

Introduction

The cornerstone of all Fire and Rescue Service (FRS) prevention work has been how services can prevent fire, fire fatalities and serious injuries in the home setting. This is where the majority of fire fatalities occur and remains the primary focus for the sector's prevention efforts.

This document sets out the background of the sector's prevention work in the home and introduces the Person-Centred Framework (PCF) for the Home Fire Safety Visit (HFSV).

This supports all FRS to deliver a standardised and evidence-based approach to a person-centred HFSV. The PCF has been developed by the National Fire Chiefs Council (NFCC) in consultation with UKFRS and with the support of the Home Office. Further collaboration with NFCC work streams, the devolved nations and external partners is required to develop the PCF further.

NFCC believes that at the core of FRS prevention work is the explicit aim to reduce fire risk; to do this the individual or community must be at the centre of all that we do.

NFCC has endorsed a person-centred approach to prevention (2018)ⁱ which encourages FRS to work in partnership with others to address the underlying causes of fire fatalities and injuries.

1. The Prevention Journey of Fire and Rescue Services.

In the first State of Fire Report released in December 2019, Sir Thomas Windsor outlined the following:

The long-term decrease in the number of fire incidents is due to many factors, including prevention work by services for which they deserve great credit. As a result of responding to fewer incidents, services have used their capacity in a range of different ways to support their local communities. This includes expanding the breadth of their prevention work.ⁱⁱ

The role of the firefighter. Services have expanded the role into broader areas, in particular, health and wellbeingⁱⁱⁱ

This reflects the changing nature of FRS which has seen an ever-increasing realisation that prevention work should include risk reduction measures developed around the wider needs of the individual; not solely the type of premises in which they reside.

The collaborative approach adopted by FRS through Safe and Well Visits (SWV) and echoed in the Working Together Document came ahead of the Government intention to strengthen collaboration through The Policing and Crime Act (2017)^{iv} which placed a statutory duty on FRS, with other blue light services, that required these services to keep collaboration opportunities under review.

In 2019, the Minister of State for Policing and the Fire Service, with the support of the Minister of State for Care endorsed the person-centred approach that NFCC was promoting, and which the sector was striving to deliver, with the important caveat that whilst he recognised the additional benefits these visits may have, the focus must remain on fire safety^v.

By 2020, up to 85% of FRS in England had developed a safe and well approach to fire risk visits in the home with similar developments in the devolved nations.

2. The Challenge Facing the Sector

NFCC recognises that there has been a varied approach to the development of fire prevention in the home across the sector.

This view from the State of Fire Report echoes the view from Government and strategic partners that a level of consistency in the approach to prevention would be beneficial.

A Home Fire Risk Check (HFRC) and SWV are fully compatible and are parts of the same pathway approach to fire prevention. Both approaches should take a person-centred approach and should be seen as part of a single approach to the Home Fire Safety Visit.

In essence, the opportunity for FRS and strategic health and social care partners to work more effectively together is based on one important factor. The evidence that we can derive from fire fatalities across the UK indicates that there are common risk factors. Research shows that health issues, when coupled with fires in the home, result in worse outcomes including a much higher likelihood of fatalities.

These factors include mental health, multi-morbidity and frailty, cognitive impairment, smoking, drugs, alcohol, physical inactivity, obesity, loneliness, and cold homes. Some of these factors such as smoking increase the likelihood of having a fire and others such as frailty increase the likelihood of sustaining more serious injuries or fatalities. However, this does not have to be at the expense of services' core functions concerning fire prevention, protection, response, and resilience.

The balance needs to be right. And it is to achieve this balance that NFCC has produced the PCF for the HFSV.

3. Developing the Person-Centred Framework

NFCC has consulted with the sector about its approach to fire prevention in the home, which has informed the development of the PCF.

Between October 2019 and February 2020, NFCC engaged with a range of FRS stakeholders to develop a standardised and evidence-based approach to the HFSV. In the course of this work, NFCC spoke to 180 colleagues from across 46 FRS, including conversations with colleagues from the devolved nations. Further consultation is planned once the initial framework is approved for development by NFCC.

This work has sought to align the best practice of the HFRC and the SWV as a single tool for the sector. This work starts to provide the sector with an evidence-based framework for the HFSV.

The Person-Centred Approach

All FRS that participated in the regional workshops accepted the rationale for the person-centred approach. There was broad consensus that we need to strengthen the fire service prevention pathway to put it on an equal footing with protection and response in terms of a consistent and evidence-based approach.

The HFSV should utilise a person-centred approach. The aim of the visit should be about reducing risk and changing behaviour, not simply a checklist of questions to be asked.

All services agreed that we need a consistent approach to prevention training for FRS staff if we are to meet agreed professional standards when delivering advice and brief interventions to reduce fire risk in the home setting.

“The primary purpose of the Home Fire Safety Visit should be to mitigate and reduce fire risk whilst trying to change some of the riskier behaviours that may affect or increase exposure to increased fire risk”.

Risk Stratification

FRS need to look at local risk but also need a standardised approach. We should be adopting an all-age approach to prevention that recognises local risk but that draws upon a national methodology.

With regards to risk stratification, there is a recognition of the weakness of IT systems. It was accepted that IRS and other systems are primarily premises-based and can fall short of more sophisticated approaches to risk stratification if a person-centred approach is not applied. More work is required to arrive at a national approach to risk stratification, and this will be done through the NFCC Community Risk Programme.

All services recognised that effective risk stratification can only be achieved if we look at risk across, prevention, protection, and response.

Data sharing is a significant limitation on the sectors ability to accurately map risk in a local community. A major barrier to offering a person-centred approach is the inability to share and receive data with partners. The General Data Protection Regulation (GDPR) has seen a risk-averse culture that sometimes hampers collaboration.

The Core Components of the Fire Risk Check

The work drawn from the regional workshops has recommended that the following core components of a HFSV should be standardised across all English FRS (and UKFRS subject to further engagement); and that these should be developed based upon a person-centred approach taking into account personal factors including physical and mental health and behavioural factors, including smoking, medication use and substance use.

- Home Fire Detection (smoke and heat)
- Fire Safety in the Home (kitchen, candles, and escape planning)
- Assistive Technology
- Fires and Heaters (safer heating)
- Hoarding and Clutter
- Arson/Deliberate Fires
- Smoking-Related Fires
- Medicines and Medical Devices
- Electrical Safety

Data Collection

Data sharing was still seen as a major barrier to developing more effective referral pathways between FRS and strategic partners. Each FRS has different relationships with partners; this was seen as a localised issue that would benefit from some national definitions of data sharing practice and an indication of the data that the sector should be collecting and reporting to strengthen the evidence base for prevention.

The case for national standardisation in England but with some local deviation was a very loud and consistent message from English FRS. At the same time while the devolved nations accept the principles of standardised data this must be developed at a devolved level in the first instance.

Part 2. The Person-Centred Framework for the Home Fire Safety Visit

1. Introduction

The framework provides guidance for all FRS to further develop a consistent and evidence-based approach to conducting person-centred HFSV. The framework provides:

- A working definition of the person-centred approach
- Guidance on risk stratification
- The core components of the HFSV
- Guidance on data collection
- Guidance on evaluation

The PCF is still in development and this work links to ongoing work with NFCC Protection Committee, NFCC Community Risk Programme and NFCC Data and Digital Programme.

NFCC supports the following working definition of the person-centred approach to reduce fire risk in the home setting:

‘The Person-Centred Home Fire Safety Visit should include risk reduction measures developed around the health, behaviour and wider needs of the individual; not solely the type of premises in which they reside. As it is these underlying causes that can increase an individual’s exposure to fire and can also reduce the chances of them surviving a fire in the home.’

2. The Person-Centred Approach to the Home Fire Safety Visit

NFCC supports the development of a consistent and professional prevention function for all FRS staff. NFCC believes that the adoption of an evidence-based person-centred approach which reflects the needs of our most vulnerable individuals and communities is the way to reduce incidents of fire and fire-related deaths in the home setting. This approach will ensure that the sector is targeting its prevention capability to benefit those individuals and communities that are most at risk of having a fire in their home.

This work is often undertaken in partnership with other agencies and has sometimes been confused as FRS is doing work on behalf of other agencies. However, at the core of all FRS prevention work is the explicit aim to reduce fire risk as a statutory function of all FRS. Achieving a balance between fire prevention, protection, response and resilience is at the

centre of the work that NFCC has undertaken to develop a national approach to fire prevention in the home setting.

If services are to provide a person-centred HFSV then the following characteristics should be evident:

- ✓ **Being person-centred means affording people dignity, respect, and compassion.**
Whenever someone interacts with services, they should always be treated with dignity, respect, and compassion. These 'experience standards' are basic human rights
- ✓ **Being person-centred means offering coordinated support.**
It's not just individual encounters that matter – services should offer or be part of coordinated support across multiple episodes and over time if needed. Coordination is particularly crucial when an individual's circumstances are changing and are being seen by a range of local partners
- ✓ **Being person-centred means offering personalised support.**
Because we are all different, person-centred support is tailored to the needs and aspirations of each individual, not standardised to their condition or circumstances. It means that the things that are important to the person receiving support and their family are discussed and form the basis of the advice we provide, and the support that we give
- ✓ **Being person-centred means being enabling.**
The starting point for being enabling is seeing people as assets, not burdens and seeking to support them to recognise, engage with, and develop their sense of resourcefulness, and to build on their unique range of capabilities. Being 'enabling' means that systems and services orientate themselves towards supporting people to recognise and build upon their strengths, and/or to recover from setbacks or negative episodes so that they can live an independent and fulfilling life.

The person-centred approach to HFSV should recognise these characteristics, and that individuals may have varying and increasing fire risk based upon numerous and changing factors which can be categorised under three headings as follows:

Person Factors- are integral to the person or people living in a property; things that are temporarily or permanently a part of them and cannot be changed such as their level of mobility or mental health and wellbeing.

Behaviour Factors- are actions, activities, or behaviours - things that people do (or don't do) such as smoking a cigarette or taking medication.

Home factors- are those factors which are integral to the home itself, or its contents (physical environment). Or how the person interacts with others (social environment) such as the layout of the property and other people that occupy the property.

Figure 1. Illustrates how this approach may result in services understanding which individuals represent a higher risk of having a fire in the home.

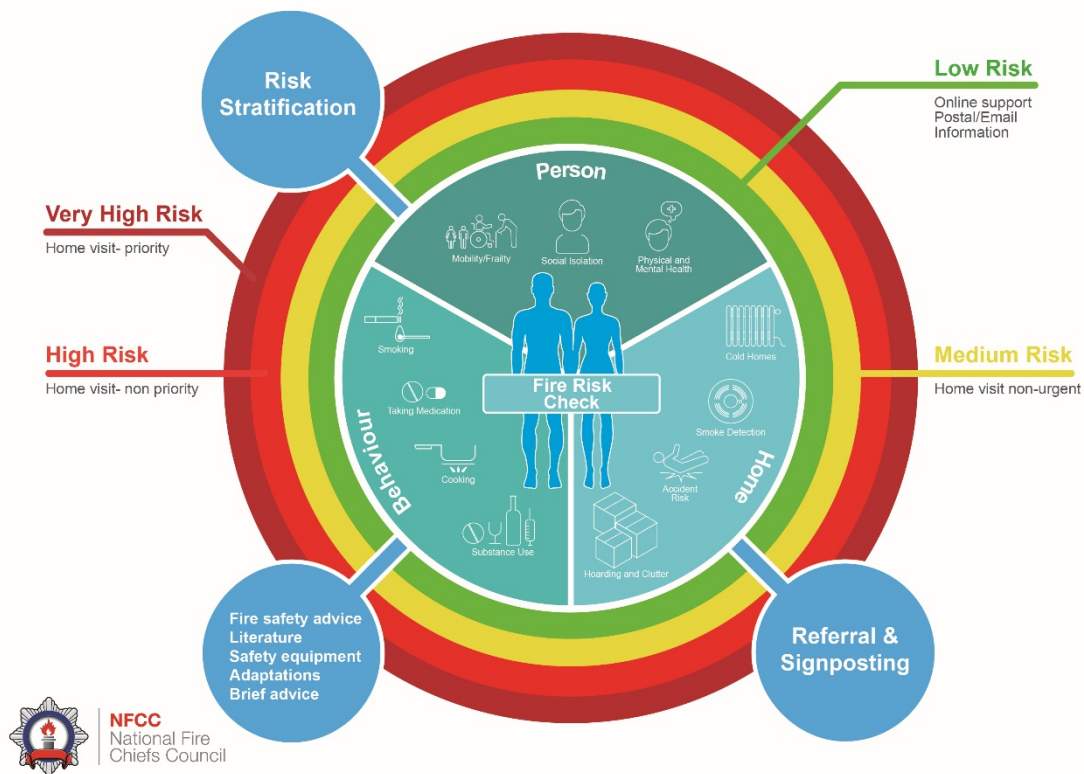


Figure 1. The Person-Centred Fire Risk Check

This definition of ‘person-centred’ outlined in this framework builds upon NFCC endorsement of the Safe and Well Standard Evaluation Framework^{vi}.

3. Risk Stratification

The information services gave us about risk stratification fits into three broad themes – Data, Process, and Systems and has informed the risk stratification baseline suggested as part of the PCF.

Incident Recording System (IRS) and Prevention/Protection Activity Data

Since 2009, FRS has been recording incident data in the IRS but there are many problems with this national data that need addressing. The sector still only has access to a much-reduced data set that is not published in a timely fashion, usually being around a year out of date.

The Home Office produces statistics in the form of numbers of incidents attended. The Local Government Association (LGA) provides a benchmarking tool via Local Government Inform. Her Majesty’s Inspectorate of Constabulary and Fire & Rescue Service (HMICFRS) provides a Power BI dashboard using the numerical data it collects as part of its inspection process. None of these data sets provides NFCC or FRS with sufficient insight or disaggregated data,

or in other words, what makes people, place and building high risk and how to stratify that risk locally. Nor does it give any context behind rising trends.

FRS are using a wide range of data like the indices of deprivation, fingertips health indicators, fly-tipping trends, and Mosaic to understand why incidents sometimes increase. Many services are developing local dashboards, but the Home Office Fire Statistics team have not developed any FRS data that could be utilised locally.

The IRS does what the Home Office needs it to do to a degree, but it is of limited use for FRS, which need to be able to access national data to fulfil their risk stratification potential with regards prevention and protection.

Process of Risk Stratification

Whether stratification is based on the risk of fire or the risk of death or injury is not consistent across the sector.

Some risk stratification methods use weighting and again these are very different. There is not one that is the same as another. There seems to be no concrete basis for how attributes should be weighted. The lack of a structure and permanent research function within the sector is a major limitation in understanding and validating the sectors approach to fire risk.

Fire analysts need a competency framework and support in the form of training and development if we are to utilise this resource for the benefit of the wider sector.

Risk Stratification to Support the Person-Centred Home Fire Safety Visit

The FRS sector is a standout beacon for prevention and protection activity and the importance of being able to evidence that everything we do is person or business centred, and intelligence-led, cannot be underestimated.

Despite risk stratification being done differently across the sector there are some factors that all FRSs have in common.

The output from the Greenstreet Berman work was that 73% of the people lived alone and that the risk of becoming a fire fatality increased exponentially from the age of 50. This analysis used data from 2009 to 2011 and during this time things will almost certainly have changed, smoking prevalence is reducing each year, for example. There has been no analysis at a national level since this report. While every service uses different methods to weight the factors, most are using the same ones.

This research suggests that the risks associated with home fire safety fall into three categories:

- Risk of having an accidental dwelling fire (ADF)
- Risk of being a casualty in an accidental dwelling fire
- Risk of being killed in an accidental dwelling fire

This research^{vii}, including the 2014 DCLG report by Greenstreet Berman, identifies that the characteristics that put people at greater risk of dying in a fire are different to those that put people at risk of having a fire or being injured.

HFSVs aim to reduce the likelihood of fires occurring as well as increasing the likelihood of safe escape if a fire occurs. It is important therefore to ensure that risk stratification models include both likelihood of fire and severity.

It is recommended that through the Community Risk Programme NFCC commission a full systematic review and analysis of national statistics to develop a more detailed risk profile.

Research which has been identified usually focuses on either fire fatalities or accidental dwelling fires and casualties. The most significant characteristics consistently identified and those which can be used with some confidence by FRSs are:

Fire fatalities

- Over 70 years old, particularly in combination with any pre-existing mental or physical impairment including frailty
- Children under 11 years old, but especially under 5 years who are less likely to be able to self-rescue
- Being male (particularly when combined with other risk factors)
- Smokers – especially if combined with poor mobility or other health condition
- Low Socioeconomic Status (SES) i.e. deprivation
- Disability or long-term health condition (including dementia)
- Mental and/or physical impairment caused by alcohol and/or drugs
- Non-owned property or mobile home – this may be a proxy indicator for low SES
- Single-parent families, and households with more children

Fire casualties / ADFs

- Living alone
- Having had a fire before, and lack of basic fire safety knowledge
- More prevalent among people in the 40-49 age group

There are several interactions between these elements. In particular, age and other characteristics, where the primary factor relates to fatality and ability to escape. Many studies have pointed to the fact that although older age groups are more likely to become fire fatalities, they are less likely to have a fire in the first place. As Gilbert et al (2017) point out, the groups who are fire fatalities are separate and distinct from the groups who have fires or experience injury relating to fire.

It is also important to note the prevalence of alcohol as a factor in fire fatalities, especially the interaction with smoking which appears to be a leading combination for inability to escape a fire. Another interesting point raised (although so far, only in one study) was that of people who had survived an ADF, 81% had experienced a fire before, so this must be taken into consideration as a key targeting factor.

It is not possible to recommend a standard for the weighting of the factors at this time until more research gives us the evidence to do this with confidence. It should be noted that more work is required to develop this aspect of the PCF.

Risk stratification is an important use of our data and vital in finding hard to reach people, but FRS also need to consider how people access their FRS. The sector needs to ensure that referral pathways allow any member of the community to recognise their risks and to reach out to their local service for advice and practical assistance where applicable. The development of a risk stratification methodology for the sector should take into account equal access and the existing position of NFCC as detailed in NFCC's Inclusion, Equality and Diversity Strategy^{viii}.

As part of NFCC's Equality, Diversity, and Inclusion Statement^{ix} FRS should ensure that the commitments of this position statement are met as services develop risk stratification approaches. More specifically FRS should take account of the following NFCC commitments:

- Encouraging Fire Authorities to undertake and strive to improve their assessment levels within the Equality Standard for Local Government
- Ensuring all new and existing policies and practices are impact assessed. The prioritisation of this is especially important at Authority and Government Department level at a time when difficult financial decisions are being made
- Encouraging learning and development at all levels to promote continuous improvement and understanding of inclusion and diversity which impact our workforce and service delivery

4. Advice and interventions – The Core Components of the Home Fire Safety Visit

Throughout its consultation with the sector NFCC has sought to understand what FRS is delivering as part of their respective HFSV. This element of the PCF sets out the core components of a HFSV based upon the practice of the FRS that were consulted and the expert opinion of topic leads through NFCC's Home Safety Committee.

It is important to stress that the following nine core components of the HFSV are seen by NFCC as an offer that all FRS can, and should, be offering as part of their prevention offer. However, this does not limit FRS in providing additional areas of advice and brief interventions where local circumstances such as capacity and capability allow it, and local risk stratification warrants additional measures. This should not be seen as a basic core level of provision, rather a sound basis to build further prevention work on, and that addresses fire risk in the home and wider home safety risks where applicable.

NFCC believes that if an FRS is offering a person-centred HFSV then it should be confident in demonstrating how it delivers these nine core components in a person-centred manner, that takes account of the person factors and behaviour factors outlined in this document.

Each of the nine core components of the HFSV is made up of a description of what the challenge is regarding the topic, the advice and intervention guidance endorsed by NFCC, details of NFCC position and what NFCC will do to support FRS in delivering these core components including work with Government and other strategic partners.

The core components in the person-centred framework adopt the Hierarchy of Risk Control (HRC) measure as recognised by NFCC National Operational Guidance (NOG). This control measure is based on information provided by the Health and Safety Executive about the [hierarchy of control](#).

Risk control involves introducing changes to reduce the likelihood of a hazardous event from happening AND/OR reduce the consequences of the hazardous event. The HRC promotes a series of risk control measures to facilitate this approach. Risk control measures at the top of the hierarchy are preferred because they are less reliant on people doing something. Also, they protect larger numbers of people. So, where possible, the control measures should be employed from top to bottom. (It may sometimes be appropriate to utilise combinations of control measures from the hierarchy so that more than one control measure is at play.)

There are variations of the hierarchy employed in different sectors. The one suggested below, for fire risk reduction in the home, is based on ERICPD (minus the D which stands for discipline and does not necessarily resonate with the spirit of the Home Fire Safety Visit).

Eliminate	The most effective method of risk control is to eliminate the hazard.
Reduce/Replace	If it is not possible to eliminate the hazard completely, the next option is to reduce it by replacing it with something safer.
Isolate	If it is not possible to eliminate or reduce/replace the hazard, the next option is to isolate the hazard (preventing people from coming into contact with it by enclosing it/shutting it off or putting distance between it and people)
Control	If it is not possible to eliminate, reduce/replace or isolate the hazard, the next option is to control it. Control is about employing safe systems, or rules about how activities should be carried out to minimise risk. This is where most traditional fire safety <i>advice</i> comes into play, such as ‘don’t leave cooking unattended’, ‘use a heavy-bottomed ashtray’, ‘extinguish candles properly’)
Personal Protective Equipment (PPE)	If the measures above are not viable, the next option is the use of PPE to prevent harm if people are exposed to a hazardous event. PPE shouldn’t be considered as a first-choice control but could be used in combination with other measures in the hierarchy.

Applying the framework to the HSFV

1. Identify the fire hazard that needs controlling (Cooking, smoking, candles, clutter, alcohol use, electrics, heaters, emollient use etc.)
2. For each measure within ERICP, identify what (if anything) the fire risk control measure is for the householder. So, what is/are the action/s they would need to take? (In some cases, there could be no identified action for a particular element of ERICP and so the householder would defer to the next level down)
3. Importantly, for each control measure identified, what is the proposed/agreed FRS Intervention to encourage or enable the householder to take the action. So, what is it that is expected of the FRS to trigger the householder to employ the control measure?

An example: Reducing Smoking-Related Fires in the Home

ERICP	Householder Fire Risk Control Measure	FRS Intervention
Eliminate (the smoking materials/behaviour)	Quit smoking	Delivery of Very Brief Advice (VBA) to encourage people to make a quit attempt
Reduce/Replace (the smoking materials/behaviour)	Switch from smoking to vaping	Provision of information about the health and fire safety benefits of switching from smoking tobacco products to vaping.
Isolate (the smoking materials/behaviour)	Have a smoke free home	Provision of information about the health and fire safety benefits of having a smoke free home.
Control (the smoking behaviour)	Practice safe smoking habits	Provision of traditional verbal smoking-related fire safety advice and smoking-related fire safety literature.
PPE (to protect against smoking-related fire)	Use PPE	Provision of fire risk reduction equipment in accordance with risk, local funding, and arrangements. E.g. fire-retardant bedding, smoking apron, self-extinguishing ashtray.

Based on this approach the following core components that recognise person and behaviour factors make up the person-centred framework and can be found at appendix 1a of this document.

Core Components of the Home Fire Safety Visit

1. Home Fire Detection
2. General Fire Safety (candles, cooking, and escape planning)
3. Electrical Safety
4. Fire and Heaters (safer heating)
5. Assistive Technology
6. Hoarding and Clutter
7. Deliberate Fires
8. Smoking-related fires
9. Medicines and Medical Devices

5. Data Collection – The Development of a Standard Data Collection Dashboard

The data collection requirements of the PCF are based upon the work undertaken between 2016 and 2018 to develop the Standard Evaluation Framework (SEF) which was approved by NFCC in 2018. The principles of the SEF have been applied to the collection of data relating to the nine core components of the framework and, as such, should be seen as an approach to standardising data collection for the HFSV across all FRS.

The SEF focused on providing the best practice guide for FRS to evaluate SWV aimed at over 65s. However, this approach can be applied to a wider range of vulnerable adults. The SEF was a first step towards enabling FRS to generate and collect consistent data on the delivery of HFSV. The learning from the SEF guidance will enable the development of the Standard Data Collection Dashboard (SDCD) as detailed in this section of the document.

The Standard Data Collection Dashboard

The SDCD is still to be developed and would provide a list of data collection criteria to ensure that FRS can collect high-quality information and capture data from the HFSV. Using a standardised approach around a core set of indicators which will enable comparisons to be made between different FRS approaches, will also allow the aggregation of this data at a national level.

The list of measures and indicators is split into the following data sets:

- Demographic Data
- Baseline Data
- Follow up Data
- Qualitative Data

These data sets are made up of essential criteria which are considered to be part of the minimum recommended dataset required to capture a HSFV against the nine core components of the PCF.

To generate good quality data, to maximise local and collective learning, and to enable continuous improvement over time each FRS should assess its HFSV, ideally in a way that is consistent with other FRS. This enables evidence to be pooled across FRS, and also enables individual approaches to be directly compared to identify best practice.

The SDCD provides a pragmatic approach to data collection. It allows for complexity, variation in local delivery whilst still enabling a level of consistency. It is not designed to be overly prescriptive or to stifle innovation. It can be adapted to suit local circumstances.

It is recognised that introducing a SDCD is a new approach for FRS and as such, represents a challenge. Many FRS across the country are currently implementing HFSV in varying ways and using different methods to collate data. This framework is intended as best practice guidance and gives FRS something to work towards. The more closely this approach can be followed, the higher the quality of data that can be generated across England and the devolved nations as appropriate.

The Core Data Set

The SDCD has identified a set of core measures for every FRS to use when collecting data for HFSV interventions.

They have been selected because either they provide key background information to enable comparison or they are the indicators that are most likely to see a change/impact as a direct result of the HFSV.

The suggested source of the data is listed alongside each indicator.

	Part One: Demographics of individual beneficiaries	Essential	Source
1.1	Date of Birth		FRS/RP
1.2	Gender		FRS/RP
1.3	Ethnicity		FRS/RP
1.4	Disability Status		FRS/RP
1.5	Smoking Status		FRS/RP
1.6	Living Alone		FRS/RP

	Part Two: Follow up Data	Essential	Source
Process Evaluation			
2.1	Target numbers identified		FRS
2.2	Numbers visited		FRS
2.2a	<i>Numbers of re-visit attempts</i>		FRS
2.2b	<i>Number of refusals</i>		FRS
2.2c	<i>Number of visits completed</i>		FRS
2.3	Numbers of beneficiaries identified at risk from:		
2.3a	Lack of Home Fire Detection		FRS
2.3b	General Fire hazards		FRS
2.3c	Electrical Hazards		FRS
2.3d	Unsafe Heating		FRS
2.3e	Assistive Technology		FRS
2.3f	Hoarding and Clutter		FRS
2.3g	Deliberate Fires		FRS
2.3h	Smoking-Related Fires		FRS
2.3i	Medicines and Medical Devices		FRS
2.4	Number of interventions delivered, or referrals made for:		
2.4a	Home Detection		FRS
2.4b	General Fire Hazards		FRS
2.4c	Electrical Hazards		FRS
2.4d	Unsafe Heating		FRS
2.4e	Assistive Technology		FRS
2.4f	Hoarding and Clutter		FRS
2.4g	Deliberate Fires		FRS
2.4h	Smoking-Related Fires		FRS
2.4i	Medicines and Medical Devices		FRS

	Part Three: Qualitative Data	Essential	Source
3.1	Beneficiary Satisfaction Measure		FRS
3.2	Case Studies of beneficiaries		FRS
3.3	Interviews with Stakeholders		FRS
3.4	Interviews with FRS delivery staff		FRS

(FRS – Fire and Rescue Service, RP – Referral Partner, PH)

Supporting Guidance for the Standard Data Collection Dashboard

There is a recognition within the PCF that there is further work required to develop the SDCC and the systems to support this approach. This work should be carried out through NFCC's Digital and Data Programme. As part of this work, NFCC will work with the wider sector to refine the data requirements of the PCF in line with sector practice; with a recognition that the supporting guidance will need to be developed to explain the rationale for each indicator and provide technical guidance on how to collect the data, or where it can be sourced from. Data collection across the devolved nations will be further explored whilst recognising local governance structures and requirements.

6. Protection

As part of the work to develop and consult upon the PCF, NFCC colleagues have worked with NFCC Protection Committee to ensure that the definition and the implementation of a person-centred approach to the HFSV is compatible with the existing definition of person-centred as first outlined in NFCC's Specialist Housing Guide (May 2017).

The Specialised Housing Guidance recognises that the scope of the fire risk assessment required by the Fire Safety Order (FSO) does not extend to the risk to residents from a fire within their accommodation, though in that risk assessment there is a need to consider, generically, the characteristics of residents for whom the premises are intended.

An assessment needs to be made of the physical ability of residents to evacuate in case of fire. The most critical stage of escape is evacuation from the resident's accommodation.

All residents' accommodation should be protected by, at least, the minimum recommendations of the specialised Housing Guidance.

However, the person-centred fire risk assessment may identify the need for additional measures, particularly within a person's accommodation. A simple template for documenting the significant findings of the person-centred fire risk assessment is available to all FRS through the Specialist Housing Guide. Assessments should, wherever possible, be completed with the person, or with others who can speak on their behalf.

Further work to ensure the person-centred approach is a shared component of the protection and prevention functions of FRS will be carried out through the respective NFCC Committees. This work will focus on the following factors that were raised by colleagues through the Regional Workshops:

- Competency for fire safety of the person carrying out the home visit
- How protection issues are captured
- Engaging with the 'responsible person'
- Evaluating the fire risk assessment against the HFSV
- Awareness/understanding of the role/importance of social alarms/telecare
- Understanding evacuation strategies

7. Evaluation

Introduction

The evaluation model described here focuses on the core fire safety element of the HFSV as described in part 2 of this document.

Measuring other potential benefits, such as health outcomes, is likely to be more problematic and it is recommended this should be undertaken in partnership with local strategic partners where possible. NFCC does not consider it necessary for FRS to take responsibility for measuring outcomes which fall outside of the core functions, but individual services are free to decide locally how many resources they can allocate to supporting partners' objectives.

It is important to use, and contribute to, high-quality evidence to inform decisions so that practitioners can be confident in the effectiveness of their interventions. Furthermore, using evidence to underpin decisions means taking a step back to assess the possible outcomes of intervention activity, looking at what has worked in the past, and ensuring that planned intervention activity meets an agreed objective. All of which helps to ensure cost-effectiveness in the approach to design and evaluation of intervention activity. In other words, to adopt the evidence-based practice.

Evaluating the effectiveness of prevention interventions, such as delivering the HFSV, adds to the available evidence and allows us to continuously improve. It's important to be prepared to change or even stop what we are doing if an evaluation or other evidence shows that our interventions are not effective or in any way harmful.

HFSV, in common with most of our prevention programmes, are designed to encourage safer behaviours. Therefore, it is useful to adopt behaviour change practices (including evaluation techniques) that are effective in other disciplines such as public health. For example, each intervention should be aimed at a defined audience and should use behaviour change theory to predict how people will react and change their behaviours.

It is essential to understand the behaviours that put people at risk before we can design the intervention, and the evaluation method to measure the predicted changes. Unfortunately, very little empirical research has been undertaken into home fire safety, so this evidence base will need to be built over time by the sector.

The methodology described in this section of the PCF has been designed for adoption by FRS regarding the core components of the HFSV. It follows that if all services adopt the guidance in this document then HFSV will be more standardised across the country.

Theory of Change

To be able to undertake an evaluation of a behaviour change programme it is useful to develop a Theory of Change with an underpinning behaviour theory. The model is based on work developed by the National Social Marketing Centre for Kent Fire & Rescue Service, drawing on the Protection Motivation Theory and identifies the following factors for the HFSV.

- **Problem** = A low perception of fire risk and fire safety behaviours not consistently maintained
- **Solution** = Educate people on the severity of the threat and recommend safer behaviours. Support and motivate change by encouraging safer behaviours and increasing self-efficacy

- **Activities** = Home visits to inform, educate and support, including one-off and repeat visits and referrals. Environmental changes including fitting smoke alarms & other equipment
- **Impacts** = Positive changes in knowledge and perception of risk. Self-reported changes in behaviour. Physical changes to the environment. Reduction in fires, fatalities, and casualties

A Theory of Change model is included at Appendix 1b of this document

Logic Model

With the theory of change in place, it is possible to develop a logic model for evaluation. The model identifies a logical link between inputs, outputs, and desired outcomes. The intention here is to show whether the HFSV is likely to have a positive impact and to ensure that the data being collected directly relates to this outcome. For example, if an outcome of the HFSV is weekly testing of smoke alarms, then the logic model prompts thinking about how and when this could be measured. If it cannot be measured directly then a proxy would need to be thought about, and if it cannot be measured at all it should be considered whether this is a viable objective. Any data that does not contribute towards the evaluation should be discounted.

The link between outputs (e.g. completed HFSV) and long-term outcomes (sustained behaviour change and fewer fire fatalities) may not be proven statistically but should where possible be supported by other evidence, such as follow-up assessments of behaviour and observable risks in the home. As detailed above, using a well thought out logic model can help practitioners to think about these steps early in the process to ensure that evaluation meets the objectives of the intervention activity.

A simple logic model for HFSV is included at Appendix 1b of this document and is based on the following factors.

- **Inputs** = This is simply the resources used to complete the HFSV over the period being evaluated. These items can also be costed if necessary
- **Outputs** = Put simply this is the measure of activities completed. This includes the number of visits, where they were completed, and the nature of the people visited
- **Outcomes** = This section shows the incremental changes that occur as a result of the outputs. Broken down into short, medium, and long term. Short term outcomes include an immediate increase in knowledge and awareness, physical changes to the home at the time of the visit. Medium-term outcomes include changes in attitude and an intention to adopt safer behaviours. Long term outcomes are sustained behaviour changes leading to fewer fires, casualties, and fatalities

Whilst it is relatively easy to collect data for inputs, outputs, and short-term outcomes it becomes increasingly difficult to collect meaningful data for medium or long-term outcomes. Using a logic framework, with supporting behavioural change theories and other evidence, allows us to be more confident about contributing reductions in fires/casualties/fatalities through the HFSV.

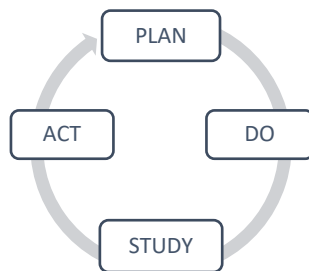
The Planning Cycle

All interventions should go through a planning cycle (illustration1). It is important to note that it is essential to include evaluation methods within the planning stage, BEFORE starting an intervention. Trying to undertake evaluation on a completed or existing intervention is not impossible, but, likely, data collected in the past will not be entirely suited to evaluation if it exists!

By taking the Logic Model approach it is possible to collect data over a relatively short period to undertake meaningful evaluation.

- **Plan** = Identify the problem or question e.g. the behaviour which needs to change. Background research. Design the intervention
- **Do** = Deliver the intervention e.g. undertake the fire safety visits
- **Study** = Evaluate the intervention
- **Act** = Review the intervention. i.e. do more, do less, improve, stop

Illustration 1



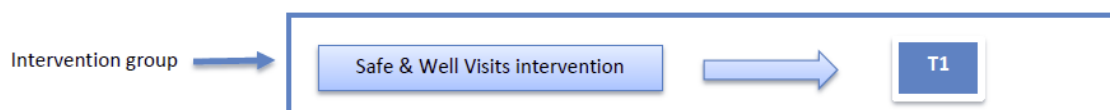
An Evaluation Method for HFSV

The evaluation aims to understand the impact of the HFSV including the perception of risk, changes in behaviour (or intention to change), and referrals.

For HFSV a cross-sectional post-intervention survey is recommended. The method used for data collection depends on the budget available, but any evaluation should be proportionate to spend, and the quality of evidence required.

Although the evaluation outlined here is post-intervention (Illustration 2), some data should be collected for evaluation routinely when undertaking visits. For example, the demographics of the individuals visited, the risks identified in the home and solutions put in place, as well as the behaviours and attitudes observed during the visit. This data can then be used to compare behaviours and risks at the time of the visit (e.g. advised to test their smoke alarms) with those found post-visit (e.g. testing smoke alarms weekly).

Illustration 2



Research is important to establish evidence to support the theory of change and logic model. What evidence supports a link between the outputs achieved and the desired outcomes?

As stated earlier there is not much weight of evidence in this area and individual fire services must share findings and collaborate to improve the evidence base. Case studies and other qualitative evidence can be collected as part of the SDCD and shared through NFCC research portal. As the weight of evidence grows, it will not be necessary to repeatedly complete evaluation unless something changes e.g. the nature of the visits, the advice given or there is reason to believe the risks have changed.

The chosen method of collecting post-intervention data from customers/service users will largely depend upon the resources available. A large sample size is not essential, and it is far more important to gain good quality, often qualitative, data. For an in-depth qualitative study, a sample size of around 30-50 participants would be expected. For quantitative survey-type studies, a minimum sample size of 100-150 is expected. If statistical analyses are to be conducted it would be worth consulting with a quantitative researcher to establish a specific sample size for the study.

Taking a qualitative approach allows for a more detailed discussion with the customer about their behaviours and motivations and may help find out 'why' they adopt a certain behaviour.

Quantitative research allows a bigger reach and allows more generalisations but is more rigid and less detailed in the type and amount of information that can be gathered. For example, only allowing certain answers which might not capture specific nuances in the customers' experience. A sample should be selected from people that have received a visit recently (the period to be selected). The sample should be selected to ensure it is representative of those people visited – depending on the criteria for visits the following could be used to select the sample: postcode to ensure a good geographical spread, type of referral, the date the visit was completed and age of the participants.

Structured or semi-structured interviews (in person or via the telephone) and/or focus groups are likely to be more suited to this type of evaluation than questionnaires. In part, this is to find out specific details about the customers' experience and also to allow a robust evaluation accounting for small numbers of people willing and able to take part, as well as drop-out rates where it is not possible to follow-up with an individual. Furthermore, using interviews or focus groups encourages further discussion and the ability to probe deeper into any interesting responses, or prompt for more information if needed. This part of the research intends to gather the short term (and potentially some medium-term) outcomes only.

The key areas to explore therefore are:

- Recall of advice and equipment provided
- Intention to change behaviour
- Adoption of safer behaviours
- Changes in perception of risk

It is useful to have the same measures collected at the time of the visit, or before the visit, if possible (i.e. advice is given, commitment to change behaviour, perception of risk), to be able to identify change.

It's also important to understand the views of staff that undertake the fire safety visits as they will have the insights into what works and what doesn't work.

The outcomes being measured can be summarised as follows:

- Reaction – did the customer find the visit useful and would recommend?
- Learning – did they acquire knowledge, skills and have they changed attitude to fire risk?
- Behaviour – have they applied/intend to apply what they learnt?

Ethical consideration

As with any research involving people, some precautions need to be taken to ensure evaluation is undertaken ethically. Care must be taken not to cause any harm, for example raising anxiety for vulnerable people. It is recommended to exclude some of the most vulnerable people from the sample for the interview, including people with dementia, mental health issues or at risk from domestic violence.

Precautions need to be taken to protect personal data and ensure legal compliance. Each FRS will need to consider its data governance issues to ensure it remains compliant with the Data Protection Act 2018. Informed consent from individuals to take part in the research should be obtained.

Example questions

Questions are designed to measure the outcomes contained in the logic model. For example:

- Can you tell me about any advice you were given during the visit?
- Was this advice useful?
- Based on that advice, can you tell me about any changes you agreed to make after your Fire Safety Visit?
- Did you make those changes after the visit?
- Do you feel that making these changes [this change] has made your home safer?
- In your view, how likely is it that people in Kent who are similar to you will experience a house fire?

The inclusion of some open questions provides qualitative data and allows for further clarification and prompting where necessary– providing richer data.

Data analysis and results

Results from the interviews/surveys will need to be analysed and presented using proportions. For example, the percentage of individuals who made changes or intend to adopt safer behaviours. Open-ended questions should be analysed by reviewing the answers and looking for common themes that arise, which will need to be coded – this is probably the hardest part of the analysis and it is recommended this is done by someone who is qualified and experienced in undertaking qualitative research.

Recommendations and Next Steps

1. Recommendations

1. NFCC will continue to consult upon the Person-Centred Framework with all UKFRS to develop this thinking as a practical approach to an evidence-based approach to the Home Fire Safety Visit and will work through the recognised governance structures and complementary workstreams of NFCC in this work.
2. That FRSs support the work and progress of the Person-Centred approach to the next stage based on the 20 next steps outlined below.

2. Next steps

The Person-Centred Approach

1. That all FRS will work towards adopting NFCC working definition of the Person-Centred Approach to the Home Fire Safety Visit.
2. That the Home Fire Risk Check and the Safe and Well Visit will be seen as components of a single approach to fire prevention in the home which will be referred to as the Home Fire Safety Visit.
3. NFCC will work with strategic partners including the Fire Standards Board to develop a consistent approach to the prevention training of all FRS staff to ensure a consistent and professional approach to prevention delivery in the home is adopted and strengthened.
4. NFCC will work with the Fire Standards Board to develop the occupational standards required to carry out a person-centred Home Fire Safety Visit.
5. NFCC will undertake further consultation with FRS on a shift away from a property focus towards a person-centred approach and increased multi-agency working to tackle fire risk in the home.
6. NFCC, Home Office and FRS will consider if, in the medium to longer-term, new person-centred IT systems will be needed to meet future service requirements.

Risk Stratification

7. That FRS work towards adopting the baseline risk stratification guidance outlined in this document.
8. The development of further risk stratification work to support the person-centred approach will be progressed through NFCC Community Risk Programme.
9. NFCC will consider the implementation of the use of predictive analytics at the national level, using data science and national data to create insight for the sector. This work should draw in local analysts, to work alongside Data Scientists, providing context and to facilitate problem-solving using data, with the added benefit of knowledge transfer to analysts.

The Core Components of the Home Fire Safety Visit

10. NFCC Home Safety Committee will further develop the core components of the Home Fire Safety Visit in partnership with FRS.
11. All FRS will work towards adopting the core components of the Home Fire Safety Visit as part of their delivery of fire prevention in the home and the Hierarchy of Risk methodology they are based upon.

Data Collection

12. NFCC through its Digital and Data Programme will work with FRS and the Home Office to develop the Standard Data Collection Dashboard to support the person-centred approach to Home Fire Safety Visits.
13. NFCC should act as a repository of FRS data, defining a core set of data that should be recorded nationally, for prevention activity.
14. Consideration should be given to unique identifiers such as NHS and NI number to complement the UPRN, and robust solutions for data collection systems should be found that resolves the differences in the local recording.
15. NFCC should develop standards, training, and development for the Role of an Analyst.

Protection

16. NFCC Prevention Committee will continue to work with NFCC Protection Committee to align the person-centred approach across the disciplines of prevention and protection and will develop the themes raised in Part 2. point 6 of this document.

Evaluation

17. FRS will consider how they will adopt the principles outlined in this document to introduce a Theory of Change and Logic Model to the evaluation of the Home Fire Safety Visit.
18. In partnership with NFCC, the Home Office should look at how research and development are funded for the Fire and Rescue Service, using the College of Policing as a comparison model.
19. NFCC should develop research programmes and work streams that support risk stratification, creating an evidence-based culture.
20. NFCC and FRS should consider ways to build evaluation skills and capacity in FRS in the UK through the identification of appropriate training and developing skills and relationships with academic partners.

Appendices

Appendix 1a. The Core Components of the Home Fire Safety Visit

Appendix 1b. The Theory of Change and Logic Model to Support the Home Fire Safety Visit

ⁱ NFCC Correspondence to all Chief Fire Officers, January 2019

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- ii State of Fire and Rescue. The Annual Assessment of Fire and Rescue Services in England (pg. 15) 2019
 - iii State of Fire and Rescue. The Annual Assessment of Fire and Rescue Services in England (pg. 24) 2019
 - iv Policing and Crime Act, HMSO, January 2017
 - v Correspondence to NFCC Prevention Committee Chair, January 2019
 - vi NFCC Standard Evaluation Framework, March 2018
 - vii Risk Stratification Research Sources

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^{viii} NFCC Inclusion, Equality and Diversity Strategy, NFCC, January 2020

^{ix} Inclusion, Diversity, and Inclusion Position Statement, NFCC, January 2020