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| **Greater Manchester Fire and Rescue Service**  **Working in Partnership with**  **Pennine Care NHS Foundation Trust**  **2013 to 2017** |

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# Introduction

Evidence shows that people who experience mental health problems and those who use drugs and/or alcohol are more likely to suffer death or injury caused by fire than others living within our communities (Breeze and Marsden 2015). Smoking continues to be the biggest cause of accidental fire deaths nationally (Home Office, 2016).

In recognition of the link between mental health and fire risk Greater Manchester Fire and Rescue Service (GMFRS) and Pennine Care NHS Foundation Trust (PCFT) signed a partnership agreement in 2013 outlining plans to work together to reduce risk. As well as preventing fires and reducing risk for people living with mental health problems, the partnership aimed to strengthen fire safety in PCFT buildings.

The aims of the partnership were:

1. To work in collaboration to reduce the risk of fire, fire injuries and deaths
2. To work in collaboration to protect people, property and the environment from harm
3. To work in collaboration to improve the health and wellbeing of the communities we serve
4. To improve fire safety awareness and health awareness of staff in order to reduce disruption to service within both organisations
5. To proactively produce and publish a joint report promoting the mutual benefits of effective partnership working between PCFT and GMFRS and provide a framework for others to follow.

# Purpose of the report

This report describes how the partnership was established and implemented. For each of the aims of the partnership the report describes the original problem or risk, what we did, outcomes and recommendations. The report covers the period October 2013 to September 2017.

# Establishing the partnership

## What we did

A quarterly steering group was established to oversee the implementation of the partnership and to provide coordination. The steering group was chaired by the GMFRS Health and Social Care Coordinator and included GMFRS representation from central and local Prevention and Protection Managers, in order to ensure that both people and buildings were protected. PCFT were represented by the Trust’s Director of Capital Investment and Estate Services, the Fire Safety Manager and a clinical manager.

Importantly, the partnership was sponsored at director level in both organisations to ensure that the work was seen as a priority and adequate resources were allocated to it. A written partnership agreement and associated action plan were developed to agree roles, responsibilities and shared aims. An information sharing agreement was also written.

## Outcomes

A strong working relationship between the two organisations was developed. This enabled progress to be made against the aims of the partnership.

## Recommendations

Ensure there is a robust governance structure in place.

Develop a written partnership agreement and associated action plan.

Secure commitment and support at director level.

Develop an information sharing agreement.

# Aim 1: To work in collaboration to reduce the risk of fire, fire injuries and deaths.

## The problem

People with mental health problems are sometimes at an increased risk of having a fire. This risk is associated with smoking, alcohol use, cooking, deliberate fire setting, distractibility, apathy, memory impairment, suicidal ideation, psychotic experiences, tremor, neuropathy, ataxia, visual impairment, sedation, poor housing, poor state of repair of cooking and heating appliances and an accumulation of rubbish. (Phelan and Fisher, 1993)

To reduce the risk of fire, fire injuries and deaths, for this at risk group, the partnership intended to increase the number of referrals for Safe and Well visits to GMFRS from PCFT. A Safe and Well visit is a free person centred home visit delivered by fire and rescue service staff to prevent fires and improve wellbeing for householders. The visit (previously known as a Home Safety Check) considers the health, capabilities and lifestyle of the householder, as well as their environment, as part of a fire risk assessment. It provides an opportunity to provide brief advice, signposting and referrals in order to address any health and wellbeing matters identified.

## What we did

Since the partnership began GMFRS and PCFT have worked hard to promote and improve access to Safe and Well visits for service users of PCFT. A Safe and Well referral pathway was created and promoted to PCFT staff via their intranet and during mandatory fire safety training. This will be described further under Aim 4. The pathway involves staff contacting GMFRS Contact Centre either by telephone or referral form to request a Safe and Well visit for a service user, with their consent.

## Outcomes

The following table illustrates the numbers of Safe and Well visits booked by GMFRS Contact Centre as a result of referrals made by PCFT. Encouragingly the figures show that the number of Safe and Well visits booked increased year on year. However, more work needs to be done to maintain this increase for 2017/18.

|  |  |
| --- | --- |
| **Year** | **Safe and Well visits booked as a result of referrals from PCFT** |
| **2013/14 (Oct to Mar)** | 73 |
| **2014/15 (Full Year)** | 86 |
| **2015/16 (Full Year)** | 163 |
| **2016/17 (Full Year)** | 183 |
| **2017/18 (Apr to Sept)** | 66 |
| **Total** | **571** |

GMFRS faces challenges when collating information about referrals from partners. The current ICT system used makes it difficult to report on the numbers of referrals made by PCFT or the numbers of Safe and Well visits that have taken place as a result. The only reportable figure using the current ICT system is the number of Safe and Well visits booked, which is why this has been used in the table above to demonstrate progress.

GMFRS have procured a new system to manage and report on referrals. The partnership between GMFRS and PCFT has influenced the development of the new system by highlighting the need for it to effectively record and report on the number of referrals made by our partners and the number of visits that these generate.

The case study below demonstrates the qualitative benefits of Safe and Well visits.

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| **Case Study 1** Mr X, aged 54, lives with his grandson, aged 17. Mr X made a self-referral for a Safe and Well visit after attending a presentation by a GMFRS Community Safety Advisor (CSA) at a PCFT support group that he attends.  Mr X has a number of physical and mental health problems including, mobility problems, asthma, COPD, angina, arthritis, spondylitis, fibromyalgia, memory impairment (associated with his mental health), panic attacks, anxiety and depression. He regularly falls asleep on the sofa due to the sedative effects of his medication. He is deaf in one ear. He smokes occasionally when feeling stressed.  He is being supported by a Consultant Psychiatrist and the Early Intervention Service and has telephone numbers for RAID and the Crisis Team. He has an appointment with the Consultant the following week. Mr X reported that his medication is ineffective when he feels stressed.  **Fire Risks identified during Safe and Well visit**  Cannabis use  Unsafe use of extension cables  Medication causes drowsiness  History of dropping a lit cigarette on the couch  Chip pan used two to three times per week.  Deaf in one ear and hearing impaired in other ear (70% deaf), unable to wear hearing aids as the ear drum is perforated and hearing aids would be ineffective.  Clutter in Living Room (Level 1).  Clutter in front upstairs Bedroom (Level 2).  Access to window blocked in upstairs front bedroom.  Candles in living room.  Feels lonely  **Recommendations and actions taken by GMFRS**  The 24/7 Sanctuary number provided  Deep fat fryer was provided and demonstrated to replace the chip pan  Double fire retardant throw for couch provided  Deaf alarm with three x wi-safe smoke alarms fitted  Information and contact details provided for Silverline and Healthy Minds  Joint follow up visit with CMHT arranged to ensure that all risks are factored into Mr X’s care plan and risk assessments  Safeguarding referral made  Deaf alarm tested, working and demonstrated |

## 

## Recommendations

## Agree referral pathway for Safe and Well visits and promote it within the health/social care organisation using existing infrastructures and mandatory training.

## Prior to delivery of the partnership, establish effective methods of recording and reporting on:

## Number of Safe and Well referrals made

## Number of Safe and Well visits booked

## Number of Safe and Well visits carried out.

## Consideration should be given to the capability of ICT systems so that the partnership can establish from the outset what data can be recorded and reported.

## Joint visits in complex cases should be encouraged where possible and appropriate.

# Aim 2: To work together to protect people, property and the environment from harm.

## The problem

Accidental and deliberate fire incidents and false alarms within NHS premises affect business continuity for the NHS and increase demand on fire and rescue services (FRS) who respond. Such incidents threaten the safety and wellbeing of staff and patients and disrupt quality of care.

PCFT recognised that activation of the fire alarms on their premises caused upset to patients and disruption to their treatment and care. Some activations resulted in patients absconding. The partnership identified two main recurring problems that caused activation of alarms on PCFT premises. These were false alarms and fires.

*False Alarm* – Where the FRS attends a location believing there to be an incident, but on arrival discovers that no such incident exists, or existed.

*Fire* – Primary fires include all fires in (non-derelict) buildings, outdoor structures and vehicles, or any fire involving casualties, rescues, or fires attended by five or more appliances. Secondary fires are fire incidents that are generally small fires which start in, and are confined to, outdoor locations, did not occur at a primary location, were not a chimney fire in an occupied building, did not involve casualties (otherwise categorised as a primary incident) and were attended by four or fewer appliances.

## What we did - False Alarms

PCFT and GMFRS set up a group with representation from all clinical areas on the site and estates to deliver a pilot at Birch Hill hospital site to reduce false alarms. GMFRS attendance at Birch Hill hospital was analysed and a range of issues causing false alarms were identified. The Trust decided that rather than introduce delayed turnouts and investigation periods which didn’t solve the issue of patient disruption they would try to avoid activations happening at all.

Causes of activations are listed below:

* faulty alarm systems
* environmental issues, steam, aerosol sprays, dust, cooking
* deliberate activation by patients setting off the alarm deliberately
* contractors and maintenance staff accidently activating or failing to notify the monitoring centres
* covert smoking in bedrooms.

PCFT adopted a range of measures to address the problem of activations.

#### Faulty Alarm Systems

A capital programme was put in place to ensure that the Trust hadthe most up to date, fault tolerant, detection and analogue addressable systems.

Unlike most acute sites PCFT works from multiple sites creating difficulty in monitoring or interrogating its alarm systems. Therefore alongside the new systems, remote monitoring of alarm panels by the Trust to allow faster response to investigating false alarms was introduced.

#### Environmental Issues

In view of the fact that a wide number of environmental issues cause activations it was agreed that no one solution would solve this. PCFT set about looking at individual activations in order to identify measures to avoid future activations.

The Trust introduced a policy that toasters were only allowed in purpose built kitchens and used for the benefit of patients. In addition passive infrared detectors have been introduced into some kitchens which switch off the appliances, microwaves or toasters if a staff member leaves the cooking appliance.

Also where door hold open devices were being used and where detection was found to be in the wrong position, or the wrong type of detection, this was replaced or re- sited. In some cases due to the installation of new detection the sensitivity of the local detector could be matched to the environment.

To address activations as a result of aerosol sprays the Trust has a policy is to purchase squeeze grip cleaning products and not those which use propellants. Patients are discouraged from bringing aerosols onto the units.

Some patients run showers excessively causing enough steam to enter the bedroom and activate an alarm. This has been combatted by installing timers which restrict how many times and how long a shower can run for.

#### Deliberate Activations.

Deliberate activations are a constant issue and to combat this all PCFT call points are key operated. On non-secure units all final exit doors are locked using magnetic locks. To discourage patients from setting off the fire alarm to release doors there is a sixty second delay to allow staff to reach the final exit doors before they release.

In new units, and where fire alarms are upgraded, PCFT have started to recess call points and use metal covers to make them more resilient to damage. PCFT have also started to fit longer euro barrels to allow fitting of suited keys, making them more robust.

#### Contractors and Maintenance Staff

To prevent activations during maintenance, new check sheets have been introduced to guide staff through the process of testing a fire alarm including taking the alarm off watch. There is also a passport system for anyone who wants to work on a fire alarm system to ensure contractors are competent and have a risk assessment and method statement in place.

When work is carried out which is likely to create dust, a system of covering detectors and isolating areas is put in place with a log of when covers are put in place and removed to enable monitoring of the system.

#### Covert Smoking

A significant number of clients with mental health issues are smokers. On inpatient units it is common for patients to covertly smoke, thus activating alarms. This is often covered up by patients spraying aerosols or running showers which disguise the fact that they are smoking in the room.

The Trust has started installing smoking detectors in risk areas which are linked to a pager so that staff are informed covertly if a patient smokes for example in their bedroom. The Trust also has a search policy to support staff in finding smoking materials being smuggled onto the ward.

#### Deliberate Fires

Arson is a criminal offence under S1 (2) and (3) Criminal Damage Act, 1971. Each year PCFT experience a number of incidents of arson, which are caused by patients on the wards. These incidents put the lives of staff, patients and visitors at risk. PCFT takes a very strong view that any person who causes a deliberate fire on their wards should be prosecuted, where they have the capacity to understand the consequences of their actions.

As a result of the partnership a number of measures were taken to reduce deliberate fire setting. These are described below.

#### Guidance for PCFT Staff

PCFT have produced guidance (Appendix 1) for staff to enable them to manage deliberate fire setting within inpatient settings and effectively manage a crime scene, following a deliberate ignition (arson), on a ward.

To ensure a successful prosecution, evidence is required. The more evidence gathered, the more likely a prosecution is to succeed. Therefore, guidance and a checklist have been provided for staff to follow and understand what actions they should take following a deliberate fire.

The introduction of this guidance has resulted in at least four custodial sentences over the last two years and it is intended to act as a deterrent to demonstrate that there is a consequence for deliberate fire setting.

This guidance relies on support from the Police and GMFRS; as a result of the partnership, GMFRS now sends a fire investigation officer where it is suspected that a deliberate fire has been set. GMFRS has issued a letter to this effect which PCFT inpatient units have laminated to show to any attending fire service or police personnel.

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#### Search Policy

PCFT has written a Search Policy (Appendix 2) which allows staff to carry out searches with the aim of reducing incoming covert materials, including those which may be used to start fires. Units have also been issued with metal detector wands to use as part of the search procedure. PCFT provides safe storage for lighters and a system of logging them in and out. Patients are not allowed to retain lighting or smoking materials on PCFT units.

#### Smoke Detection

As stated earlier, PCFT has started to roll out smoke detection linked to a silent pager which notifies staff very quickly of the presence of smoke in the rooms where this is fitted. It works alongside the existing detection but is much more sensitive. As well as targeting smoking it allows staff to identify fire setting in a timely manner. Posters have been positioned throughout the Trust which state that deliberate fire-setters will be prosecuted. GMFRS personnel regularly visit inpatient groups to talk about fire safety.

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| **Case Study 2** A fire incident occurred in a PCFT hospital ward whereby a resident deliberately set fire to a bedroom. There was significant damage to the contents of a patient’s bedroom but the fire was contained to the room of origin.  The local Fire Safety Officer quickly attended a meeting with Directors and the Fire Safety Manager from the Trust. During the fire the evacuation went smoothly, procedures were followed and no-one was injured. However, a number of concerns were highlighted both on the night of the fire and post incident during the investigation.  All concerns were addressed promptly and action taken. The effective response described above was made easier by the strong working relationships that had been developed as part of the partnership.  **Concerns raised during fire investigation**  Several staff unable to operate the key operated maglock override due to defective keys  121 observation procedure  Patients access to lighters  Decision by staff to not tackle the fire in the early stages.  **Actions taken by PCFT**  Internal investigation carried out  Review of key procedures on the wards  All wards to have a master box so that keys are tested daily  Fire check sheet to be provided to raise awareness and ensure procedures are being followed  Letter issued to all staff outlining their fire safety responsibilities  Review of bank staff and how to ensure they understand their responsibilities around fire safety  Meetings with Trust Directors and GMFRS staff to monitor and review progress. |

## What We Did - Early Detection and Response

It is critical to the wellbeing of patients that care is not disrupted. A serious fire in an inpatient unit can have devastating consequences to patients if they have to evacuate a unit. If the fire affects a number of bedrooms this can result in patients being transferred all over the UK. PCFT is committed to working with GMFRS to effectively manage fires and minimise harm and damage when they do occur. This involves early detection and early response to an indication of fire.

#### Using Extinguishers

PCFT trains staff in how to extinguish small fires using propane gas fired simulators and electronic simulators including cosmetic smoke. This approach means that staff are more likely to use extinguishers to extinguish fires in the early stages. Nine litre water extinguishers are heavy so a programme has been introduced to replace them with more effective and lighter six litre extinguishers. In addition to this the Trust are considering using water mist extinguishers.

Staff have been extremely successful in extinguishing fires in the early stages. If the fire cannot be put out safely, the next stage is to contain the fire in the room of origin. This is normally effective because the majority of inpatient fires occur in bedrooms and the doors are surrounded by 30 minutes fire resistance. Staff are given face to face training in their own unit every 12 months and are taught how to reduce and avoid the risk of fires as well as about fire loading and fire development.

#### Reducing Fire Loading

PCFT strives to keep fire loading to a minimum by following the Health Technical Memoranda which identifies the ignition source 5 and 7 for mattresses, fire retardant curtains and bedding. Fire retardant bins with lids which extinguish the fire when the lid is closed are now used routinely. This has proved to be extremely effective since bin fires are the most common location for fires to start within NHS premises. Fire loading is assessed as part of the risk assessment process and any issues are brought to the attention of the unit.

#### Dry Sprinkler Powder Aerosol

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******PCFT are in consultation with GMFRS about trialling a Dry Sprinkler Powder Aerosol (DSPA) with the aim of them being provided in all in- patient bedrooms. These have been tested at the new GMFRS Training facility in Bury. ***DSPA Fire Suppression*** is a revolutionary fire extinguishing technology that can be activated manually and can be used for any type of fire, even if the person remains in the room of origin.

**The DSPA** requires no water and it maintains oxygen levels intact. I**t** is harmless to humans and animals. It is also environmentally friendly.

DSPA has been installed in a wide range of premises where alternative fire suppression systems are not practical or are price prohibitive.

**DSPA** is an aerosol gas which, like halon, acts volumetrically to reach those places that are difficult to access. The benefit of the DSPA is that it substantially reduces property damage caused by the fire but also avoids expensive damage caused by water and other alternative extinguishing methods.

#### Refurbishing the Built Environment

A programme of improvements was carried out which included surveying compartment lines, fire resisting doors and fire dampers. Following this, doors were replaced and gaps in compartment walls were repaired. Heat release fire dampers were replaced with motorised smoke and fire dampers. This meant that if a fire occurred it was confined to the room of origin and damage kept to a minimum.

PCFT are currently incorporating all the learning from fire incidents and unwanted fire signals into planned refurbishments which includes two Adult Acute inpatient wards with 42 beds. The refurbishment will include new motorised fire dampers with a brand new remotely monitored panel. Hold open devices on kitchen doors which are linked to a local fire detection system will be fitted. The aim of this is to reduce unwanted fire signals.

To date electronic cigarette chargers have caused two fires within PCFT premises. In response to this electronic cigarette metal charging units have been installed throughout PCFT to reduce the likelihood of a fire occurring.

#### Improvements in Future Building Design and Best Practice

### By incorporating lessons learnt from incidents, PCFT has developed a strategy for future development and improvement of active and passive fire safety systems.

### Examples include:

* Fitting of self-testing emergency lighting systems to cut down on disruption of wards during testing and improve visibility of test results
* Replacement of existing fire alarms with standardised fully addressable systems with remote monitoring to allow auditing of testing
* Replacement of fire dampers on compartment and sub compartment lines with motorised fire and smoke dampers linked to intelligent remotely monitored damper panels
* Introduction of additional compartment and sub compartment lines to assist with progressive evacuation
* Introduction of innovative approaches to management of risk including local smoke detection in high risk areas linked to hold open devices in addition to the traditional heat detection
* Fitting of metal charging cabinets with local smoke detection in ward offices

## Outcomes

Despite all the pro-active measures that have been introduced it has not been possible to prevent all fires and false alarms. Since the partnership began, the number of incidents has reduced significantly and fires are dealt with more effectively. This is demonstrated in the tables below.

#### GMFRS Recorded Incidents at PCFT Premises with 10 or more Beds (2011/12 – 2016/17[[1]](#footnote-1))

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **PCFT units with**  **10+ beds** | **2011 / 2012** | **2012 /**  **2013** | **2013 / 2014** | **2014/ 2015** | **2015 / 2016** | **2016/ 2017** | **Total** |
| **Stepping Hill Hospital** | 101 | 100 | 78 | 44 | 35 | 58 | **416** |
| **Birch Hill Hospital** | 54 | 57 | 31 | 44 | 42 | 23 | **251** |
| **Fairfield General Hospital** | 53 | 62 | 47 | 25 | 28 | 20 | **235** |
| **Trafford General Hospital** | 48 | 49 | 42 | 35 | 19 | 13 | **206** |
| **Heathfield House** | 2 | 0 | 2 | 3 | 7 | 4 | **18** |
| **Butler Green Hospital** | 5 | 1 | 2 | 1 | 3 | 4 | **16** |
| **Royal Oldham Hospital Parklands** | 2 | 7 | 3 | 1 | 0 | 0 | **13** |
| **Grange View** | 0 | 2 | 0 | 1 | 2 | 6 | **11** |
| **Meadows Hospital** | 1 | 5 | 3 | 1 | 0 | 0 | **10** |
| **Bealey Hospital** | 0 | 1 | 0 | 1 | 2 | 0 | **4** |
| **Rochdale Stansfield Place** | 0 | 0 | 0 | 0 | 1 | 0 | **1** |
| **Total** | **266** | **284** | **208** | **156** | **139** | **128** | **1,181** |

***Caveat: Incidents at PCFT premises refers to all incidents GMFRS attended at the premises in general and is not limited to the specific units provided by PCFT, as GMFRS incident recording doesn’t always capture the specific units in which the incident occurred, in particular for Stepping Hill Hospital, Birch Hill Hospital, Fairfield General Hospital and Trafford General Hospital.***

The volume of incidents attended by GMFRS in PCFT premises with ten or more beds peaked at 284 incidents during 2012/13. The volume of incidents in PCFT premises has been reduced year-on-year since 2013/14, which coincides with the introduction of the partnership in October 2013.

Stepping Hill Hospital by far accounted for the largest volume of incidents, albeit the volume of incidents declined year-on-year from 101 in 2011/12, to a period low of 35 during 2015/16. However, partial year data for 2016/17 identifies this downward trend of recent years has been partially negated by a 66% increase in the current year.

In keeping with the overall downward trend, strong overall reductions were also evident between 2011/12 and 2015/16;

* Birch Hill Hospital – down 22% or 12 incidents
* Fairfield General Hospital – down 47% or 25 incidents
* Trafford General Hospital – down 60% or 29 incidents.

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#### GMFRS Recorded Incidents at PCFT Premises, by Incident Type (2011/12 – 2016/17)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **PCFT Units**  **with 10+ Beds** | **2011 / 2012** | **2012 / 2013** | **2013 / 2014** | **2014 / 2015** | **2015 / 2016** | **2016 / 2017** | **Total** |
| **False Alarm** | 248 | 258 | 182 | 152 | 125 | 111 | **1,076** |
| **Fire** | 16 | 21 | 20 | 18 | 12 | 13 | **100** |
| **Other None CLG** | 9 | 12 | 9 | 1 | 0 | 3 | **34** |
| **Special Service** | 6 | 10 | 7 | 5 | 8 | 17 | **53** |
| **Total** | **279** | **301** | **218** | **176** | **145** | **144** | **1,263** |

False alarms by far accounted for the largest share of incidents, accounting for 86% of total incidents during 2015/16, albeit representing a reduction from the 89% share recorded in 2011/12. Indeed, the total number of false alarms has been almost halved during the previous five-year period, from 248 false alarms to 125 false alarms in 2015/16. Although fires have decreased, they accounted for the second most commonly occurring incident type, with the proportional importance rising from 6% in 2011/12 to 8% in 2015/16.

#### Complete Mobilisations to Incidents at PCFT Premises, by Incident Type (2011/12 – 2016/17)

The table below provides a breakdown of the total number of completed call-outs to incidents that occurred at PCFT premises.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Mobilisations to PCFT Units** | **2011 / 2012** | **2012 / 2013** | **2013 / 2014** | **2014 / 2015** | **2015 / 2016** | **2016 / 2017** | **Total** |
| **False Alarm** | 250 | 275 | 191 | 165 | 135 | 156 | **1,172** |
| **Fire** | 23 | 33 | 28 | 27 | 23 | 26 | **160** |
| **Other None CLG** | 0 | 0 | 0 | 0 | 0 | 2 | **2** |
| **Special Service** | 5 | 11 | 11 | 8 | 13 | 29 | **77** |
| **Total** | **278** | **319** | **230** | **200** | **171** | **213** | **1,411** |

The 1,076 false alarm incidents at PCFT units resulted in 1,172 call-outs during the period under review.

During 2011/12, there were 250 call-outs to false alarms at PCFT premises, equivalent to a cost to GMFRS of £68,750 (based on £275 per call-out).

By 2015/16, the number declined by 115 to 135 call-outs, equivalent to a cost to GMFRS of £37,125.

#### GMFRS Fire Incidents at PCFT Premises, by Fire Cause (2011/12 – 2016/17)

The table below provides a breakdown of fire incidents, by fire cause. The majority of fires in PCFT premises have largely tended to be accidental, with the exception of 2014/15 and 2015/16.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Fires in PCFT Units with 10+ Beds** | **2011 / 2012** | **2012 / 2013** | **2013 / 2014** | **2014 / 2015** | **2015 /**  **2016** | **2016 / 2017** | **Total** |
| **Accidental** | 11 | 13 | 14 | 5 | 3 | 9 | **55** |
| **Deliberate** | 5 | 8 | 6 | 13 | 9 | 4 | **45** |
| **Total** | **16** | **21** | **20** | **18** | **12** | **13** | **100** |

The number of deliberate fires has fluctuated overall between 2011/12 and 2015/16. Discussions are taking place about the possibilities of funding some research into deliberate fire setting in mental health inpatient units.

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| **Case Study 3** Business continuity has improved along with a reduction in the number of fires and the impact that fires have when they do occur. The case study below provides an example of how business continuity has improved as a result of the measures put in place during the partnership.    PCFT staff receive mandatory fire safety training by their Fire Safety Manager.  When a fire broke out, on one of the wards, staff responded to the fire alarm and discovered a well-developed fire in a bedroom. The door to the bedroom was closed. The staff member had been trained to use extinguishers but made a judgement based on the training that the fire was too large for an extinguisher. They kept the door closed and evacuated patients to the next fire compartment.  Staff on the ward led the fire service to an entrance adjacent to the bedroom where the fire service extinguished the fire. The training includes directing the fire service to the most appropriate entrance, and during this incident staff did so.  Staff and GMFRS followed the arson protocol which resulted in an investigation and prosecution.  The Trust Board had invested around £500,000 on fire safety improvements on Trust premises. As a result the fire precautions within the room had recently been upgraded to include fire stopping in the ceilings and upgraded fire doors. The board of directors were pleased that they had seen an immediate benefit for their investment, because it was possible to bring the ward back into use as soon as GMFRS had extinguished the fire and cleared the smoke. |

#### Reduced Costs to GMFRS and Pennine Care

During 2011/12, there were 250 mobilisations to false alarms at PCFT premises, equivalent to a cost of £68,750 (based on £275 per mobilisation). By 2015/16, the number declined by 115 to 135 mobilisations. When you compare the costs of the two years there is a cost saving of £31,625.

## Recommendations

Based on what we did and the outcomes achieved the recommendations for protecting people, property and the environment from harm in in-patient settings include:

1. Development of an Arson Protocol and guidance for staff on the management of deliberate fire setting in their premises.
2. Introduction of a search policy which allows staff to carry out searches with the aim of reducing covert materials.
3. Introduction of smoking detection systems linked to a silent pager to alert staff to the presence of smoke in high risk areas.
4. Mandatory fire safety training to include the use of fire extinguishers to extinguish small fires, fire loading and how to contain fires in the room of origin.
5. Use of alternative sprinkler systems such as Dry Sprinkler Powder Aerosols in patient bedrooms and other high risk areas.
6. Use of Passive Infra-Red Devices in in-patient kitchens to reduce the incidence of unwanted fire signals associated with appliances such as toasters and microwaves.
7. Financial investment to upgrade fire precautions.  This is likely to significantly reduce the impact that a fire has should one occur, thus reducing risk of injury to patients, staff, damage to property and buildings and disruption to services.

# Aim 3: To work in collaboration to improve the health and well-being of the communities we serve.

## The problem

Mental health problems are the largest global cause of years lived with disability:

* One in four adults and one in ten children are likely to have a mental health problem in any year
* People with severe mental health problems die 15 – 20 years prematurely
* 70% of children and adolescents who experience mental health problems have not had appropriate interventions at a sufficiently early age
* 30% of people with a long-term physical condition also had a mental health problem
* 46% of people with a mental health problem also had a long term physical health problem
* 70 million days are lost from work each year because of poor mental health
* Mental health costs the UK economy £70 - £100 billion each year.

The effective support of people experiencing mental health problems is set to become one of the greatest public health challenges of this decade. Without action to address the increasing demand for public services, it will not be possible to absorb the rising costs of providing care and support for those experiencing mental ill health in the long term.

Those who are already in positions that play a role in shaping mental health should be provided with the skills to embed mental health improvement in their everyday working practice and *make every contact count* (Mental Health Foundation, 2016). The Greater Manchester Mental Health and Wellbeing Strategy (2016) describes the shift in focus of mental health care to prevention, early intervention and resilience and this is where GMFRS have a key role to play when delivering Safe and Well visits.

## What we did

#### Supporting People with Mental Health needs

Over the last nine years of recording, GMFRS has identified that in 20% of accidental fire fatalities mental health is a factor. Suicide accounts for 42% of all non-accidental fire deaths. In light of this it is important that fire and rescue service staff talk to people about mental health during prevention activities, particularly Safe and Well visits so that it can be factored into fire safety advice. Having these conversations provides the opportunity for fire and rescue staff to offer brief advice or to signpost and refer individuals for help and support in relation to mental health. The partnership with PCFT strengthens this approach in the following ways:

PCFT has helped to shape the mental health section on the Safe and Well visit form and continue to act as a consultant for GMFRS on matters relating to mental health. The partnership has recognised that consultation with PCFT service users and carers would have been beneficial although this was not carried out. In future GMFRS will consult with PCFT service users and carers when developing fire safety interventions for people with mental health needs.

By working closely with PCFT, GMFRS has access to information about local, statutory and third sector mental health services that they can share with the public if it is required; this may be during a Safe and Well visit or at an incident. The information is published in service directories for GMFRS staff which have been produced in collaboration with PCFT. Staff use the directories for information about services and referral pathways either to respond to a need, prevent deterioration or to assist someone who is experiencing a mental health crisis.

Included in the service directories is a 24/7 mental health triage telephone number which is staffed by a PCFT mental health professional. GMFRS can ring the number at any time to receive advice and guidance on how to support someone who is experiencing a mental health crisis. Access to this resource was facilitated through the Greater Manchester Crisis Care Concordat where GMFRS and PCFT are active members.

## Outcomes

One aim of the partnership was for GMFRS to increase the number of appropriate referrals to PCFT. However, it was not possible to record referrals due to the limited reporting systems within both organisations. The importance of measuring this outcome from partnerships such as this one has now been recognised and GMFRS are changing the way they record outputs during Safe and Well visits. In the future staff will be required to select outputs such as ‘referral made’, ‘brief advice given’, ‘telephoned 24/7 triage number’.

Despite the lack of statistical evidence, anecdotal reports do suggest that GMFRS are addressing mental health and wellbeing as a result of the partnership. In Case Study 1 (above) a Community Safety Advisor provided the occupier with telephone numbers for the Sanctuary and Silverline along with information about Healthy Minds. They organised a joint follow up visit with the community mental health team to ensure that all risks were factored into Mr X’s care plan and risk assessments. A safeguarding referral was also made.

## Recommendations

Based on what we did and the outcomes achieved the recommendations for collaboratively improving the health and wellbeing of our communities include:

1. Safe and Well visits should include consideration of mental health to inform fire risk assessment.
2. Fire and rescue services should maximise the opportunity provided by Safe and Well to identify mental health needs and offer brief advice, signposting and referrals.
3. Development of fire safety interventions (e.g. Safe and Well visits) should involve consultation with partners who work with the target audience.
4. Fire and rescue services should consult with service users and carers when developing fire safety interventions for people with mental health needs.
5. Fire and rescue services should have access to information about local statutory and voluntary organisations that support people with mental health needs including referral pathways.
6. Partnerships should ensure that systems are in place to facilitate recording and reporting of all outcomes achieved, for example referrals made to other organisations.
7. Mental health services should consider providing a 24/7 triage phone line for emergency services to use.

# Aim 4: To improve fire safety awareness and health awareness to staff in order to reduce disruption to service within both organisations.

## The Problem

In order to achieve the aims of the partnership the knowledge and awareness of the close link between fire and mental health needed to improve within both organisations. Successful delivery of the partnership would depend on well informed and engaged staff. Previously training and awareness-raising had been inconsistent. A previous fire incident within a PCFT in-patient setting also demonstrated the importance of well-trained, well informed staff. Furthermore as GMFRS developed its Safe and Well offer it was recognised that staff required a better understanding of mental health and how it affects people and their risk of having a fire.

## What we did

#### Training

GMFRS trainers delivered face to face training to 46 PCFT members of staff on fire safety in the home and Safe and Well. The purpose of this training was to help staff identify people at increased risk of fire and know how to make a referral for a Safe and Well visit. The logistics of rolling this out to all PCFT were problematic so alternative solutions were put in place.

Firstly the GMFRS Health and Social Care Coordinator worked with the PCFT Fire Safety Manager to include the topic in the existing mandatory fire safety training that all PCFT staff receive. Secondly, GMFRS developed a short promotional video describing what a Safe and Well visit is and how service users can access a visit. An hour long training webinar has also been developed and is delivered regularly to partners. Both of these resources have been made available to PCFT and are available on the [GMFRS web page for partners](http://www.manchesterfire.gov.uk/fire_safety_advice/information-for-our-partners/).

GMFRS Community Safety staff have delivered fire safety awareness sessions to PCFT staff at one of the hospital sites and will continue to deliver quarterly.

PCFT has delivered a series of training sessions to GMFRS Fire Safety Officers and Business Safety Advisors covering the NHS structure and key design principles of NHS hospitals that are relevant to GMFRS. Sessions also include information about the specific differences between acute hospitals and mental health inpatient units so that GMFRS are better informed and prepared when turning out to incidents.

The Patient Advice and Liaison Team (PALS) from PCFT delivered face to face mental health awareness training to GMFRS staff. Delivery of this training was not a direct result of the partnership and was organised by GMFRS’ Health and Wellbeing Team in the People Directorate; however, it met the requirements of Aim 4, therefore the partnership decided not to duplicate by arranging separate mental health awareness training.

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#### Resources

Posters displaying information about Safe and Well visits and the referral pathway have been distributed on PCFT notice boards. A Safe and Well referral leaflet was developed jointly and is handed out to PCFT staff at induction training, mandatory training and is published on the Trust intranet.

GMFRS has developed ten service directories, one for each borough in Greater Manchester. These assist frontline staff to identify and refer people to local services as needed. Information about PCFT services is now included in these.

The size and complexity of PCFT has influenced the way in which GMFRS engages with partners and disseminates information about fire safety and Safe and Well visits. GMFRS has recently developed a suite of resources for partners including Safe and Well literature, GMFRS community resources brochure, partner video and a webinar.

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#### Raising Awareness

When the partnership was first developed PCFT and GMFRS held a launch event where the partnership agreement was signed off by Directors. Key managers and stakeholders were invited to find out more about the partnership to encourage them to engage in delivery.

GMFRS and PCFT continue to collaborate by attending events and supporting campaigns which promote the aims of this partnership. One example of this was GMFRS attendance at the opening of the new Irwell Unit (PCFT).



PCFT and GMFRS collaborated to create a bespoke Fire Safety Awareness Week in 2015 with the aim of raising the profile of the partnership and promoting the take up of Safe and Well visits for PCFT service users. Members of the Community Safety Team and a fire service vehicle attended a full day event at PCFT Trust Headquarters where they provided fire safety guidance, advice and materials to PCFT staff and members of the public. GMFRS also supported home fire extinguisher demonstrations that were carried out by PCFT fire safety officers.

GMFRS Community Safety Managers have attended, and will continue to attend, PCFT team meetings and other appropriate forums to raise awareness of what GMFRS can offer.

GMFRS and PCFT led on the Urgent and Crisis Mental Health workshop which has involved initial discussions regarding future Fire Safety Awareness Days.

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| PCFT fire safety training feedback  *“Very informative training, using extinguishers made this a less daunting prospect in case the situation arose’’*  *“Best fire safety training in 29 years!’’*  *“I thought the course was excellent, I have already changed my behaviour”*  *“Steve’s style of presenting kept it interesting as well as informative”*  *“Brilliant overall, thank you”* |

## Outcomes

4500 PCFT staff received face to face training in mandatory fire safety including a briefing on community fire safety and the Safe and Well referral process.

Additionally 46 PCFT staff received face to face training in community fire safety and the Safe and Well referral process.

GMFRS Fire Safety Officers and Business Safety Advisors in all of the boroughs involved in the partnership received training from PCFT.

Nearly 700 GMFRS personnel attended face to face mental health awareness training delivered by PCFT.

GMFRS staff deliver quarterly fire safety in the home training at one of the hospital sites.

The partnership has not directly assessed whether the training, resources, and awareness raising described above has improved staff awareness. However, outcomes from Aims 1 to 3 demonstrate:

* Increase in number of Safe and Well visits booked as a result of referrals from PCFT
* Decrease in incidents (false alarms and fires) in PCFT premises
* Reduction in costs and disruption to service
* Anecdotal evidence that GMFRS are addressing health and wellbeing during safe and well visits.

Without training, resources and awareness raising it is unlikely that these outcomes would have been achieved.

## Recommendations

1. Identification of staff at the right level (preferably management) within health or social care organisations to act as fire safety champions. Champions should develop their knowledge of fire safety and disseminate it throughout their organisation.
2. Ensure that all referral pathways are visible to staff in fire and rescue services and health and social care services.
3. Consideration should be given to the most appropriate way of training and raising awareness within partnership organisations. In cases where the scale and logistics of delivering face to face partnership training are problematic, other options should be explored. Options may include electronic training, webinars, films/videos, literature, joint campaigns/events and including new content in existing mandatory training.
4. Fire and rescue services and health and social care organisations should join forces and collaborate on key national campaigns that are of mutual interest.  For example, Dementia Awareness Week, Suicide Prevention Day, World Mental Health Day, Mental Health Awareness Week.

# Aim 5: To proactively produce and publish a joint report promoting the mutual benefits of effective partnership working between PCFT and GMFRS and providing a framework for others to follow.

The report was written by GMFRS Health and Social Care Coordinator with input from members of the partnership Steering Group.

The report will be shared with fire and rescue and health and social care organisations in a number of different forums including:

* Launch event to promote findings of the report to interested parties
* National Fire Chiefs Council (NFCC)
* National Association of Healthcare Fire Officers (NAHFO)
* Greater Manchester Health and Social Care Partnership
* Royal Society for Public Health (RSPH)

# Summary

The partnership between GMFRS and PCFT has achieved a number of successes, particularly in reducing fire incidents and false alarms in PCFT premises. Whilst the numbers of Safe and Well visits for PCFT services users has continued to increase year on year, there is still room for improvement. Generally, good progress has been made against the aims of the partnership and this progress is underpinned by building a sound foundation.

Commitment from directors within both organisations is essential to ensure that the implementation of the partnership is prioritised and adequate resources are allocated. It is vital that the partnership is led and coordinated by role holders with the knowledge, authority and capacity to lead and influence.

Regular and consistent attendance at steering group meetings is necessary so that work can progress and open communication can be maintained. The building of trust is important and the appreciation of each other’s roles, priorities and pressures is equally vital. Once the right personnel are in place, a robust partnership agreement with clear aims and objectives enables the partnership to maintain its focus and structure.

Through the partnership GMFRS and PCFT have better access to colleagues to ask advice, share risk information and to problem solve. Increased interactions with mental health practitioners will undoubtedly improve GMFRS staff confidence, knowledge and understanding of mental health and services that are available. This in turn will serve to improve the quality of the interactions that they have with members of the public either during operational incidents or community activities.

The relationships that have been built as a result of the partnership create secondary gains for all involved. There is now an enhanced understanding and appreciation across both organisations about each other’s roles, responsibilities and organisational structures, a key ingredient of successful partnership working.

# Summary of Recommendations

1. Ensure there is a robust governance structure in place.

2. Develop a written partnership agreement and associated action plan.

3. Secure commitment and support at director level.

4. Develop an information sharing agreement.

5. Agree referral pathway for Safe and Well visits and promote it within the health/social care organisation using existing infrastructures and mandatory training.

6. Prior to delivery of the partnership, establish effective methods of recording and reporting on:

• Number of Safe and Well referrals made

• Number of Safe and Well visits booked

• Number of Safe and Well visits carried out.

7. Consideration should be given to the capability of ICT systems so that the partnership can establish from the outset what data can be recorded and reported.

8. Joint visits in complex cases should be encouraged where possible and appropriate.

9. Development of an Arson Protocol and guidance for staff on the management of deliberate fire setting in their premises.

10. Introduction of a search policy which allows staff to carry out searches with the aim of reducing covert materials.

11. Introduction of smoking detection systems linked to a silent pager to alert staff to the presence of smoke in high risk areas.

12. Mandatory fire safety training to include the use of fire extinguishers to extinguish small fires, fire loading and how to contain fires in the room of origin.

13. Use of alternative sprinkler systems such as Dry Sprinkler Powder Aerosols in patient bedrooms and other high risk areas.

14. Use of Passive Infra-Red Devices in in-patient kitchens to reduce the incidence of unwanted fire signals associated with appliances such as toasters and microwaves.

15. Financial investment to upgrade fire precautions. This is likely to significantly reduce the impact that a fire has should one occur, thus reducing risk of injury to patients, staff, damage to property and buildings and disruption to services.

16. Safe and Well visits should include consideration of mental health to inform fire risk assessment.

17. Fire and rescue services should maximise the opportunity provided by Safe and Well to identify mental health needs and offer brief advice, signposting and referrals.

18. Development of fire safety interventions (e.g. Safe and Well visits) should involve consultation with partners who work with the target audience.

19. Fire and rescue services should consult with service users and carers when developing fire safety interventions for people with mental health needs.

20. Fire and rescue services should have access to information about local statutory and voluntary organisations that support people with mental health needs including referral pathways.

21. Partnerships should ensure that systems are in place to facilitate recording and reporting of all outcomes achieved, for example referrals made to other organisations.

22. Mental health services should consider providing a 24/7 triage phone line for emergency services to use.

23. Identification of staff at the right level (preferably management) within health or social care organisations to act as fire safety champions. Champions should develop their knowledge of fire safety and disseminate it throughout their organisation.

24. Ensure that all referral pathways are visible to staff in fire and rescue services and health and social care services.

25. Consideration should be given to the most appropriate way of training and raising awareness within partnership organisations. In cases where the scale and logistics of delivering face to face partnership training are problematic, other options should be explored. Options may include electronic training, webinars, films/videos, literature, joint campaigns/events and including new content in existing mandatory training.

26. Fire and rescue services and health and social care organisations should join forces and collaborate on key national campaigns that are of mutual interest. For example, Dementia Awareness Week, Suicide Prevention Day, World Mental Health Day, Mental Health Awareness Week.

# Next Steps

A decision was made to continue the partnership because there have been a number of positive outcomes as described in this report. Furthermore, outcomes against some of the aims have not been fully achieved so there is more work to do. During the process of reviewing the partnership new areas for collaboration have been identified. Subsequently the next steps for the partnership include:

1. Improve data capture and methods of evaluation to better understand the value of the partnership and inform future development. This will include:

* Improved recording of Safe and Well referrals from PCFT
* Collection of service user feedback
* Analysis of the impact of training, resources and awareness-raising on staff knowledge and practice.

1. Increase the numbers of Safe and Well referrals made by PCFT staff.
2. Promote the inclusion of fire risk in health and social care documentation, care plans and risk assessments.
3. Develop mental health champions within GMFRS who have an increased access to knowledge, information, contacts and support and who can raise awareness of mental health throughout the organisation.
4. Regularly share good practice and learning points with key stakeholders and interested parties both within fire and rescue services and health, social care and third sector organisations to continually improve services.
5. Promote the use of community fire stations to PCFT staff and service users.

# Appendices

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# References

Breeze P and Marsden D, (2015) Health and Social Care Fire Safety Guidance Greater Manchester Fire and Rescue Service and Manchester Mental Health and Social Care Trust.

Greater Manchester Combined Authority and Public Health England, (2016) Greater Manchester Mental Health and Wellbeing Strategy.

Home Office (2017) Fire Statistics.

Mental Health Foundation (2016) Mental Health and Prevention: Taking local action for better mental health, Policy Report.

Phelan, M and Fisher, N (1993). Fire Risk: Assessment and management in long term psychiatric patients. Psychiatric Bulletin (17): 86-88.

1. Partial year data correct as at 21st December 2016 [↑](#footnote-ref-1)