Public Health England

Protecting and improving the nation's health

# The Winter Pressures Pilot: evaluation of the impact of Fire and Rescue Service interventions in reducing the risk of winter-related ill health in vulnerable groups of people

## Technical annex

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# Introduction

This document describes the methodology used to conduct the evaluation of the winter pressures pilot. It has three main sections:

1) Section 1 describes the methodological approach to the evaluation;
2) Section 2 describes the approach to be taken to calculate the cost of the interventions
3) Section 3 describes the approach that could be taken to complete an estimation of the pilot's impacts and return on investment once the required data is released.

The research tools used to conduct the research are also presented in an annex. This document should be considered within the wider evaluative research being conducted on the Fire and Rescue Service (FRS).

# Section 1: Approach to the evaluation

This section presents the methodological approach to the evaluation in order to inform the findings presented in the Summary Report that accompanies this document.

## Evaluation methodolgy

### Focus of the evaluation

The study aimed to evaluate the Winter Pressures Pilot over its lifetime and answer three main research questions:

1) How have the specific interventions being tested in the three pilot areas had an impact on winter pressures?
2) What was the impact of the interventions on the individuals who received a home visit?
3) What was the return on investment of the intervention?

To answer these research questions, the study sought to:

- standardise the evaluation approach in each pilot area to enable an overall estimate of impact to be made as well as a comparison between them
- use multiple and mixed methods to gather data required (management information collected by the pilot, interviews with different stakeholders, data

collected by partners and other agencies) which reflected the need to minimise the burden on stakeholders (time, sampling, flexibility) but to capture the nature and scale of the impact of the pilot
- use qualitative information collected from beneficiaries, FRS delivery staff and partners in other organisations for triangulation to supplement the data collected about the home visits and the outcomes for the beneficiaries recorded by health, social services and other organisations
- establish how the pilots can be compared either to areas without the intervention or to their outcomes in previous winters in order to attribute the intervention to the outcomes being measured

The evaluation ran from 29 September 2015 to 30 June 2016, covering the pilot period which ran from 2 November 2015 to 31 March 2016.

## How far the study was able to meet these aims

During the scoping phase, the evaluation team set out the data that would need to be collected in order to support the evaluation in measuring the pilot's aims and objectives. The data collection requirements are presented in Annex 3. However, not all of the aims and objectives of the evaluation can be met from the information currently available. As yet, some data is not available or accessible on the following:

- excess winter deaths: assessing any meaningful impact on excess winter deaths will require the use of trend data. which will take at least three years to materialise, as well as data on confounders such as temperature and influenza activity (alternative explanations for any observed change) in intervention and comparator areas
- health and wellbeing outcomes experienced by beneficiaries: the evaluation has not been able to assess the potential improvements to quality of life and improvements in health outcomes that might have occurred as a result of the pilot, through sources of data, such as beneficiaries' patient records. There is also limited available data in relation to outcomes related to social isolation and cold homes (the data is not disaggregated by area and is time lagged)
- associated costs and benefits to organisations affected by winter pressures: limited data is available from partner organisations to support the evaluation in establishing the associated costs and benefits to these organisations. This includes primary and secondary care services, social care services and voluntary care services

Some inconsistent and incomplete collection of beneficiary characteristics by pilot areas during the home visits affected the ability to compare the pilot areas. For example, all pilot areas used different methods for recording beneficiary ages (including date of birth and age groups); Staffordshire Fire and Rescue Service did not collect data on long-term health conditions or people living with a disability; Greater Manchester Fire and

Rescue Service had incomplete data fields (17% did not record ages of beneficiaries); and, Gloucestershire Fire and Rescue Service used different categories for ethnicity compared to Greater Manchester Fire and Rescue Service and Staffordshire Fire and Rescue Service, and did not collect data on the information advice and guidance (IAG) provided to households.

As a consequence of the gaps in data available to the evaluation and because of the early stage of assessment (that is, some behavioural changes and impacts will not have been realised over the evaluation period), a potential approach to measuring the impacts of the pilot, such as data matching (see Section 3 for more detail) was not possible and a longer period of assessment is needed to estimate all the benefits and the extent of the pilot's financial return.

### Methodology

A four-stage method was devised to meet the evaluation objectives outlined above and ensure some feedback to stakeholders during the pilot to inform implementation. This consisted of three stages of research and analysis after a preparatory scoping stage.

## Stage 1: Establishing the evaluation framework and initial scoping phase

The aim of the scoping phase was to establish the evaluation approach and research tools for the fieldwork stage of the study. A description of these can be found in Annex 1 and Annex 2, respectively. The scoping phase ran from September to November 2015. During this stage the following tasks were undertaken:

- an inception meeting with the pilot's advisory group (including representatives from PHE, Age UK, Staffordshire Fire and Rescue Service, Greater Manchester Fire and Rescue Service and Gloucestershire Fire and Rescue Service) to agree the priorities for the evaluation and the methodological approach
- a data meeting with Greater Manchester Fire and Rescue Service to discuss the data collection approach to the pilot. This identified what data should be collected and developed a template that was circulated to other pilot areas. An outline of the data collection requirements is outlined in Annex 3
- nine scoping interviews with the pilot leads in the three pilot areas, the project co-ordinator at Public Health England (PHE) and a representative from the Chief Fire Officers' Association (CFOA). The purpose of the scoping interviews was to gain a better understanding of the pilot's aims and objectives, targeting, training, implementation, delivery and expected outcomes and impacts, including any challenges that may be anticipated
- review of relevant programme documents and data, in order to get a better understanding of different aspects of the pilot, including identification and

targeting of pilot recipients, as well as the type of data collection methods employed by pilot areas

The findings from these tasks fed into a scoping report, which was submitted to the advisory group on 10 November 2015 and reviewed by the group on 13 November 2015. This report established the evaluation framework, research tools and data requirements for the evaluation.

## Stage 2: Formative evaluation phase

The formative phase of the evaluation ran from December 2015 to February 2016. It examined how the pilot had been implemented so far, including the progress towards achieving the pilot outputs, outcomes and impacts. During this stage, the following tasks were undertaken:

- six telephone interviews with operational leads and personnel involved in the delivery of the pilot. The purpose of these interviews was to explore what had happened during the implementation of the pilot (planning, development, training and delivery) and to get an update on the progress of the pilots towards their intended outputs, outcomes and impacts
- seven telephone interviews with staff from partner organisations to establish the roles they have played in the development of the pilot and how they have contributed to its delivery;
- advisory group meeting to review progress of the pilots and discuss emerging issues. During the meeting, the pilot areas finalised the data sharing method and agreed the method of gaining consent to share beneficiaries' data. Greater Manchester Fire and Rescue Service required confirmation from beneficiaries to participate in the evaluation because consent to be contacted by a third party had not been requested at the point of the home visit. As a result, an opt-in letter was drafted by ICF (with input from the Advisory Group) and a trial period of two weeks was agreed to establish a likely response rate. The trial period was reviewed after the two weeks (23 February 2016) and it was agreed that the response rate was too low to continue with the opt-in approach. Therefore, an agreement was made to use an opt-out letter
- circulation of the data collection spreadsheet template to FRS areas. The purpose of the template was for FRS areas to input the Level 1 and 2 data they collected as part of the pilot in order to share it with ICF for analysis. A SharePoint was developed and launched to enable the secure transfer of this data. Annex 1 has more detail on the data requirements
- analysis of pilot management information

The findings from these tasks fed into an interim report, which was submitted to the Advisory Group on 19 February 2016 and reviewed at their meeting on 25 February 2016.

## Stage 3: Summative evaluation phase

The summative phase of the evaluation ran from March 2016 to May 2016. In this stage, evidence was collected on the progress of the pilot towards achievement of its outcomes and impacts, which contributed to an analysis of the pilot's return on investment and the production of the Summary Report. During this stage, the following tasks were undertaken:

- seven face-to-face interviews with operational leads and personnel involved in the delivery of the pilot. The purpose of these interviews was to get an update of how the pilot had progressed against the work plan and identify any changes that may have occurred since the formative evaluation period. This included whether the pilot areas had overcome any challenges during delivery, whether delivery had matched expectations, and the outcomes achieved by the pilot to date
- a total of 22 face-to-face interviews with frontline staff, including firefighters, community service advocates and watch mangers (who carried out the visits). The purpose was to get in-depth views from frontline staff on the outputs of the visits, perceptions of the outcomes and impacts of the visits and the enablers and barriers they faced during delivery
- nine telephone interviews with staff from partner organisations to further establish the roles they have played in the delivery of the pilot and gain their views on the outcomes and impact of the visits for their services
- 60 telephone interviews with pilot beneficiaries to record their views on the benefits, outcomes and impacts of the visits which can be measured and their changes in behaviour and attitudes to social isolation, falls and winter-related health risks
- e-survey of 173 frontline staff (equal to a response rate of 14%) to capture the views of frontline staff on their experience of the winter pressures pilot, including the training, delivery of home visits, referral pathways and the data collection process

The pilot's advisory group (including representatives from PHE, Age UK, Staffordshire Fire and Rescue Service, Greater Manchester Fire and Rescue Service and Gloucestershire Fire and Rescue Service) met on 5 May 2016 to discuss progress and agree plans for dissemination of the evaluation findings.

## Stage 4: Post-intervention analysis and reporting phase

At this stage, the evaluation focused on a final assessment of progress towards the pilot's outcomes and impacts and how this has been achieved, noting which of the particular components of the intervention drive success. It also conducted an analysis of

the available data to assess the pilot's impacts. During this stage, the following tasks were undertaken:

- analysis of management information (MI) supplied by pilot areas: data on fire call-outs within each pilot area, the data collected during the home visits, the referrals made, and the costs of the pilot inputs were provided by each pilot area
- analysis of fire call-out data supplied by three comparator areas: West Yorkshire FRS, Humberside FRS and Cornwall FRS.[1]
- analysis of national data sets: data was collected on the number of A&E episodes and emergency admissions taken from the NHS England A&E Attendances and Emergency Admissions data series, and data on flu vaccination rates taken from PHE seasonal flu vaccine uptake data within pilot areas and comparator areas

The findings from the tasks undertaken in the four evaluation stages fed into the final Summary Report, which was submitted in draft to the advisory group on 30 June 2016 and reviewed on 6 July 2016. The Summary Report is the final version of this report.

[1] Comparator areas were selected based on the three delivery models of the pilot areas, for example, West Yorkshire FRS is a metropolitan authority, Humberside FRS is a combined authority and Cornwall FRS is a unitary authority.

# Section 2: The cost of the intervention

The inputs for this pilot are money, time and other in-kind contributions.

Information on the additional cost of delivering the Winter Pressures Pilot, as part of the Safe and Well visit, was collected from each of the pilot areas. The information covers the pilot budget, in-kind staff time (based on the average additional time it took to conduct the Winter Pressures aspect of the home visit) and costs of equipment and other contributions.

A breakdown of this information is shown in Table 1. The evaluation excluded the cost of fire safety related contributions, as this would have been used to conduct home visits in the absence of the pilot. Therefore, the evaluation estimates that the total financial input to the programme as £25,400 and that the total additional cost of the pilot was £154,900.

The FRS in each of the pilot sites provided information on the number of Winter Pressures visits completed and the average duration during a visit of the completion of the pilot elements of the visit (30 minutes). The evaluation assumed that two members of staff provided the winter warmth assessments, and these staff are community safety advisors or firefighters, with an hourly cost of £13.40. As the Winter Pressure visits took place as an extension of the Safe and Well visits in the same household, no cost for transportation is included in this calculation.

**Table 1: Total cost of Winter Pressures Pilot**

| **Cost item** | | **Greater Manchester (£)** | **Staffordshire (£)** | **Gloucester-shire (£)** | **Total (£)** |
|---|---|---|---|---|---|
| Financial input | *Pilot budget* | 5,300 | 12,400 | 7,700 | 25,400 |
| In-kind staff time | *Pilot management* | 24,800 | 13,500 | 7,800 | 46,200 |
| | *Opportunity staff cost of providing visits* | 36,300 | 15,000 | 18,200 | 69,400 |
| Equipment and other contributions | *Specific contributions for winter pressures pilot* | 11.900 | 0 | 2,000 | 13,900 |
| | *Wider fire service contributions* | *120,300* | *6,900* | *19,500* | *146,800* |
| **Total additional cost** | | **78,300** | **40,900** | **35,700** | **154,900** |

Information provided by FRS, values rounded to nearest £100

The total costs were divided into set-up and ongoing costs. This was done in order to assess the sustainability of the pilot. To do this, it was assumed that all staff training costs, pilot promotional activities and programme management costs were set-up costs, only incurred in the initial stages of the pilot. All staff time used to carry out the assessments, post letters to participants and equipment provided to beneficiaries was defined as on-going costs. A breakdown of these costs is presented in 0. In total, the set-up costs of the pilot were £65,300. The ongoing costs of the pilot were £89,600; with an average ongoing cost of £13 per visit.

**Table 2: Set up and ongoing costs**

| **Cost item** | **Greater Manchester (£)** | **Staffordshire (£)** | **Gloucestershire (£)** | **Total (£)** |
|---|---|---|---|---|
| Set-up costs | 30,100 | 25,900 | 15,500 | 71,600 |
| Additional ongoing costs | 48,200 | 15,000 | 20,200 | 83,300 |
| Number of visits | 2,707 | 2,236 | 1,357 | 6,300 |
| Average additional ongoing cost per visit | 18 | 7 | 15 | 13 |
| **Total cost** | **78,300** | **40,900** | **45,700** | **154,900** |

## Benefits

The unit cost of an A&E episode, emergency admission and mid to high risk fall have been used to estimate the impacts needed to cover the costs of the programme delivery. This does not include reductions in excess  winter deaths, changes in quality of life, or primary care appointments.

The total cost of the programme has been estimated to be £154,900. In order for the benefits of the programme to exceed the cost, the number of attributable impacts would need to be as follows:

- 760 A&E episodes avoided[2] or
- 99 emergency admissions avoided[3] or
- 34 mid to high risk fall[4]

[2] An episode avoided is an A&E episode which would have taken place in the absence of the pilot, but which did not take place due to the intervention delivered through the pilot.

[3] An emergency admission avoided is an admission that would have taken place in the absence of the pilot, but which did not take place due to the intervention delivered through the pilot. Department of Health (2015) NHS Reference Costs 2014 to 2015. Average cost of a non-elective inpatient admission (£1,565) inflated to 2015-16 prices using GDP deflators

[4] Average cost of a mid to high risk fall (£4,530) CSP Falls Prevention Economic Model (2016) http://www.csp.org.uk/documents/falls-prevention-economic-model

# Section 3: Research opportunities

In order to fully assess the impact of the pilot and complete the SROI, further research and analysis of data may be possible. Some approaches are suggested below.

## Data from the Fire and Rescue Service

The data collected by the pilot areas could be used in combination with national Exeter data and FRS data on call-outs to assess the impact of the pilot on fire crew call-outs. Data for the number of fire crew call-outs to pilot beneficiaries could be compared to a comparator group selected from the Exeter database. Once the data has been matched, then the following approaches could be used to assess the impact of the pilot:

- comparing the number of fire service call-outs for the treatment group and comparator group for the period following the home visit. This will allow tests to see if fire service call-outs among the treatment group is significantly different than in the comparator group
- comparing the number of call-outs over time (a difference-in-difference or DiD approach). This would require data over a longer period of time, to compare the number of fire service call-outs for the treatment and comparator groups before and after the home visit

## Data on excess winter deaths

The impact of the pilot on excess winter deaths was not included in this evaluation as the data was not available at the time the research was carried out. Data on the number of excess winter deaths in 2015/16 at local authority level will be available in late 2017 This may allow an analysis of the impact of the pilot on excess winter deaths to be made. The most appropriate way to assess this impact in the pilot areas will be to look at how the number of excess winter deaths has changed in each pilot area and in comparator areas in the years before the pilot was introduced, assuming suitable comparator areas can be identified.

If the direction of travel is similar in the two areas, then the change in excess winter deaths in the pilot site and the comparator areas can be compared. If the change in the number of excess winter deaths is lower in the pilot site than the comparator site, then the programme could have had an impact on excess winter deaths. A DiD approach could be used to test if the pilot has had a statistical impact on excess winter deaths. This model would need to consider all variables which could have influenced the number of winter deaths in either the pilot or comparator areas, such as population age distribution, levels of comorbidities, outdoor winter temperatures and influenza activity.

## Data from Hospital Episode Statistics

Through the MI data collected by FRS pilot areas during the pilot, a large amount of data has been collected on the pilot's beneficiaries. In combination with Hospital Episode Statistics (HES)5 individual level data, the data on beneficiaries could be used to assess the impact of the pilot in the future.

### Data collected

The evaluation collected data for the following fields

- full address, including postcode
- full name of at least on adult in household
- date of Birth
- age
- gender
- ethnic group
- health (if they have long term conditions)
- household type (social housing, private rented, owner occupier)

Using the postcode data, it is possible to attribute an IMD score to each household, which can be used to develop a comparator group.

### Data matching

Using the name, address and date of birth fields from the data collected, it should be possible to match the beneficiary information to HES. This would form a cohort.
The first stage of this would be to match the data for pilot beneficiaries (treatment group) with a local Patient Master Index (PMI). This would allow the matching of an NHS number to each individual beneficiary. This would also allow further matching to other health databases, particularly the HES. The PMI for a comparator area would also need to be used to identify a comparator group or comparator cohort. The comparator group could be matched on the following indicators:

- gender
- age/date of birth
- ethnic group
- IMD score

The cohorts for the pilot group and the comparator group would then need to be linked to the HES database for A&E attendances and hospital inpatient and day case databases, using pseudo-anonymised NHS numbers so that individual patients cannot be identified.

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[5] HES is a data warehouse containing details of all admissions, outpatient appointments and A&E attendances at NHS hospitals in England.

## Matched data required

The fields required from the HES data for pilot beneficiaries and comparator groups will be:

- A&E attendance – has the individual attended A&E (selecting a time period after they have received the home visit). It may be possible to select A&E attendances for specific conditions that would be attributable to the home visit; however, A&E attendance information is not always broken down by diagnosis
- inpatient/day case – has the beneficiary been admitted to hospital/had a hospital appointment for conditions targeted by the winter warmth programme. These would include:
  - respiratory conditions
  - circulatory conditions
  - injuries caused by falls
- duration of inpatient stay

## Analysis of data

The matched data suggested above could be used in different ways to assess the impact of the Winter Pressures element of the visits. These include:

- comparing the number of attendances for the treatment group and comparator group for the period following the home visit. This will allow tests to see if attendance at hospital among the treatment group is significantly different than in the comparator group
- comparing the duration of stay in hospital for the treatment and comparator groups (with a test of significance for the difference in means). This will indicate whether participants in the treatment group have less severe symptoms than in the comparator group
- comparing attendance over time (a DiD approach). This would require data over a longer period of time, to compare the attendance at hospital of the treatment and comparator groups before and after the home visit

## Review of Kent FRS Home Safety Visits Evaluation[6]

The evaluation of Kent's FRS Home Safety Visits followed a similar approach to data matching as described above. It examined the attendance at A&E for participants in the programme and a comparator group.
The participants were matched to the Kent Primary Care Agency PMI. However, less than 40% of participants could be matched to the PMI. It would be expected that not all

[6] http://www.kpho.org.uk/__data/assets/pdf_file/0007/58444/KFRS_report_Final_25052016.pdf

participants could be matched to the database (inaccurate information provided to or recorded by the programme, out-of-date information held in the Master Index), but a match rate of under 40% is low. The patient records for relatives (who lived at the same address as the participant) were then added to the treatment group, as they would also benefit from the intervention.

The programme participants/beneficiaries were then matched to A&E first attendances records. This provided information on the number of attendances at A&E for conditions targeted by the Home Safety Visits (for example burns, lacerations and abrasions). A comparator group was selected by matching the characteristics of the participants who attended A&E with the characteristics of A&E attendees who were non-participants. This was still within the Kent area. The characteristics used for matching were age, gender, date of A&E attendance and IMD.

This approach to matching has a couple of weaknesses when applied to the winter warmth programme. Firstly, the matching process ignores participants who have not attended A&E. Secondly, by using comparators within Kent who have not taken part in the programme, there is likely to be some selection bias (why have the individuals in the comparator group not received a visit?).

The evaluation compared attendance at A&E of the treatment group and comparator group. The mean number of A&E visits of the two groups is presented (although no test of significance has been applied to the difference in means). Differences in the location where the injury which caused the admission occurred (did it happen at work, at home, public place etc.) were tested, and found that there was no significant difference between the treatment and comparator group. However, some of the advice given in the Home Safety Visit would also help to prevent accidents in other locations.

This is an interesting study making use of a data matching approach, which is complicated and time consuming. However, to apply this approach to the winter warmth programme, some methodological changes and data considerations would be recommended. These include:

- a higher matching rate of programme participants to the PMI. With over 60% of the programme participants not being matched to NHS records, there is a danger that the matched participants might not be representative of the total population (there might be specific groups which could not be matched)
- using geographical areas where the winter warmth programme was not operating to select the comparator group. This would reduce the risk of selection bias
- match the treatment group and the comparator group using the PMI. This would allow individuals who had not attended hospital to be included in the analysis
- include an analysis of inpatient and day cases

# Annex 1: Logic model and evaluation framework

This section presents the framework which was used to evaluate the impacts of the pilot on vulnerable people and to answer the research questions set out in Section 2.1.1 above, including the social return on investment and value for money.

## Logic model

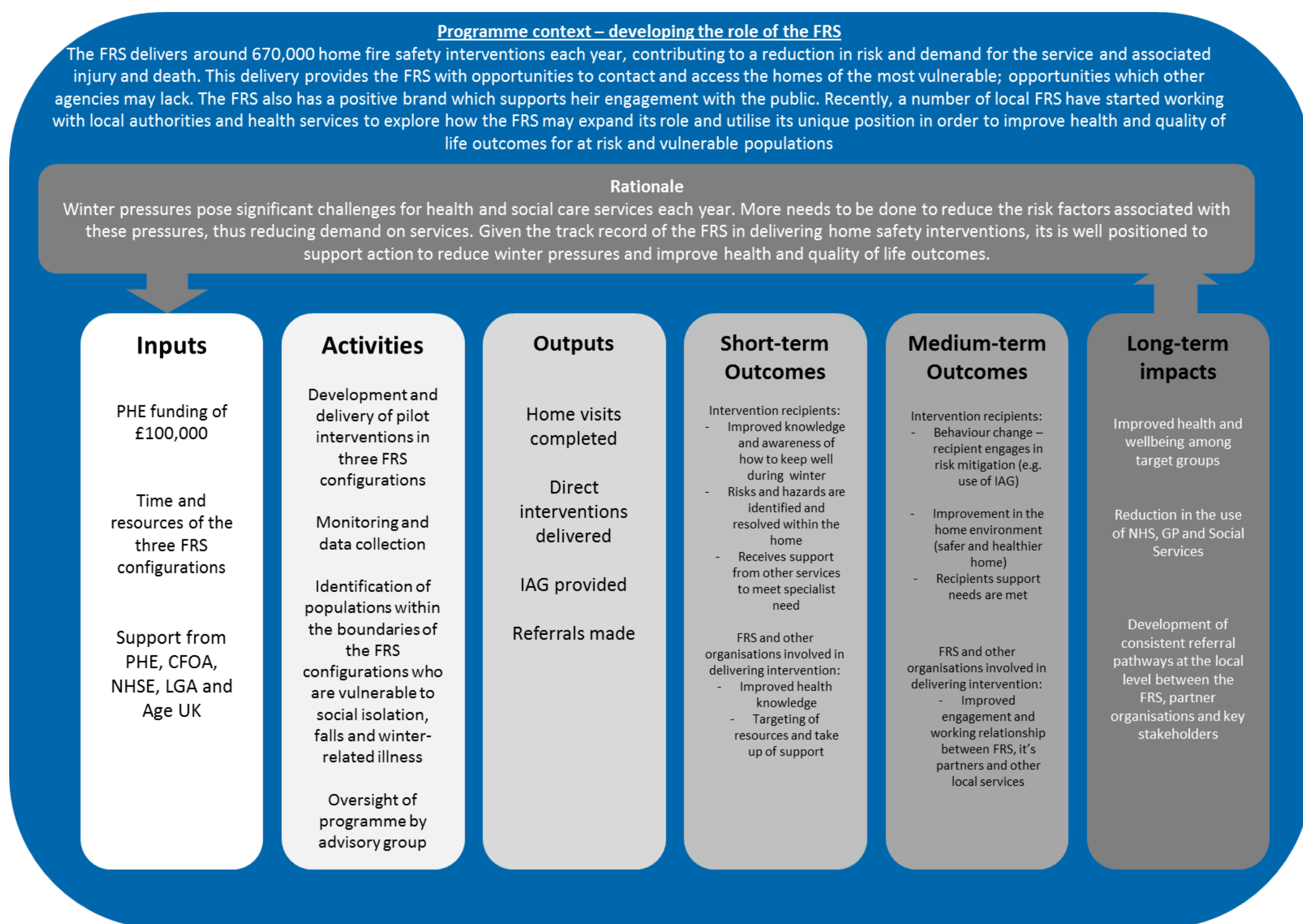
The expected outputs and outcomes for the Winter Pressures Pilot are presented in Figure A1.1. This is a logic model based on a review of the available pilot documentation, information gathered during the scoping interviews about the inputs and activities, and evaluations of similar initiatives carried out by ICF which have demonstrated what short- and medium-term outcomes could be expected from the outputs of the home visits. The main assumptions are:

- the risk assessments carried out during the visits lead to mitigating actions by FRS staff and others
- in the short term, the visit's actions (provide a mitigation, give targeted information and advice, make a referral) give rise to householders with better knowledge and competences and better take up of services which can reduce risks (for example, flu jabs, help with heating, participation in social activities)
- In the medium term, these give rise to the use of the aids and adaptations provided, the use of sources of information and advice, warmer homes and increased social contact
- as a consequence, the householders' visited have fewer falls and less serious or shorter periods of ill health

The evaluation 'tests' the logic model set out below by analysing the relationship between the pilot's inputs, outputs and outcomes. The evaluation determines whether, for example:

- PHE and local FRS inputs have successfully produced the intended activities and outputs
- the outputs recorded are commensurate with the level of resource committed to the activities
- the activities and outputs brought about the outcomes expected (that is, they can be attributed to the pilot activities)

## Figure A1.1: Logic model for the Winter Pressures Safe and Well pilots




## Evaluation framework

Table A1.1 presents the evaluation framework. The framework details the proposed measures and evidence sources to be used to evaluate each component of the logic model.

Table A1.1 Evaluation framework

| Element of logic model | Measure | Tool/method of evidence collection |
|---|---|---|
| Inputs | • Public Health England Funding | • Management information on budget spend<br>• Qualitative interviews with operational leads and key delivery staff |
| | • Support from stakeholders and partners (including PHE, CFOA, NHSE, LGA and Age UK) | • Survey data from frontline delivery staff<br>• Qualitative interviews with |

| Element of logic model | Measure | Tool/method of evidence collection |
|---|---|---|
| | | delivery stakeholders/partners |
| | • Time and resources of the three FRS configurations (in-kind contributions) | • Qualitative interviews with operational leads and key delivery staff about development and delivery resourcing<br>• Survey data from frontline delivery staff<br>• Management information provided by FRSs on deployment of staff to arrange and carry out visits |
| Outputs | • No. of staff received training in Safe and Well additions to HSC<br>• | • Management information<br>• Survey data from frontline delivery staff |
| | • No. of home visits delivered | • Management information: data collected on the home visits |
| | • No. and type of risks and hazards identified | • Management intervention: data collected during home visits<br>• Qualitative interviews with beneficiaries<br>• Qualitative interviews with delivery staff<br>• Survey data from frontline delivery staff |
| | • No. and type of immediate interventions delivered | • Management intervention: data collected during home visits<br>• Qualitative interviews with beneficiaries<br>• Qualitative interviews with delivery staff<br>• Survey data from frontline delivery staff |
| | • No. and type of information, advice and guidance delivered | • Management intervention: data collected during home visits<br>• Qualitative interviews with beneficiaries<br>• Qualitative interviews with delivery staff<br>• Survey data from frontline |

| Element of logic model | Measure | Tool/method of evidence collection |
|---|---|---|
| | | delivery staff |
| | • No. and type of referrals made | • Management intervention: data collected during home visits<br>• Qualitative interviews with beneficiaries<br>• Qualitative interviews with delivery staff<br>• Survey data from frontline delivery staff<br>• Qualitative interviews with delivery stakeholders/partners<br>• Feedback information from partners on service provided |
| Short-term outcomes | • Proportion of beneficiaries report improvements in knowledge and awareness of how to keep well during winter | • Qualitative interviews with beneficiaries |
| | • No. and type of support provided to beneficiaries from other services to meet specialist need | • Management intervention: data collected during home visits<br>• Qualitative interviews with beneficiaries<br>• Qualitative interviews with delivery staff<br>• Survey data from frontline delivery staff<br>• Feedback information from partners on services provided |
| | • Proportion of FRS staff demonstrate increased knowledge about the health needs of vulnerable people and improved skills to deliver interventions | • Management intervention: training pack material and data collected during home visits<br>• Qualitative interviews with beneficiaries<br>• Qualitative interviews with delivery staff<br>• Survey data from frontline delivery staff<br>• |
| | • Proportion of FRS and partner delivery staff demonstrate increased knowledge of services best able to | • Management intervention: training pack material and data collected during home visits |

| Element of logic model | Measure | Tool/method of evidence collection |
|---|---|---|
| | address health needs of pilot recipients | • Qualitative interviews with beneficiaries<br>• Qualitative interviews with delivery staff<br>• Survey data from frontline delivery staff<br>• Qualitative interviews with delivery stakeholders/partners |
| Medium-term outcomes | • Proportion of beneficiaries report engaging in safer behaviour (e.g. engage in risk mitigation) using aids and adaptations, talking up offers of referral agencies, using information and advice | • Management intervention: data collected during home visits<br>• Qualitative interviews with beneficiaries |
| | • Proportion of beneficiaries report improvement in their home environment (safe and healthier home, warmer home)<br>• | • Management intervention: data collected during home visits<br>• Qualitative interviews with beneficiaries |
| | • Proportion of beneficiaries report having their support needs met | • Qualitative interviews with beneficiaries<br>• Feedback information from partners on services provided |
| | • Proportion of partners report that engagement and working relationship with the FRS enabled better targeting of those in need and increased take-up of support improved over the duration of the pilot | • Qualitative interviews with delivery stakeholders/partners |
| Impact | • Proportion of beneficiaries report feeling more positive about their health and wellbeing | • Qualitative interviews with beneficiaries |
| | • Reduction in the use of NHS, GP and social services | • Data collected from local and national datasets (e.g. Hospital admissions, weekly winter reports, A&E visits)<br>• Feedback information from partner organisations |

| Element of logic model | Measure | Tool/method of evidence collection |
|---|---|---|
| | • Proportion of partners who have established sustainable referral pathways at the local level between themselves and the FRS | • Qualitative interviews with delivery stakeholders/partners |

# Annex 2: Research tools

This section describes the research tools used to gather evidence to support the evaluation.

## Research tools for the scoping phase

The research tools below were used during the inception stage of the evaluation to collect information in order to inform the evaluation work plan and research tools for later stages of the evaluation.

## Scoping phase interview topic guide

### Rationale

What is the rationale behind the pilot programme in your area? What are its aims?

- Why did you decide to take part?
- What are your expectations of the pilot? What problems is it addressing?
- What do you think the pilot will achieve? For FRS? For each of partners?

### Context

How does the pilot fit with your usual ‘safe and well’ activities?

- How can the intervention add value to these activities?
- How different is it from your safe and well visits? (content, immediate actions (IAG), referrals, time required per visit, volume)

How does it fit with any other existing experimental/pilot home interventions that you deliver?

- What are these (if any) in your area?
- How does it differ from these?
- How are these being evaluated? Obtain details

How does it fit with national and local public health strategies to:

- Address winter pressures – what are winter pressures? How does the issue of winter pressures differ from issues relating to cold weather?

- Mitigate against the negative impacts of cold weather (e.g. cold homes, increased risk of falls, flu)
- Improve health and wellbeing (including mental health)
- Reduce social isolation
- Address social care needs
- Improve people's home environment

## The intervention planned

Who does the intervention aim to target?
- Household characteristics of target group(s)
- How will they be identified? If referral, ask about who from/criteria
- How will they be invited to participate?

What is the scale of the intervention?
- How many people/households do you expect to target in your area?
- Is the targeting in specific areas or across the whole of the area under command?

Who is delivering the visits? Describe staff roles (specialist or part of wider role)
What additional resources are you putting in compared to safe and well visits? Staff? Other costs? (indicate that detailed information on inputs will be collected at the end of the pilot on staff time/costs)
What are the key indicators of success for the pilot?
- Target outputs and outcomes
- How do these reflect the expected achievements/differences in response to Q1-3 above

How have you engaged partners in this?
- Who is engaged in development?
- Who is a new partner?
- When were they engaged (at start, during)
- How have they helped develop the pilot so far?

## Delivery

How will you be delivering the intervention? Take me through the process (identification, arranging a visit, carrying out the visit, providing IAG after assessment during the visit, follow-up/referral, monitoring).
How are you engaging with partners to deliver the intervention?
- Who are they? What role will they play in delivery? Referral?
- Progress with data transfer and sharing?

What risks are foreseen in delivering the intervention?
- Explore additionality (for example, duplication, substitution, not at high risk)
- Explore issues around recruitment, referral, IAG
- Mitigations
- Explore any internal barriers to success (such as competing priorities, resources)

### Data

What data do you collect through your existing 'Safe and Well' visits (and other home intervention programmes)? Could you share this data with us? (Make arrangements for the transfer of data).
What data do you expect to collect on the inputs and outputs during the home visits? How do you plan to store this data (central database, spreadsheet)?
What data do you collect on local fire service related incidences (such as call-outs, fires, accidents)?
How are you working with partners to collect/share data on signposting and referral pathways? Who are the partners?
Do you know of any published data that may support the impact evaluation of the project (such as data on hospital admittance, A&E visits, hospital bed statistics)? If so, will this data be available before the final report submission in June?

### Additional questions

Is there anything else you would like to add that you think is important for us to know at this time?

## Research tools for formative evaluation

The research tools below were used during the formative evaluation phase to collect information and data on the progress of the pilot, its initial activities and expected outcomes and impacts.

## Topic guide for interviews with FRS operational leads and delivery staff

### Background to the interviewee

Confirm the interviewee's name
What is your role in the organisation?
What is your role in the implementation and delivery of the pilot?
Can you give me a brief overview of the delivery of the pilot? Prompts: identification and targeting of the visit, arranging visits, carrying out the visit, providing IAG after assessment during the visit, follow-up/referral, monitoring).

### Planning

What are your views on the planning of the pilot (for example, selection of pilot areas, development of training package, components of the pilot, input from PHE, CFOA, NHSE and AGE UK)?
What plans did you put in place to deliver the pilot? Use prompts:

- Staffing and resources
- Delivery of training
- Engaging with local partners

How well do you think the planning process of the pilot worked? What do you think could have been improved? How?

## Training

How did you go about delivering training to staff?
Has training been delivered to all frontline staff within the FRS authority? If not, why not?
Do you think the contents of the training pack meet the requirements of staff in order to equip them with the skills to deliver the pilot effectively?
Were there any issues in delivering the training?
How could the delivery of the training, including the training pack, be improved?

## Targeting

Who is being targeted for the intervention?
Are individuals/households being targeted across the whole FRS authority or within particular areas?
What method are you using to identify targets for home visits ( Mosaic, Exeter data, information from partners, direct referrals)?
How are targets being invited to participate (for example, knocking on doors, letters and leaflets, cold calling)?
Do you think the pilot is reaching the right people?
How could the targeting of the pilot be improved?

## Home visits

How many home visits do you intend to deliver over the course of the pilot?
Who is delivering the home visits?
What does the home visit assessment consist of, please provide details of the different components?
Are there aspects of the home visit that are working particularly well? Are there aspects of the home visit that are working less well? Use prompts:

- ‘Get up and go test’ and falls
- Risk assessment
- Safety installations
- Provision of information, advice and guidance
- Information about flu advice
- Information about cold homes
- Referrals

- Data collection and monitoring

How could the delivery of the home visits be improved?

## Referrals

Please describe the referral process. Who are the key partners involved?
What was the process for setting up the referral pathway?
Can you describe how the referral pathway works? Take me through it step-by-step?
Are the number of referrals being made as expected?
What aspects of the referral pathway work well/work less well?
How could the referral pathway be improved?

## Data collection and monitoring

How have you found the data collection aspect of the home visit? Have there been any issues in collecting data required for the monitoring of the pilot? If so, please describe?
How are you working with partners to collect data on the referral pathway? Are you receiving feedback on referrals? How is this feedback being recorded and stored?
In terms of data collection, what aspects of data collection work well/less well?
How could the data collection and monitoring aspect of the pilot be improved?

## Early indication of outcomes and impact

What are the main outcomes you expect the pilot to achieve?
Where do you think the pilot is likely to have the biggest impact?
Follow prompts:

- incidence of falls
- hospital admissions
- excess winter deaths
- reduction in incidence of flu
- improved health and wellbeing
- reduced demand on public services
- reduced incidence of fire
- improved conditions of the home

What are the key enablers to success?
What barriers or challenges exist that may affect the achievement of these outcomes and impacts?
How likely is it that the pilot will achieve its target outputs and outcomes?
Has the pilot achieved any early outcomes? If so, please describe these outcomes in detail.
Overall, how well do you think the pilot is performing in these early stages? Are you on target to meet your intended outputs and outcomes?

### Additional questions

Is there anything else you would like to add that you think is important for us to know at this time?

## Topic guides for interviews with delivery partners

### Background

Confirm the interviewee's name and role in the delivery partner.
Confirm the type of delivery partner (such as third sector, public sector)
What is your organisation's role with the pilot?

### Context and rationale

Why did you decide to take part?
Explore their understanding of the aims of the pilot:

- What are the main aims of the pilot?
- Who does the pilot aim to target (for example, age group, household characteristics)?
- What is the scale of the pilot (number of home visits expected to be conducted)?
- How do these aims fit with the aims of your organisation?
- How does the pilot differ from other pilots/initiatives that are being delivered locally in this area?

Explore their expectations of the pilot:

- What are your expectations of the pilot? What problem is it addressing?
- What do you think the pilot will achieve? For your organisation? For the FRS?

### Involvement in the pilot programme

Explore how the delivery partner became involved in the programme:
Did you have an existing relationship/history of working with the [insert name of local FRS]? If yes, were you involved/informed that they were going to volunteer to take part in the pilot?
Did you actively participate in the development of the pilot? In what ways did you contribute to its development (for example, targeting, training, home visits, referral pathway)?
If yes, what did this contribution consist of?
Please describe your involvement in pilot (for example, targeting, training, home visits, referral pathway).

### Pursue as relevant, based on response to Q9:

Targeting:

- How have you contributed to the targeting of the pilot?
- Who is being targeted for the intervention?
- Are individuals/households being targeted across the whole FRS authority or within particular areas?
- What method are you using to identify targets for home visits?
- How are targets being invited to participate (for example, knocking on doors, letters and leaflets, cold calling)?
- Do you think the pilot is reaching the right people?
- How could the targeting of the pilot be improved?

Training:

- What role did you play in the delivery of the training?
- What resources were used to develop the contents of the training? Did you use the training pack as developed by the programme Advisory Board?
- How many staff received the training? Was training delivered solely to FRS staff?

Home visits:

- What is your organisations role in the delivery of the home visits?
- How many staff are delivering the home visits? What proportion of total staff delivering home visits is provided by your organisation?
- Are home visits provided by your organisation the same as those delivered by other organisations involved in delivering home visits? How might they differ?

Referral pathway:

- What is the structure of the referral pathway?
- Can you describe how the referral pathway works? Take me through it step-by-step?
- What was the process for setting up the referral pathway?
- Is the number of referrals being made as expected?
- What aspects of the referral pathway work well/work less well?
- What are you doing to engage with other partners/organisations that form part of this pathway?
- How could the referral pathway be improved?

Overall, how well do you think the pilot is performing in these early stages? Are there areas for improvement? If so, how could it be improved?

## Data and monitoring

Are you involved in the data collection and monitoring aspect of the evaluation? If so, please explain:

- The role your organisation plays in data collection and monitoring
- What data they are collecting and how it is being stored/shared with the FRS
- Is it data on home visits, referrals/follow-up, and so on
- Are they providing/collecting data or feedback on referrals/follow-up

### Early indication of outcomes and impacts

What are the main outcomes you expect the pilot to achieve?
Where do you think the pilot is likely to have the biggest impact?
Follow prompts:

- incidence of falls
- hospital admissions
- excess winter deaths
- reduction in incidence of flu
- improved health and wellbeing
- reduced demand on public services
- reduced incidence of fire
- improved conditions of the home

What are the key enablers to success?
What barriers or challenges exist that may affect the achievement of these outcomes and impacts?
How likely is it that the pilot will achieve its target outputs and outcomes?
Has the pilot achieved any early outcomes? If so, please describe these outcomes in detail.

### Additional questions

Is there anything else you would like to add that you think is important for us to know at this time?

### Research tools for summative phase

The research tools below were used during the summative phase of the evaluation to collect information and data on the final progress of the pilot towards its outcomes and impacts, understand how this has been achieved and the outcomes achieved by the pilot.

## Topic guide for interviews with FRS operational leads and delivery staff

### Background to the interviewee

Confirm the interviewee’s name and role in the organisation.
What is your role in the implementation and delivery of the pilot?

### Context and rationale

Have the main aims and objectives of your pilot changed since we last spoke?
As an organisation, how do you fit within the local health economy?

Probe:

- Do you sit on any health and wellbeing boards?
- Do you have a relationship with the local CCG?
- Do you engage with local stakeholders in your area?

Do you think this relationship/lack of relationship with health stakeholders has had an influence on the pilot?

Probe:

- Ability to setup referral pathways
- Gain local knowledge to inform the targeting of the pilot
- Other enablers/barriers
-

## Training

Since we last spoke, have you delivered the Winter Warmth training to any other staff? If so, who?
Do you think the contents of the training pack met the requirements of staff in order to equip them with the skills to deliver the pilot effectively?
Probe for comments on the different modules of the training pack:

- Falls
- Cold homes/flu immunisation
- Social isolation

Should the training have included anything else?
Looking back on how the pilot has performed so far, do you think the delivery of the training could be improved? If so, how?
Probes:

- Contents of the training
- Method of delivery
- Type/number of staff trained

## Targeting

Since we last spoke to you, has the group of people the pilot is targeting changed? If so how?
Has the targeting approach been accurate? Are you delivering home visits to targets as intended?
Probe:

- Has use of the various sources of data improved; have any additional sources been identified; have intermediaries been referring more people to the FRS for a home visit etc.
- Have any new priority groups emerged?

How did you approach households to take part in the pilot?
Probe:

- by mail, email, telephone, door knocking, self-referral?
- What are your views on the relative effectiveness and efficiency of the approaches they have used?
- Has the geographical scope of the pilot changed since the last time we spoke? If so, please describe how. Why has it changed?
- How could the targeting of the pilot be improved?

## Home visits

Has the target number of home visits changed? If so:
- What is the new target?
- Why has it changed?

Are targets cascaded to local Fire Stations/specific areas?
What are your views on the pilot's progress towards your target number of home visits?
Are you on track to meet the target?
Are there aspects of the home visit that have worked particularly well/worked less well?
Use prompts:
- 'Get up and go test' and falls
- Risk assessment
- Safety installations
- Provision of information, advice and guidance
- Information about flu advice
- Information about cold homes
- Referrals
- Data collection and monitoring

Has delivery gone as planned? Have you encountered any challenges, and how have these been addressed?
How could the delivery of the home visits be improved?

## Referrals

Have the number of referrals made during the pilot met with your expectations?
Is the proportion of referral from home visits greater or less that you anticipated – why do you think this is the case?
Probe around the different type of referrals (falls, cold homes, local authority) and why they did/did not meet expectations?
Have you engaged with any new partners/set up any new referral pathways since the last time we spoke?
If so, please describe your reasons for this as well as detail on the organisation and type of service they provide.
What are your overall views of the referral pathway? Are there any aspects that you feel have worked well/less well?
How could the current referral pathway be improved?

## Data collection and monitoring

How have you found the data collection requirements of the pilot? Have there been any issues in collecting data required for the monitoring of the pilot? If so, please describe?

- What have you done to address these issues?

Have you made changes to the original data collection model during the course of the pilot? If so:

- What are they?
- Why did you take these steps?
- What have the changes achieved?

How are you working with partners to collect data on the referral pathway? Are you receiving feedback on referrals? How is the feedback being recorded and stored? Can you share this with us?

How could the data collection and monitoring aspect of the pilot be improved *(in* addition *to any changes they might have already mentioned)*?

We have asked for the MI data from the pilot to be sent through to us by XXXX. Do you think this is achievable? If not, why not? When is reasonable? Is there anything we could to do expedite the process?

## Outcomes and impact

What has been achieved so far? Please describe these outcomes in detail.

Probe:

- incidence of falls
- hospital admissions
- excess winter deaths
- reduction in incidence of flu
- improved health and wellbeing
- reduced demand on public services
- reduced incidence of fire
- improved conditions of the home

Are these the main outcomes that you expected the pilot to achieve?

Are there any factors which might affect the achievement of outcomes?

Are you seeing any outcomes that you did not originally anticipate? Which ones? What do you think has been the reason for this?

Where do you think the pilot is likely to have the biggest impact?

Probe:

- incidence of falls
- hospital admissions
- excess winter deaths
- reduction in incidence of flu
- improved health and wellbeing
- reduced demand on public services
- reduced incidence of fire

- improved conditions of the home

What are the key factors which have enabled the pilot to achieve these?
Overall, how well do you think the pilot has performed? What has worked well? What has worked less well?
Where is there scope for improvement – internal to the FRS and externally (for example, with partners locally and at national level)?

## Additional questions

Is there anything else you would like to add that you think is important for us to know at this time?

## Topic guide for interviews with FRS frontline/delivery staff

## Background to the interviewee

Confirm the interviewee's name and role in the organisation.
What is your role in the implementation and delivery of the pilot?

## Context and rationale

What are the main aims of the pilot?
How do they differ from what you have been asked to do in the past (in terms of home visits)?

## Training

Do you think the contents of the training pack met your requirements in order to equip you with the skills to deliver the pilot effectively?
Probe for comments on the different modules of the training pack:

- Falls
- Cold homes/flu immunisation
- Social isolation
- Should the training have included anything else?

Looking back on how the pilot has performed so far, do you think the delivery of the training could be improved? If so, how?
Probes:

- Contents of the training
- Method of delivery
- Type/number of staff trained

## Targeting

Has the targeting approach been accurate? Are you delivering home visits to targets as intended?
Probe:

- Have any new priority groups emerged?
- How did you approach households to take part in the pilot?

Probe: by mail, email, telephone, door knocking, self-referral?
What are your views on the relative effectiveness and efficiency of the approaches you have used?
How could the targeting of the pilot be improved?

## Home visits

What are your views on the pilot's progress towards your target number of home visits? Are you on track to meet the target?
Are there aspects of the home visit that have worked particularly well/worked less well? Use prompts:

- 'Get up and go test' and falls
- Risk assessment
- Safety installations
- Provision of information, advice and guidance
- Information about flu advice
- Information about cold homes
- Referrals
- Data collection and monitoring

Has delivery gone as planned? Have you encountered any challenges, and how have these been addressed?
How could the delivery of the home visits be improved?

## Referrals

Have you been involved in the referral process? If yes:
Probe:

- In what way?
- How does the process work? What works well/less well?
- Do you think it could be improved?

## Data collection and monitoring

How have you found the data collection requirements of the pilot? Have there been any issues in collecting data required for the monitoring of the pilot? If so, please describe?
What have you done to address these issues?
Have you made changes to the original data collection model during the course of the pilot? If so:

- What are they?
- Why did you take these steps?
- What have the changes achieved?

### Outcomes and impact

What has been achieved so far? Please describe these outcomes in detail.
Probe:

- incidence of falls
- hospital admissions
- excess winter deaths
- reduction in incidence of flu
- improved health and wellbeing
- reduced demand on public services
- reduced incidence of fire
- improved conditions of the home

Are there any factors which might affect the achievement of outcomes?
Are you seeing any outcomes that you did not originally anticipate? Which ones? What do you think has been the reason for this?
Where do you think the pilot is likely to have the biggest impact?
Probe:

- incidence of falls
- hospital admissions
- excess winter deaths
- reduction in incidence of flu
- improved health and wellbeing
- reduced demand on public services
- reduced incidence of fire
- improved conditions of the home

### Additional questions

Is there anything else you would like to add that you think is important for us to know at this time?

## A1.1.2 Topic guide for delivery of partner organisation interviews

### Background

Confirm the interviewee's name and role in the delivery partner.
Confirm the type of delivery partner (for example, third sector, public sector)
What is your organisation's role with the pilot?

### Context and rationale

Explore their understanding of the aims of the pilot:
Probe:

- What are the main aims of the pilot?
- Who does the pilot aim to target (for example, age group, household characteristics)?
- What is the scale of the pilot (number of home visits expected to be conducted)?
- How do these aims fit with the aims of your organisation?
- How does the pilot differ from other pilots/initiatives that are being delivered locally in this area?

## Involvement in the pilot programme

How was your organisation approached to take part in the pilot?
Please describe your involvement in the pilot (e.g. targeting, training, home visits, referral pathway).
How have you contributed to the targeting of the pilot e.g. through referrals to the FRS? If so, please describe this process.
Probe for:

- Who is being targeted for the intervention?
- Are individuals/households being targeted across the whole FRS authority or within particular areas?
- What method are you using to identify targets for home visits?
- How are targets being invited to participate (for example, knocking on doors, letters and leaflets, cold calling)?
- Do you think the pilot is reaching the right people?
- How could the targeting of the pilot be improved?

## Referral pathway

Can you describe how the referral pathway works? Take me through it step-by-step?
What was the process for setting up the referral pathway? Do you think this could be improved?
What happened to those people who were referred to you? Were you able to address the needs of the individual or were they referred onto another agency?
Probe:

- If people were referred onto other agencies, did they follow-up this up?

Were the referrals appropriate? If not, why not?
Did the number of referrals you received match your expectations? Please describe.
What aspects of the referral pathway work well/work less well? Please describe.
How could the referral pathway be improved?
Overall, how well do you think the pilot has performed? Are there areas for improvement? If so, how could it be improved?

## Data and monitoring

What data are you collecting on the referral pathway? How is it being stored/shared with the FRS?
Are you collecting data on referral feedback/outcomes of service provision/follow up? Would you be able to share this data with us?

### Early indication of outcomes and impacts

What are the main outcomes you expect the pilot to achieve?
Where do you think the pilot is likely to have the biggest impact?
Follow prompts:

- incidence of falls
- hospital admissions
- excess winter deaths
- reduction in incidence of flu
- improved health and wellbeing
- reduced demand on public services
- reduced incidence of fire
- improved conditions of the home

What are the key enablers to success?
What barriers or challenges exist that may affect the achievement of these outcomes and impacts?
How likely is it that the pilot will achieve its target outcomes?
Has the pilot achieved any early outcomes? If so, please describe these outcomes in detail.
If the pilot was to be repeated, is there anything that you would have like to have gone different? If so, what?

- Approach to participate
- Planning
- Training

### Additional questions

Is there anything else you would like to add that you think is important for us to know at this time?

## Topic guide for beneficiary interviews

### Background

Please can you confirm your full name?

### RS home visit

How did you hear about the home visit programme?

Probes:

- Did you receive a letter?
- Did you receive a phone call?
- Did you receive a knock at the door?
- Were you referred by another organisation? If so, which organisation?
- Did you request a home visit yourself? If so, how did you do this?

Thinking back to before you received the visit, what did you expect to get from the visit?
Did you receive any information about the visit prior to it taking place?
Why did you decide to accept a home visit from (name of local FRS)?

Probe:

- Did you have any existing issues you wanted addressing? If so, what were they?
- Would you have allowed another organisations into your home to conduct the visit? Why/why not?

Could you tell me a little bit about the visit?
Probes:

- Who carried out the visit?
- Did they explain the purpose of the visit and what would happen?
- What did they ask you?
- What did they do (for example, did they check the smoke alarms, did they point out trip hazards)
-

## Questions on the Get up and Go test

During the visit, did you take part in a Get Up and Go test? If they do not recognise the name of the test use the following: Do you recall being asked to do a get up out of a seat, walk a few steps and then walk back to your seat? If yes:
How did you feel about being asked to carry out this test?
Were you happy to take part in the test?
Do you feel the test was relevant to you and your needs?
Did you receive a Get Up and Go booklet? If yes:

Probe:

- Did you find the booklet useful? Why/why not?
- Have you put any advice from the booklet into practice? Why/why not?

During the visit were you:

- Given any equipment (smoke alarms, thermometers)?
- Did you receive any leaflets or advice?

Did they suggest referring you to another organisation to give you additional help/assistance? What organisation did they suggest? What additional help did they suggest you might need?

Probes:

- What happened next?
- Have you received support from this organisation? If so, what kind of support did you receive? When did you receive this support?
- Did they address any issues or needs you had? If so, what did they do and how did they do it? If no, why do you think this was?

Was the home visit useful to you? In what way? Was it as you expected?
Probe:

- Did you find the information you were given useful?
- Did the visit address any issues you had at the time?
- Did the visit lead to a referral? Did the referral organisation address any issues you had at the time?
- If no, why do you think it wasn't useful? How could it be improved?

## Questions on impact

Have you or another service made any changes to your house since the visit?
Probe for*:*

- Have you had any home improvements (e.g. installation of hand rails, safer footwear)?
- Have you changed your behaviour (e.g. change the way you heat your home)?
- Have you taken advantage of energy related discount schemes (e.g. Warm home discount scheme)?

Do you think these changes would have happened if you had not received a visit from your local FRS? Do you think you would have got this support from another organisation?
Have you had a flu jab this winter?

- If yes, was this because of the advice you received from the visit or a referral organisation? Was it through a different service?

Do you believe you are at risk of a fall? Have you ever had a fall?
If yes, do you feel the home visit has reduced the risk of you experiencing a fall?

- If yes, how?
- If no, why? Have you received support from another organisation unrelated to the home visit?

How often do you:
Probe:

- Leave the house? What do you leave the house to do?
- Have visitors? See or chat to other people?
- Has the home visit supported you to engage in any of the activities we have covered? If so, how?
- Do you think you would have been able to do these if the home visit had not happened?

- Are there any other services that might have supported you in doing the activities we just discussed?

Would you say the home visit has led to any other changes to your life, health, wellbeing? If so, please could you tell me about them?

## Questions on QOL and service use

Have you required the support of any emergency services this winter (ambulance, police, Fire Service, A&E)? Have you required them in previous winters? If so, please describe:
Probe:

- If they have required any emergency healthcare support, find out if they have spent any periods in hospital this winter.

Do you think the support you have received as a result of the home visit could help improve your quality of life? Why/why not?
Do you feel more supported and better able to manage your health?

## Additional comments

Would you recommend the service to others, including family and friends? Why/why not?
Do you have anything else you would like to say which he have not discussed so far?

## E-survey

The evaluation team designed and distributed an online survey to all staff involved in the delivery of pilot across the three pilot areas. The survey was designed to take around 15 minutes to complete (based on closed questions with the opportunity to provide free text comments). The content of the E-survey is detailed below.

## Personal details

- Name: open response
- Work Email address: open response
- Position: open response
- Full-time/retained: single choice response – either full-time or retained
- FRS area: single choice response from – Greater Manchester FRS; Staffordshire FRS; Gloucestershire

## Winter Warmth/Safe and Well training

Did you attend the Winter Warmth/Safe & Well training?: *single choice response – yes/no*

Do you undertake Winter Warmth/Safe & Well home visits?: *single choice response – yes/no*
How many home Winter Warmth/Safe & Well visits would you say you have delivered since November 2015? (Single choice response: Under 10; 11-20; 21-30; 31+)
How was the training delivered?: *single choice response*

- Face-to-face
- Webinar/e-learning
- Other (please describe)

Which of the following was covered during your training? *Multiple choice response*

- Falls
- Cold homes
- Flu
- Social isolation

*For sections 1.3.1 – 1.3.4, route survey to skip any which the respondent has not checked in question 10.*

## Falls

Have you ever received falls training in the past, prior to the Winter Warmth training?: *single response – yes/no*
*If respondent clicks 'yes' they will be directed to Question 11. If they click 'no', they will be directed to Questions 12.*
To what extent do you agree with the following statements (using Likert Scale, which is a five-point scale from 'Strongly agree' through to 'Strongly disagree')
The training: *single choice response for each statement below*

- Added to my knowledge and ability to identify falls risks and hazards in the home
- Added to my ability to directly address falls risks and hazards
- Added to my ability to give appropriate information and advice about falls risks
- Sufficiently prepared me to carry out the Get Up and Go test
- Improved my knowledge and ability to make a referral for a falls assessment/support around falls where appropriate
- Improved my knowledge of potential falls referral organisations

To what extent do you agree with the following statements (using Likert Scale, which is a five-point scale from 'Strongly disagree' through to 'Strongly agree')

The training: single choice response for each statement below

- Sufficiently prepared me to identify falls risks and hazards in the home
- Sufficiently prepared me to directly address falls risks and hazards in the home
- Sufficiently prepared me to give appropriate information and advice about falls risks
- Sufficiently prepared me to carry out the Get Up and Go test

- Enabled me to make a referral for a falls assessment/support around falls where appropriate

## Cold homes

Have you ever received training on issue relating to cold homes in the past, prior to the Winter Warmth training?: *single response – yes/no*
*If respondent clicks 'yes' the will be directed to Question 13. If they click 'no', they will be directed to Questions 14.*
To what extent do you agree with the following statements (using Likert Scale, which is a five-point scale from 'Strongly disagree' through to 'Strongly agree')
The training: *single choice response for each statement below*

- Added to my knowledge and ability to identify issues related to cold homes
- Added to my ability to directly address issues relating to cold homes
- Added to my ability to give appropriate information and advice about issues relating to cold homes
- Improved my knowledge and ability to make a referral for issues relating to cold homes where appropriate
- Improved my knowledge of organisations who support people experiencing cold homes

To what extent do you agree with the following statements (using Likert Scale, which is a five point scale from 'Strongly disagree' through to 'Strongly agree')

The training: *single choice response for each statement below*

- Sufficiently prepared me to identify issues relating to cold homes
- Sufficiently prepared me to directly address issues relating to cold homes
- Sufficiently prepared me to give appropriate information and advice about issues relating to cold homes
- Enabled me to make a referral for additional support around cold home

## Flu immunisation

To what extent do you agree with the following statements (using Likert Scale, from 'Strongly disagree' through to 'Strongly agree'):
The training: *single choice response for each statement below*

- Sufficiently prepared me to give information and advice about flu risks and flu vaccinations
- Enabled me to appropriately signpost people to flu vaccination clinics

## Social isolation

To what extent do you agree with the following statements (using Likert Scale, from 'Strongly disagree' through to 'Strongly agree'):

The training: *single choice response for each statement below*

- Sufficiently prepared me to identify issues relating to social isolation
- Sufficiently prepared me to give appropriate information and advice about social isolation
- Sufficiently prepared me to make an appropriate referral for issues relating to social isolation where necessary

## Quality and relevance of the training

Overall, how would you rate the training in preparing you to undertake the winter pressures home visits? (using 0-5 scale: 0 being poor and 5 excellent): *single choice response*
Do you think the training could be improved?: *single choice response*
*If responded click 'yes' they will be asked to describe how the training could be improved through an open response.*

## Delivery of the programme

How much time would you say it takes, on average, to conduct a home visit? (Between: 0-0.5 hours, 0.5-1 hours, 1-1.5 hours, 1.5-2 hours, 2-2.5 hours, 2.5+ hours): *single choice response*
How often did you encounter problems with gaining access to households in order to conduct a home visit?: *single choice response*

- Never
- Rarely (less than 20% of home visits conducted)
- Sometimes (Between 20% - 40% of home visits conducted)
- Often (more than 50% of home visits conducted)

*Note: In this section, we would like to focus on the data collection aspect of the home visits. By data collection, we mean the recording of information such as name, address, age of occupier, whether they needed a referral.*

Using a scale of 0-5, with 0 being simple and 5 being very challenging, how did you find the data collection requirements of the home visit?
Were there any aspects of the data collection requirements that you found particularly difficult? If so, please describe (Open response)
Do you think there would have been useful to collect more information? If so, what additional information would you collect? (Open response)
Do you think the delivery of the home visits could be improved? If so, please describe (open response).

## Outcomes and impacts

Based on your experience of conducting the home visits and the activities you carried out during the home visits, which area(s) do you think the pilot is likely to have the most impact?
Please select from the following (*multiple choice response*):

- Falls
- Cold homes
- Flu immunisation
- Social isolation
- Fire safety
- Other (please describe)

Do you think there are any factors which might prevent the pilot from achieving outcomes in the areas listed above? If so, please describe (*Open response)*
If you have any additional comments on any aspect of the training or the pilot in general please state them here. (*Open response).*

# Annex 3: Data collection

This section presents the data identified that needed to be collected to support the evaluation. The data is divided into five groups – referred to as 'Levels' – based on the different research questions for the evaluation.

It was expected that the Level 1 and 2 data would be collected through the targeting and delivery stages of the intervention. This is broadly management information which the pilot areas would need to collect from the outset. Level 3 data aimed to track the pathways of participants once they had received the intervention and identify the outcomes and impacts of additional services provided through referral pathways. This is broadly management information that partner organisations would be asked to provide by the pilots areas. Level 4 and 5 data would support the evaluation in establishing the outcomes and impacts of the intervention on local services and health outcomes. This is broadly data which is collected by other services on take up and the health of the target beneficiaries. It may not be published at the level required for this study or be shared at present.

Each of these is described in more detail below.

## Level 1

It was expected that Level 1 data would be collected during the identification and targeting stage of the intervention. This must include:

- data on the number of households identified as eligible for the intervention
- the address of the individual households being targeted
- a response to the offer of the intervention, whether:

- The individual refused to participate in the intervention
- The individual failed to respond to the offer
- An appointment was made to visit the home but not visited
- A home visit was completed

It was expected that the identification and targeting stage would also be likely to provide some information on the characteristics of individuals being targeted for the intervention. This would include the following:

- age
- gender
- ethnic group
- geographical location
- health (if they have long term conditions)
- household type (social housing, private rented, owner occupier)

This information helps the evaluation to understand the need for the intervention and whether the targeting was appropriate as well as providing one of the outputs (visits completed).

### Level 2

It was expected that Level 2 data would be collected during (or immediately after) the delivery of the home visits. This would include data grouped around the following components of the intervention.

#### Data on the intervention participants

This would include:

- full address, including postcode
- full name of all adults in household (we presume over 65s) in receipt of the intervention, this may also include information on other people in the house who may also benefit from the intervention (NB Date of Birth may be required for data linkage)
- telephone number

This data is important as it provides the evaluation with information to track the service use of beneficiaries (if this is possible), as well as contact details for beneficiary interviews during the fieldwork stage of the evaluation.

#### Data on the home

It was expected that the visit would collect data on a range of different aspects of the home, including:

- type of heating used in the home – for example, do they have central heating, do they use secondary heating, do they heat one room or the entire home
- an assessment of the overall quality/condition of the home
- whether the house is insulated/has double glazing and so on

This information supports the evaluation in understanding the types of homes being targeted and the relationship between the home and health.

### Risk assessment

Based on the information provided to the evaluation in the training pack, it is understood that the intervention would consist of a series of risk assessment carried out during the home visit. Therefore, it was expected that data would be recorded on all the risks assessed during the home visit:

- falls and frailty (for example, ‘Get up and Go’ assessment)
- vulnerability of the home to cold weather
- social isolation
- flu
- fire safety

### Risk identification

It was expected that the information collected during the risk assessment would identify risks within the home. It was also expected that information on the risks would be recorded under the five main issues (falls, isolation, cold homes, flu, fire safety) identifying the relevant risks and hazards listed in the training packs. This information helps the evaluation establish the difference between the intervention and a business-as-usual approach (HSCs).

### Immediate actions

It was expected that the identification of a risk will prompt an act of mitigation from the staff conducting the home visit. It is important that all of these immediate interventions are recorded. It was expected that these activities were likely to include actions such as, replacing light bulbs, clearing clutter that may cause a trip hazard, and fire safety installations, to name a few.
This information is important as it supports the evaluation in identifying potential outcomes and impacts of the intervention through interviews conducted with beneficiaries, as well as establish the kind of activities conducted during the intervention.

### Signposting and advice

Depending on the risks identified during the visit, it may be necessary for delivery staff to signpost participants to other services or provide information and advice about staying safe and/or warm, as mitigations. It is important to keep a record of this information as it will help the evaluation track which organisations and services beneficiaries may have been accessed in response to the intervention.

In addition, it is important to distinguish what is meant by signposting and advice. Signposting and advice is likely to consist of leaflets, contact details and information provided to the beneficiary which requires action from the beneficiary. For example, the delivery staff may

provide the beneficiary with contact details of the local service responsible for conducting falls assessments. It is then up to the beneficiary to access this service.

### Referral

It was expected that some home visits will lead to a referral being made to another service requiring the service to then contact the beneficiary. It was anticipated that these would be a small range of the following:

- health services
- social care services
- other local authority services
- third sector services
- other public services (FRS, local DWP)

This information is important as it supports the evaluation in identifying the type of services accessed by the beneficiaries and establish the outcomes and impact of the intervention.

### Permission for data sharing

It is important that FRS staff gain permission from beneficiaries to share the information (names, contact information, etc) collected with the evaluation team for evaluative purposes.

This is vital in supporting the evaluation team to conduct interviews with beneficiaries at a later stage of the evaluation, as well as access and analyse the information collected. It was expected that approval was confirmed at the time of the home visit.

### Level 3

At this level, the data consists of information provided by the referral organisations on the types of service accessed by beneficiaries (or by the local population/population sub-group as a whole). It was expected that the pilot areas (as well as partnership organisation) would work together with partner organisations to agree the collection and sharing of this information.

It was expected that the organisations involved in the referral process would include the following:

- local NHS Falls teams
- local authority services
- voluntary and third sector organisations, such as Age UK
- the FRS

This data helps establish some of the costs (or cost savings) as a result of the intervention. It will also help us track the pathways of people who have received the intervention.

### Level 4

It was proposed that ICF, PHE and the local FRS work collectively to negotiate access to service use data in local areas during and after the intervention period by the beneficiaries of the intervention. This helps support the comparator impact assessment and SROI aspect of the evaluation, in particular, the potential cost savings associated with the intervention if the evaluation is able to establish any reduction in the use of such services compared to areas without the intervention.

It was expected that the following data would be collected:

- data on fire service call-outs (including location, cause, characteristics of individuals involved, house-type) by the FRS
- data on the incidence of falls by NHS and Local Authority Falls assessment team
- local public health data on older people's health and wellbeing sourced from CCGs and local authorities
- data on the prevalence of cold homes sourced from local Warm and Well teams

### Level 5

It was proposed that ICF, PHE and the pilot areas work collectively to negotiate access to service use data in local areas during and after the intervention period by the beneficiaries of the intervention. This helps support the impact assessment and SROI aspect of the evaluation, in particular, the potential cost savings associated with the intervention if the evaluation team is able to establish any reduction in the use of such services in the period after the delivery of a home visit.

It was expected that data could be collected on the following:

- A&E attendances (NHS England; NHS Trusts
- hospital admissions (including condition specific admissions) (NHS England; NHS Trusts)
- flu immunisation rates (PHE)
- excess winter deaths (ONS/PHE; principal local authority);
- hospital situation reports (bed spaces and hospital capacity) (NHS England; NHS Trusts)

It is important that local data and statistics listed in Level 5 can be sourced for the pilot areas (and for the target age groups) so that trend data over similar periods as the study period can be obtained.