
<tr>
<td>West Suffolk</td>
<td>79,378</td>
<td>33,457</td>
<td>42</td>
</tr>
</tbody>
</table>

### Proportion of households off the gas grid in Suffolk

![Bar chart showing proportion of households off the gas grid in Suffolk](chart.png)
Appendix D - Warm Homes Healthy People Caseload Breakdown

Our Clients 2018-19

Health Condition

Referral Origin

Client Age

Client Tenure

Support Given to West Suffolk and Ipswich Hospital Patients 2018/19

<table>
<thead>
<tr>
<th></th>
<th>Loan Heaters</th>
<th>Fuel Payments</th>
<th>Boiler Repairs &amp; Replacements</th>
<th>Heating System Installs</th>
<th>Key safes</th>
<th>Other Assistance</th>
<th>Estimated Bed Days Saved</th>
<th>Approx Savings to Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ipswich Hospital</td>
<td>10</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>56</td>
<td>4</td>
<td>125</td>
<td>£50,000</td>
</tr>
<tr>
<td>West Suffolk Hospital</td>
<td>7</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>N/A</td>
<td>3</td>
<td>84</td>
<td>£33,600</td>
</tr>
<tr>
<td>Norfolk and Norwich Hospital</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>£2,800</td>
</tr>
</tbody>
</table>
In 2016 WHHP commissioned a bold and innovative research project was started to help evaluate the impact of WHHP project interventions on the health of householders across Suffolk. In partnership with East Coast Community Healthcare and University Campus Suffolk data collecting started to assess the impact of project interventions on client health and wellbeing.

Participants were asked to complete a health questionnaire (an example can be found in Appendix D) before either a first time central heating system, or boiler replacement was installed, and a year after.

In addition to this ten participants were randomly selected to complete a semi-structured interview, in order to gather more qualitative data on the impact of the heating intervention. The semi-structured interview questions are shown in Appendix E.

The data collected highlighted trends showing that post heating intervention participants had better mobility, more social interaction and felt a slower decline in health (although none of these differences were statistically significant).

The semi-structured interviews were more useful in establishing an idea of the impact of project intervention. Common themes from interviews were the following;

Most participants experienced worry and anxiety that they were unable to heat their homes to stay warm enough and healthy, and reduce any impact on their long term health conditions.

“Not being able to warm your home...it increases the anxiety, if you know, you cannot make the house warm, so the relief of, the relief reduces the anxiety and lifts mood definitely”

“It was very depressing it was...it was um...in some ways it is horrible to be in..very depressing, this sort of this time of year winter when temperatures used to really drop, it was unbearable. I would stay in the bedroom with an electric heater, hardly come into my living room it was that cold”

Participants were often resorting to extreme measures to stay warm.

“So it was like, lots of hot water bottles and blankets, and layers of clothes and snuggled up close together, you know just me and my children, absolutely freezing. Or going to bed a great deal earlier, just to be warm”

“A huge difference, psychically and mentally...I look forward to coming home now when it is, you know, when it gets cold outside I look forward to coming home and getting warm again, never could do that before”
“...with the storage heaters...they come on at midnight...and they go off at seven in the morning...well the place is...absolutely brilliant...but before 8 o'clock...the whole place is freezing cold...we then had to turn to the fire...burning anything from wood to coal”

Participants also highlighted the impact the central heating had on their energy bills,

“...this heating has...saved me big time, compared to what it used to be, because it was a struggle with the storage heaters, they are expensive to run”

“The house is warmer, I feel warmer, I am sleeping better, because I am not cold, I don’t wake up cold, and I do not have to wrap myself in socks, gloves, a hat and blanket anymore”

All participants strongly felt the heating had a positive impact on their health and wellbeing.

“...it was freezing, it was an absolute icebox in there, since these radiators have been installed, it is hard to say how much of an improvement, oh it’s unbelievable”

“...It is a godsend, honestly...and I could not be more happy with it”

In addition, we asked participant’s GP surgeries for data related to hospital admissions, A&E attendances and other cases of the participants presenting to the health care system. Results showed no significant difference in the number of times the participants needed to access healthcare. This could be explained in part by the relatively short length of the study, only being a year on average from point of intervention and the small sample size.

The full project evaluation report can be found in Appendix F.
SF36 Health Questionnaire

**INSTRUCTIONS:** This set of questions asks for your views about your health. This information will help keep track of how you feel and how well you are able to do your usual activities. Answer every question by marking the answer as indicated. If you are unsure about how to answer a question please give the best answer you can.

1. In general, would you say your health is: (Please tick one box.)
   - [ ] Excellent
   - [ ] Very Good
   - [ ] Good
   - [ ] Fair
   - [ ] Poor

2. Compared to one year ago, how would you rate your health in general now? (Please tick one box.)
   - [ ] Much better than one year ago
   - [ ] Somewhat better now than one year ago
   - [ ] About the same as one year ago
   - [ ] Somewhat worse now than one year ago
   - [ ] Much worse now than one year ago

3. The following questions are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much? (Please circle one number on each line.)

<table>
<thead>
<tr>
<th>Activities</th>
<th>Yes, Limited A Lot</th>
<th>Yes, Limited A Little</th>
<th>Not Limited At All</th>
</tr>
</thead>
<tbody>
<tr>
<td>3(a) Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3(b) Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3(c) Lifting or carrying groceries</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3(d) Climbing several flights of stairs</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3(e) Climbing one flight of stairs</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3(f) Bending, kneeling, or stooping</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3(g) Walking more than a mile</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3(h) Walking several blocks</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3(i) Walking one block</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3(j) Bathing or dressing yourself</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

4. During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of your physical health? (Please circle one number on each line.)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>4(a) Cut down on the amount of time you spent on work or other activities</td>
<td>1</td>
</tr>
<tr>
<td>4(b) Accomplished less than you would like</td>
<td>1</td>
</tr>
<tr>
<td>4(c) Were limited in the kind of work or other activities</td>
<td>1</td>
</tr>
<tr>
<td>4(d) Had difficulty performing the work or other activities (for example, it took extra effort)</td>
<td>1</td>
</tr>
</tbody>
</table>

5. During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (e.g. feeling depressed or anxious)? (Please circle one number on each line.)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>5(a) Cut down on the amount of time you spent on work or other activities</td>
<td>1</td>
</tr>
<tr>
<td>5(b) Accomplished less than you would like</td>
<td>1</td>
</tr>
<tr>
<td>5(c) Didn’t do work or other activities as carefully as usual</td>
<td>1</td>
</tr>
</tbody>
</table>
6. During the past 4 weeks, to what extent have your physical health or emotional problems interfered with your normal social activities with family, friends, neighbours, or groups? (Please tick one box.)
   Not at all  □
   Slightly  □
   Moderately  □
   Quite a bit  □
   Extremely  □

7. How much physical pain have you had during the past 4 weeks? (Please tick one box.)
   None  □
   Very mild  □
   Mild  □
   Moderate  □
   Very Severe  □

8. During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)? (Please tick one box.)
   Not at all  □
   A little bit  □
   Moderately  □
   Quite a bit  □
   Extremely  □

9. These questions are about how you feel and how things have been with you during the past 4 weeks. Please give the one answer that is closest to the way you have been feeling for each item.
   (Please circle one number on each line.)
   All of the Time  Most of the Time  A Good Bit of the Time  Some of the Time  A Little of the Time  None of the Time

   9(a) Did you feel full of life? 1 2 3 4 5 6
   9(b) Have you been a very nervous person? 1 2 3 4 5 6
   9(c) Have you felt down in the dumps that nothing could cheer you up? 1 2 3 4 5 6
   9(d) Have you felt calm and peaceful? 1 2 3 4 5 6
   9(e) Did you have a lot of energy? 1 2 3 4 5 6
   9(f) Have you felt downhearted and blue? 1 2 3 4 5 6
   9(g) Did you feel worn out? 1 2 3 4 5 6
   9(h) Have you been a happy person? 1 2 3 4 5 6
   9(i) Did you feel tired? 1 2 3 4 5 6

10. During the past 4 weeks, how much of the time have your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives etc.)? (Please tick one box.)
   All of the time  □
   Most of the time  □
   Some of the time  □
   A little of the time  □
   None of the time  □

11. How TRUE or FALSE is each of the following statements for you?
   (Please circle one number on each line.)
   Definitely True  Mostly True  Don't Know  Mostly False  Definitely False

   11(a) I seem to get sick a little easier than other people 1 2 3 4 5
   11(b) I am as healthy as anybody I know 1 2 3 4 5
   11(c) I expect my health to get worse 1 2 3 4 5
   11(d) My health is excellent 1 2 3 4 5

Thank You!
Appendix F - Semi-structured interview used for project evaluation

Warmer Homes Draft Semi-structured Interview Questions

Format: 1:1 semi-structured interview lasting approximately 30 – 40 minutes

This evaluation was designed around:

1. The success criteria identified by Suffolk Councils in their bid for funding for this Intervention. These were to:

   - Reduce fuel poverty and provide warmer homes that are more comfortable and affordable to heat
   - Reduce cold-related morbidity and mortality
   - Improve health and wellbeing
   - Reduce pressure on health and social care services (particularly in winter); and
   - Provide wider social, economic, environmental and other benefits for both households and communities.

2. Results of the initial SF36 questionnaire analysis

The stated objectives of this evaluation are:

<table>
<thead>
<tr>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Objective</strong></td>
</tr>
<tr>
<td>To measure the effect on the health and wellbeing of the target population living in Suffolk nine months following the introduction of heating and/or insulation</td>
</tr>
<tr>
<td><strong>Secondary Objective 1</strong></td>
</tr>
<tr>
<td>To measure the number of health care professionals visits to this population of patients prior to and post implementation of the heating initiative</td>
</tr>
<tr>
<td><strong>Secondary Objective 2</strong></td>
</tr>
<tr>
<td>To evaluate the at the number of acute hospital admission or readmissions pre Vs post the project</td>
</tr>
<tr>
<td><strong>Secondary Objective 3</strong></td>
</tr>
<tr>
<td>To evaluate the wider social, environmental and economic impact of the intervention</td>
</tr>
</tbody>
</table>

The interview structure and questions are based upon the above objectives, and have been guided by the themes identified from the initial SF36 analysis
Draft questions:

Setting background & developing rapport:

• How long have you been living in this house?
• What improvements have been made to your home by the Warmer Homes Team?
• In your opinion, has this been a worthwhile project?
  ◊ Follow up if indicated: Why do you think that?

Health impact:

• You have now had the improvements made to your home. Before these were completed, do you think that your health was affected by living in a colder home?
  ◊ Follow up if indicated:
    • If yes:
      • In what way?
      • Did this affect your ability to do your daily activities (give examples: walking, climbing stairs, bathing)
    • If no: Why was this?

• Some people have told us that they have noticed improvements in their health as a result of having a warmer home. Have the changes to your home made any difference to your health?
  ◊ Follow up if indicated:
    • If yes:
      • What are the main health differences that you have noticed since having the improvements made to your home?
    • If no:
      • Why is this?
      • Do you feel your health was a problem to you before the changes were made to your home?

• Have you noticed any differences in your own energy or activity levels since having the improvements made to your home?
  ◊ Follow up if indicated:
    • If yes:
      • What sort of things are you managing to do, or finding it easier to do now these changes have been made to your home?
      • Do you think you have more energy and are accomplishing more because you now have a warmer home, or have other things affected this?
    • If no:
      • Why is this?
      • Do you feel your energy and activity levels were good before the improvements were made to your home?
Some people have told us that having a warmer home has made them feel brighter in themselves. Have you noticed any difference in your mood since these improvements have been made to your home?

◊ Follow up if indicated:
  - If yes:
    - How has your mood changed since these improvements have been made to your home?
    - Do you feel the changes to your home have been responsible for these changes? Why is this?
  - If no:
    - Why is this?
    - Do you feel that low mood was an issue for you before the changes were made to your home?

Do you expect your health to change over the next few years?

◊ Follow up if indicated:
  - If yes:
    - Do you expect the change to be for the better or for the worse?
    - Will the changes that have been made to your home affect this?
    - In what way?

Use of Health Resources:

Some other projects have found that when people live in a warmer home, then they don't need to see a Doctor or Nurse quite so often. Have you noticed any difference in your need to access the Health Service since these improvements have been made to your home?

◊ Follow up if indicated:
  - If yes:
    - In what way has your use of Health Services changed since these improvements have been made to your home?
    - Do you feel the changes to your home have been responsible for these changes?
    - Why is this?
  - If no: Why is this?

Economic impact:

As well as making your home warmer, modern heating & insulation can sometimes save on heating bills too. Do you think the improvements to your home are saving you money?

◊ Follow up if indicated:
  - If yes: What difference are these savings making to you?
  - If no: Why is this?

Other:

- Is there anything else you would like to tell me about your experiences of this project?