# NIAS Complex Case Team Evaluation


McGARRY CONSULTING

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NIAS NORTHERN IRELAND AMBULANCE SERVICE

British Red Cross

# INTERACT – summary statistical findings

## Per Patient

- 3 in 4 patients had a reduction in ambulance calls
- 4 in 5 having a reduced number of ambulance responses
- 3 in 5 had less ambulance conveyances to hospital/ED

## Per Sample (of 48 patients)

- net calls decreased by over half (55.2%)
- net responses decreased by two-thirds (66.6% )
- net conveyances reduced by 61.1%

**£1.94m**

**Estimated Net Cost & Improvement Savings per Annum (for 48 People)**

## Proportion of Calls Requiring a Response and/or Conveyance

- The ratio of responses to calls fell by a third (from 35.7% to 26.6%)
- The number of patients conveyed to hospital, per call, fell from one in six (16.7%) to one in seven (14.5%)

# 3 Key Points

**£1.94m**

**Estimated Net Cost & Improvement Savings per Annum (for 48 People)**

- **Reduced Conveyances**
- **Increased Capacity**
- **Improved Category 1 & Category 2 Responses**

**The right thing to do for patients**

**With special thanks to all the NIAS CCT and BRC INTERACT Teams**


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# overview

**frequent caller definition:**

“Anyone over the age of 18 who calls for an emergency ambulance more than 5 times in one month or more than 12 times in 3 consecutive months.”

(image c/o @tigressflames667)

## nutshell

The NI Ambulance Service (NIAS) has an obligation to appropriately respond to all calls for help. There are some high-frequency callers, referred to as High Intensity Users or 'Frequent Callers'. NIAS set up a Complex Case Team (CCT) in 2017 and secured funding in 2022 for a joint 15-month project, INTERACT, with the British Red Cross (BRC), to specifically address frequent callers.

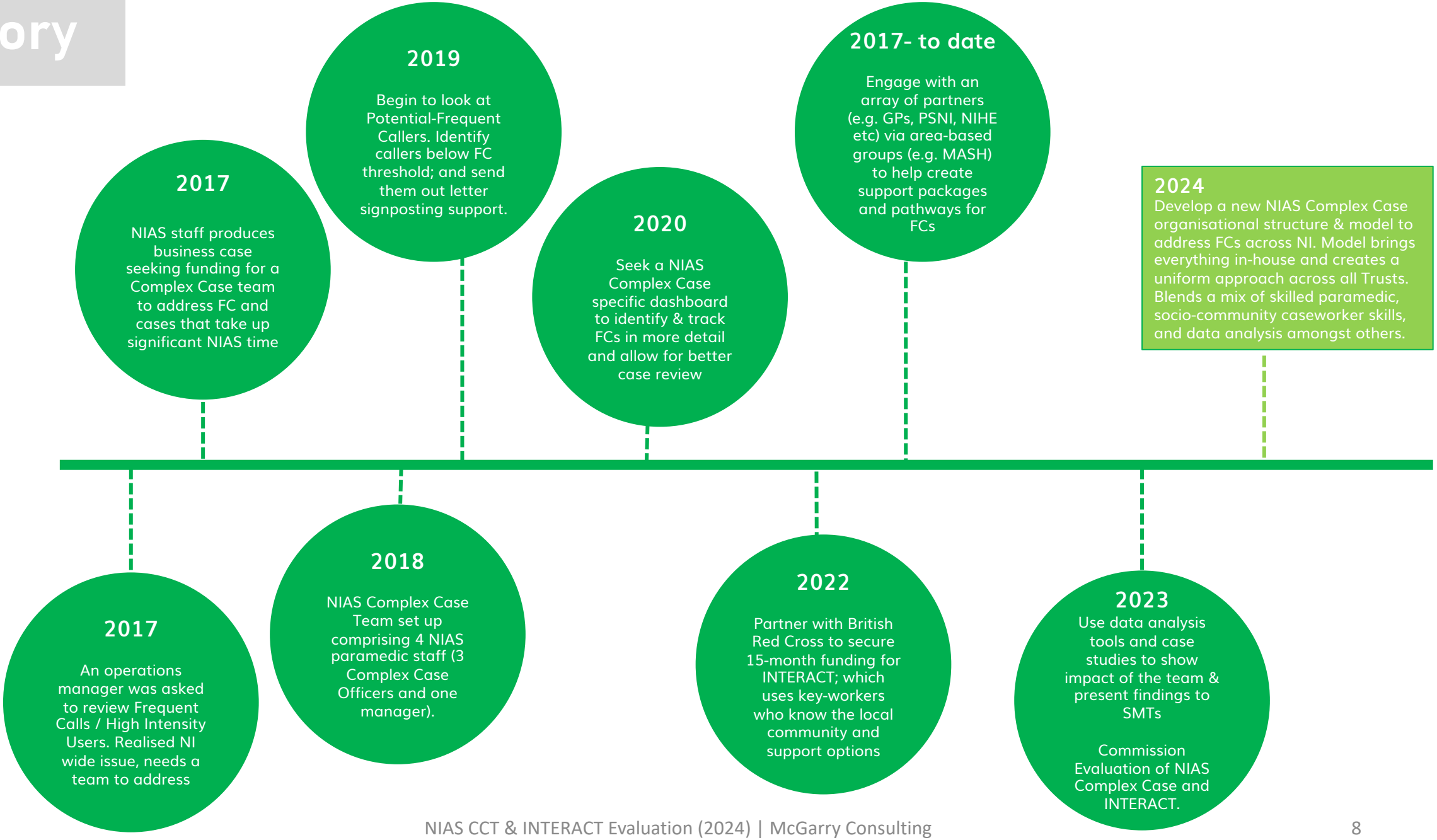
Frequent Callers have often more complex needs, require more resources (NIAS and others, e.g. PSNI), and present more risk than non-Frequent Callers. Therefore, there is a need to look beyond the number of frequent calls to gain a better understanding of frequent callers and their impact on the NIAS and others.

This is a global issue. In the UK, a Frequent Caller National Network (FreCaNN) was set-up by the Association of Ambulance Chief Executives (AACE) to develop best practice in addressing the complex needs of Frequent Callers.

CCT use a dedicated digital dashboard to identify and track Frequent Callers. The team has only 4 staff, and provides a NI wide service, although concentrated east of the Bann. The team's methodical patient-centred, preventative and partner-led approach has proven successful, with interventions leading to fewer Frequent Caller actions.

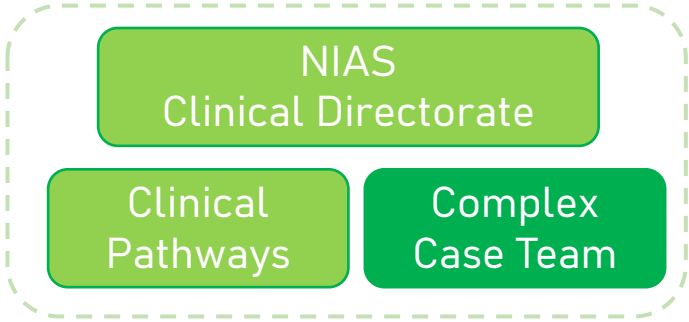
This report addresses CCT's performance, including INTERACT. Overall, the team is effective, innovative and has done well. They have clearly demonstrated a growing and ongoing socio-health and financial need to address Frequent Callers and Potential Frequent Callers. Finally, they have also identified a new NI wide NIAS organisational model to reduce the impact of Frequent Callers on the NHS and better address their health needs.

# history


2017
NIAS staff produces business case seeking funding for a Complex Case team to address FC and cases that take up significant NIAS time
2019
Begin to look at Potential-Frequent Callers. Identify callers below FC threshold; and send them out letter signposting support.
2020
Seek a NIAS Complex Case specific dashboard to identify & track FCs in more detail and allow for better case review
2017- to date
Engage with an array of partners (e.g. GPs, PSNI, NIHE etc) via area-based groups (e.g. MASH) to help create support packages and pathways for FCs
2024
Develop a new NIAS Complex Case organisational structure & model to address FCs across NI. Model brings everything in-house and creates a uniform approach across all Trusts. Blends a mix of skilled paramedic, socio-community caseworker skills, and data analysis amongst others.
2017
An operations manager was asked to review Frequent Calls / High Intensity Users. Realised NI wide issue, needs a team to address
2018
NIAS Complex Case Team set up comprising 4 NIAS paramedic staff (3 Complex Case Officers and one manager).
2022
Partner with British Red Cross to secure 15-month funding for INTERACT; which uses key-workers who know the local community and support options
2023
Use data analysis tools and case studies to show impact of the team & present findings to SMTs
Commission Evaluation of NIAS Complex Case and INTERACT.

# complex cases team

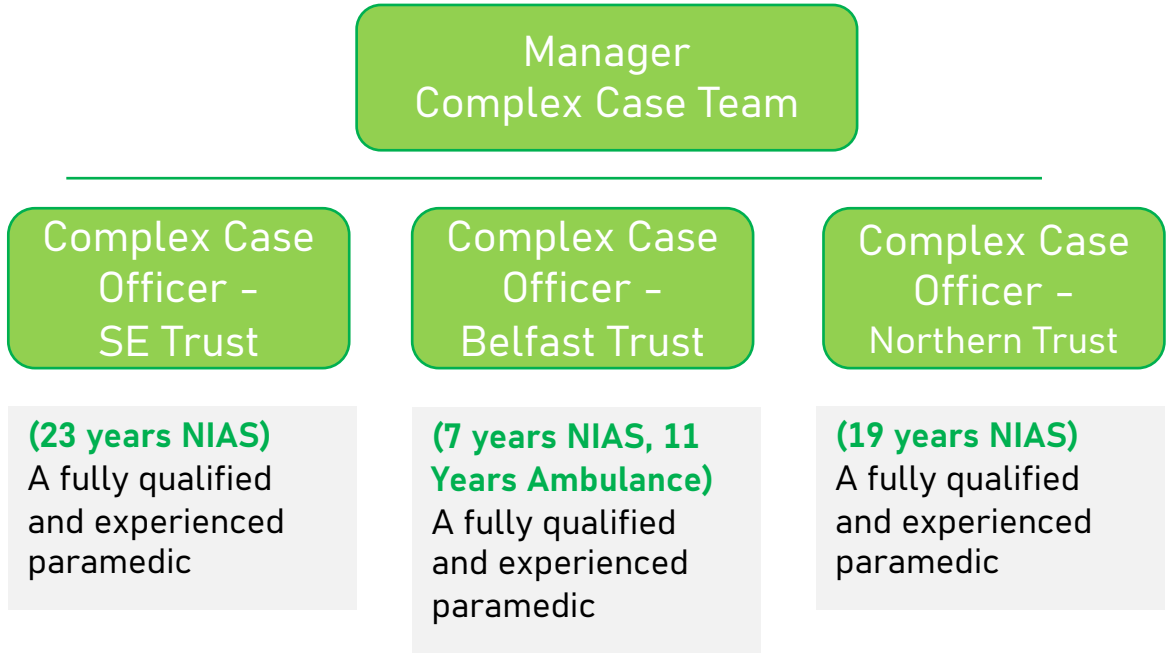
The 4-person Complex Case team has **~80 years' experience** behind them. This is a highly experienced, capable and qualified NIAS unit.




**Complex Cases Team (As at March 2024)**

All the team are fully qualified paramedics and have a wealth of experience to draw on. The complex case officers cover one dedicated trust each, and then between them cover Western and Southern H&SC Trusts. The team was seeking a new manager as at Q1 2024. The team have developed valuable relationships with EDs, PSNI, NIFRS, GPs, Mental Health and Addiction teams plus many community-based organisations, and large dedicated services.

NB: A former NIAS operations manager, created and led the CC team from inception but left the CC team in January 2024




**INTERACT**

The British Red Cross team involved one project manager*, and 3 key-workers. The **key-workers** role involved working intensively with frequent callers, often face-to-face for long-periods to bring them to appointments and/or ensure they are on the right programme. In effect making sure they get the right care, and any care plans are fully implemented.

(*left in August 2023)

# frequent caller stats

# in 2023

**1,242**
Unique Frequent Callers

**22,168**
Frequent Calls

**2hr 2mins**
Average Frequent Call Duration

**3.0%**
Of All Callers

**7.6%**
Of All Calls

**2hr 42mins**
Average Non-Frequent Call Duration

Frequent calls, on average, were 40 mins (25%) shorter in 2023 than non-frequent caller calls.

This is believed to be partly due to frequent callers calling back and/or making repeat calls. With only the individual (not aggregate time) being recorded.

This is evidenced by their higher proportion of all calls, and via case studies and project data outlined in this report.

# NIAS Frequent Caller data 2023

| Date | % of Calls Made by FC | % of Callers who are FC | Average Duration of Non-FC Call (Minutes) | Average Duration of FC Call (Minutes) |
|---|---|---|---|---|
| Jan-23 | 7.3% | 2.8% | 161.1 | 98.7 |
| Feb-23 | 7.0% | 2.8% | 152.5 | 102.3 |
| Mar-23 | 6.5% | 2.7% | 172.1 | 106.8 |
| Apr-23 | 7.0% | 2.9% | 154.0 | 106.0 |
| May-23 | 6.8% | 2.9% | 146.8 | 111.3 |
| Jun-23 | 7.5% | 2.8% | 156.2 | 105.1 |
| Jul-23 | 7.6% | 2.8% | 157.1 | 108.6 |
| Aug-23 | 7.6% | 2.7% | 153.0 | 120.4 |
| Sep-23 | 6.8% | 2.9% | 152.5 | 137.2 |
| Oct-23 | 6.6% | 2.9% | 179.3 | 161.1 |
| Nov-23 | 8.5% | 3.4% | 171.3 | 132.1 |
| Dec-23 | 11.2% | 4.0% | 184.7 | 142.3 |
| **Grand Total** | **7.6%** | **3.0%** | **162.2** | **121.6** |

## Key NIAS Frequent Caller Statistics from 2023

Frequent Callers comprise approximately **3% of all callers** in 2023; and **7.6% of all calls**. This indicates that, on average, a frequent caller was **2.5 times more likely to call the NIAS** than the NI general public. This appears low in comparison to the British Red Cross GB frequent caller statistics (next page, although based on frequent callers to A&E rather than just to 999/Ambulance).

The average service engagement with a frequent caller call lasted **2 hours and 2 minutes**, between the call commenced and the time the call was closed.

## Frequent Caller 'Rationale'

As to what motivates Frequent Callers, research* in 2023 (albeit on small sample size of 15 Frequent Callers) found:

### Results

People said they make frequent calls to emergency ambulance services as a last resort when they perceive their care needs are urgent and other routes to help have failed. **Those with the most complex health needs generally felt their immediate requirements were not resolved and underlying mental and physical problems led them to call again**. A third of respondents were also attended to by police and were arrested for behaviour associated with their health needs. Those callers receiving case management did not know they were selected for this. Some respondents were concerned that case management could label frequent callers as troublemakers.

### Conclusion

People who make frequent calls to emergency ambulance services feel their health and care needs are urgent and ongoing. **They cannot see alternative ways to receive help** and resolve problems. Communication between health professionals and service users appears inadequate.

The research also mentioned that more research is needed to understand service users' motivations and requirements to inform design and delivery of accessible and effective services.

**Experiences and views of people who frequently call emergency ambulance services: A qualitative study of UK service users – Bridie A. Evans PhD et al*

# British Red Cross data 2022 (English Frequent Callers to A&E)

**0.67%**
Proportion of Population who are Frequent Callers

**16%**
FC Share of ED Attendances

**29%**
FC Share of Ambulance Journeys

**26%**
FC Share of Hospital Admissions

Source: British Red Cross – Nowhere Else to Turn (2021) Report #AddressingHIU

# frequent caller – age & life expectancy

| Age Range | No. of FCs | As % |
|---|---|---|
| 0-20 | 0 | 0.0% |
| 20-39 | 8 | 13.6% |
| 40-59 | 18 | 30.5% |
| 60-79 | 24 | 40.7% |
| 80+ | 9 | 15.3% |
| **Total** | **59** | **100.0%** |

| | Average Age at Death | | NI Life Expectancy |
|---|---|---|---|
| | Mean | Median | |
| Male | 58.7 | 63.0 | 79 |
| Female | 64.6 | 63.5 | 82 |

**Days Between Being Identifed as FC by CCT and Date of Death**

| Years | Days | Total Frequent Callers | As % |
|---|---|---|---|
| 1 | 0-365 | 33 | 49.3% |
| 2 | 366-730 | 15 | 22.4% |
| 3 | 731-1,095 | 6 | 9.0% |
| 4 | 1,095-1,460 | 9 | 13.4% |
| 5 | 1,461-1,825 | 3 | 4.5% |
| 6 | 1,825-2,190 | 1 | 1.5% |
| | **Total** | **67** | **100.0%** |

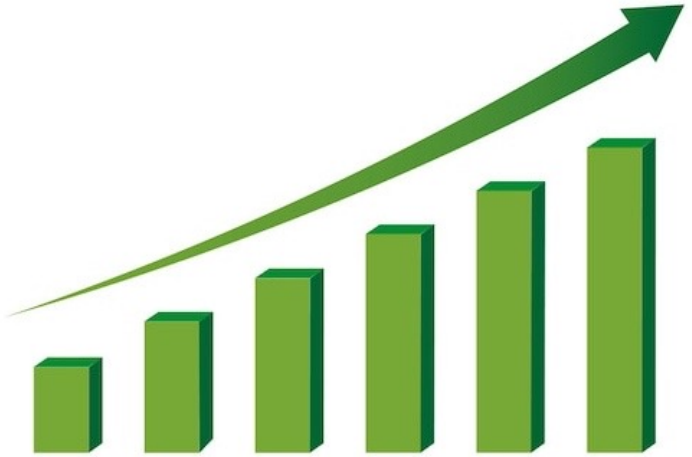
## Age & Life Expectancy

The CCT took a sample of 75 frequent callers to identify their age at death; and how long they had been identified as a frequent caller before their death. There was data on 67 people with respect to time on the system, and data on 59 people with respect to age.

The picture presented was stark.

| | |
|---|---|
| 535 days | Mean no. of days from identification as an FC on system before date of death. That is less than 1.5 years |
| 20.3 years | How much fewer years a male FC will live compared to the NI average |
| 17.4 years | How much fewer years a female FC will live compared to the NI average |
| 13.6% | The proportion of FC aged between 20-39 |
| 29 | Age of the youngest FC |
| 94 | Age of the oldest FC |
| 1,846 days | Longest period between being identified as FC and death |

# frequent callers

**Complex & Underlying Need**
Most Frequent Callers have an underlying need (e.g. mental health, addiction). Often their call will refer to another need (primary need), rather than their underlying (secondary need). It is important to define and understand their underlying need and rationale for calling.

**A Package of Support & Signposting**
A package of support and/or creative solution is needed to address their underlying needs. Therefore, regular engagement with partners is required, as well as knowledge of social and community support opportunities. The patient may also need help to avail of these supports.

**Profile & Projections**
The age and underlying needs of the average Frequent Caller, indicate that the volume – and needs – of Frequent Callers will only grow. Due to an ageing population and rising waiting lists, mental health, cost of living, risk of isolation/loneliness and public funding cuts.

# Problem Caller – Prosecutions

## Frequent Callers to Problem Callers

In rare instances some people will call excessively and refuse treatment. This can lead to prosecution for obstructing the NIAS from responding to emergency circumstances and persistent improper use of a public communications network.

In March 2024, a man rang 999 more than 40 times in a 5-day period (18-22 March). Paramedics were dispatched repeatedly to his Belfast home, but he refused to accompany them to hospital. Upon the ambulance crew leaving he would call 999 again. At times during these 5 days the NIAS was operating at a level classed as “severely under pressure”.

In court, the man stated that his actions were down to anxiety aggravated by alcoholism. His barrister stated that the man’s actions were subject to a ‘vicious cycle of alcohol misuse’. At court, the judge was told the man had 26 previous offences for similar behaviour.

Whilst the CCT can’t resolve all cases or persistent problem callers, the INTERACT project and CCT have been shown to help people with anxiety and alcoholism. Information markers have also been shown to reduce responses. Increased person-related data should help details of persistent problem callers to be more easily shared among blue-light services. Finally, some hospitals have introduced a yellow and red card system to address persistent callers and it may be worth considering new options to address this as part of a new CCT model.

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### Belfast man accused of phoning for ambulances 44 times

6 hours ago

# strategic context

# why is there need to act now?

# why is it the NIAS's problem?

**"General Practice in NI is in crisis… we face destabilisation if action is not taken.**

**Despite the best efforts of GPs and practice teams, the system is overwhelmed and in many cases, patients are struggling to get access to the care they deserve."**

Dr Ursula Mason
**Chair of the Royal College of GPs in NI (28Mar23)**

## Short Answer

People call 999, and ask for the ambulance, which has a legal obligation to appropriately respond.

## GP Service Survey (June 2023)

A survey undertaken in June 2023 in NI, by Compare NI, found that:

**72%** of people were not satisfied with their GP waiting times

**76%** of people had been worried about not being able to access a GP appointment last year

**47%** of people were not able to get a routine GP appointment when needed

**43%** of people were not able to get an emergency GP appointment when needed

**85%** of people said it was harder to book an appointment after the pandemic than before

With long waiting lists for hospital appointments, often months or years, **the ambulance service is the easiest branch of the wider health service to speak with someone.**

## Long-Answer

People with medical, mental or physical health needs want help. They face a long wait to get support, and often they need a package of clinical and non-clinical support. Research from the British Red Cross has shown that most FCs tried their GP and/or other health services first. But for various reasons* they were unsatisfied and/or unable to avail of the support. **see British Red Cross – Nowhere Else to Turn (2021) Report #AddressingHIU*

They can also face a maze of different trusts, services, locations and changing personnel, along with waiting lists, phone numbers (and automated responses); and websites. Which makes it challenging to navigate; and often only operate 9-5 Monday to Friday.

**999 is easily remembered, available 24 x 7, and is usually answered within seconds.**

Therefore, the NIAS becomes the coal-face for dealing with people who feel they have nowhere else to go, or no-one else to call. If the underlying need is not addressed, then the calls usually continue, taking up more and more NIAS (and sometimes ED or PSNI) time. Ultimately, the NIAS needs to work with others to improve FC outcomes; and to better manage their resources and mitigate risks.

**Latest Year (2022/23)**

**137,264**
Calls / attendances to PhoneFirst / Urgent Care Centre services

**750,672**
Attendances at EDs (New & Unplanned Reviews)

**50.1%**
of ED attendances are treated and discharged home, or admitted within 4 hours

**221,422**
Calls were responded to by the NIAS

# Northern Ireland Hospital Statistics:
## Emergency Care 2022/23

### Increasing Demand & Waiting Times at ED

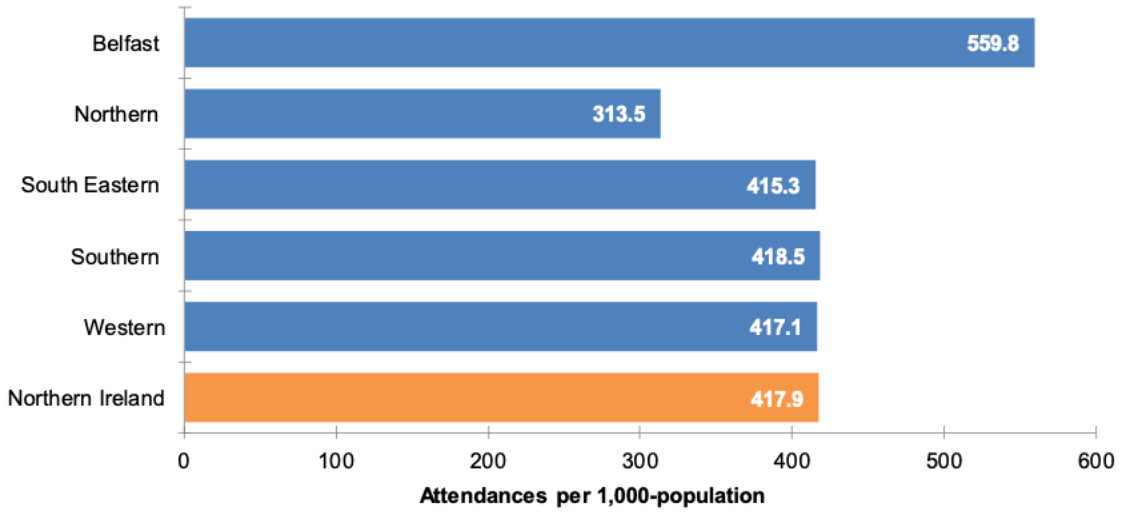
ED attendances are up 3.8% year on year, with only half now meeting the 4-hour waiting time (down from 54.8% in 21/22 and 69.9% in 18/19). 1 in 7 (compared to 1 in 9 in 21/22) spend over 12 hours in an ED. Recent NI waiting times were 36 times those of 2009 (as reported on Channel 4), indicating the stark need to focus on non-ED led prevention/intervention.

Approximately 1 in 4 (23.6%) of ED attendances occur in Belfast. Belfast attracts one third more attendances at EDs per capita than the NI average.

### What does this mean for NIAS?

Apart from increased demand (and proportionately heavier demand in Belfast) it means that NIAS crews will have to stay longer at – or outside - EDs, especially if the patient is a low clinical priority. This takes up limited resources. Therefore, there is need to tackle Frequent Callers and reduce their level of conveyances, which anecdotally take longer than average.

**Figure 10: Attendances at EDs per 1,000-Population, by HSC Trust (2022/23)[11]**



# mental health & social worker shortage in NI

**Inspire**
@InspireWBGroup

Follow

Listening to some great examples of prevention in action across NI. Key takeaways: we work better together across sectors and organisations, sharing learning establishes solid innovative services and the need for building trusted relationships with people needing support!


14:00 · 21/03/2024 · **220** Views

## Mental Health Demand (21-March-2024)

The NI Assembly held a public session on the early intervention and prevention in Mental Health on 21-Mar-2024. They acknowledged rising mental health rates and discussed how this could be addressed.

Key issues identified (opposite) included the need for better working together, innovative services and building relationships. The CCT adheres to these principles.

## Shortage of Social Workers (21-March-2024)

Another session on the same day into health waiting lists identified that there was **358 social worker vacancies across the five trusts** (excluding managerial roles). This has led to increase in waiting lists, which in turn may lead to an increase in frequent callers.

An 'Independent Review of Children's Social Care Services' in July 2023, highlighted the shortage of social workers, principally among children's services. At the time, the British Association of Social Workers (BASW) stated there was **a shortage of 550 social workers in NI**, with 10% of posts vacant (up to 50% in children's services).

## BASW

In a media* interview on 21-Jun-2023 following the launch of the Review, Carolyn Ewart, director BASW NI noted:

*"At present we would **need around 550 new social workers** just to cover the vacancies that we have within the sector."*

*"**Social workers are also dealing with very high case loads**, looking after upwards of 25 families, when it has been recently recommended that social workers should not be dealing with more than 15 cases each."*

*"This issue is combined with how social workers are having to spend their working time as **they are spending around 80% of their work filling out paperwork and reports**, rather than working directly with families. In an ideal world the reverse would be in effect."*

The lack of social workers, and heavy admin burden on them, means there is a shortage of support for people with complex cases in NI. This is **likely to lead to people with complex cases seeking support from more accessible means e.g. the ambulance service.**

**Belfast Live*, 21-Jun-2023

# Royal College of Emergency Medicine

**Crisis in NI Health Service (20-Jan-2024)**
Emergency Medical Consultant and Head of the Royal College of Emergency Medicine (RCEM) Dr Russell McLaughlin, noted in a newspaper* interview in January 2024:

"Once you have patients regularly at volume waiting beyond 5 hours, you start to see an increase in things going wrong. It's not just a quality issue, it's a safety issue as well and that increased delay is associated with harm in our emergency departments."

"In very simple terms, there is strong evidence that indicates that in 2022, 1,434 people died as a result of delays in NI emergency Departments."

"The point is we are losing a significant volume of patients every year and its off the radar. **Any excess death is a tragedy for the individual and for the family, but once you get beyond the statistics you are looking at systematic failure**."

**Irish Times (p9, Saturday 20-January-2024)*

"**Burnout among frontline staff and workforce shortages are also widespread** in other parts of the NHS as healthcare workers **deal with greater demands and treating patients with more complex needs**."

Dr McLoughlin outlined why emergency departments were congested and that doctors were now going down South for jobs. He commented "you can definitely see this place on the slide". In response, NI's Department of Health responded:

"The situation is reflective of the current pressures across the entire health and social care system, with demand far outweighing existing capacity. The Department fully acknowledges that care will be far from optimal and potential risks intensified – **if hospitals are operating far beyond capacity with the transfer of patients from ambulances delayed, and ambulance response times in the community consequently impacted**."

***"The point is we are losing a significant volume of patients every year and it's off the radar"***

**"Fundamentally there is possibly some kernel of optimism that, with the right circumstances, some of this is fixable… there are some rewarding elements in terms of being able to treat very unwell patients and make them better quickly."**

# what is the public policy rationale?

# NIAS rationale

**Caring Today, Planning for Tomorrow**
The strategy reflects how NIAS can meet the DoH's 'Health & Wellbeing 2026' strategy. NIAS's mission is

> **"to consistently show compassion, professionalism and respect the patients we care for"**

The complex case team is designed to show compassion to those with complex needs, often those who have fallen through the gaps elsewhere, and to meaningfully engage with them to help address their underlying needs. In doing so, they also help free up more crews to meet the growing demands upon NIAS.

At the outset NIAS outlines the key transformational workstreams required to implement the strategy including:

- Enhancing the way we deliver care
- Improve staff health & wellbeing
- Support staff to provide the best and most appropriate care possible
- Embrace new technologies
- Reconfigure our infrastructure
- Improve our communication and engagement

All of these dovetail with the current Complex Cases team approach and the proposed model. The strategy explicitly recognises that ***"we have a larger proportion of our population living with a complex mix of clinical conditions, which demands a different system for managing health and social care on a daily basis".***

It also stresses the need for alternative pathways to give patients more appropriate health services to meet non-emergency conditions; and that ***"it is vital that the care we give is appropriate and effective for the patient".*** For those with a *complex mix of clinical conditions* that requires a more holistic, more compassionate, more co-ordinated and longer-term approach. Further, NIAS needs to partner with others to do so.

**NIAS GOAL**
Our communities will continue to value and trust us

**We will aim to reduce the number of patients who request the assistance of the ambulance service on a frequent basis through working in partnership with such patients to find better solutions for long-term or complex physical, mental health and social problems**

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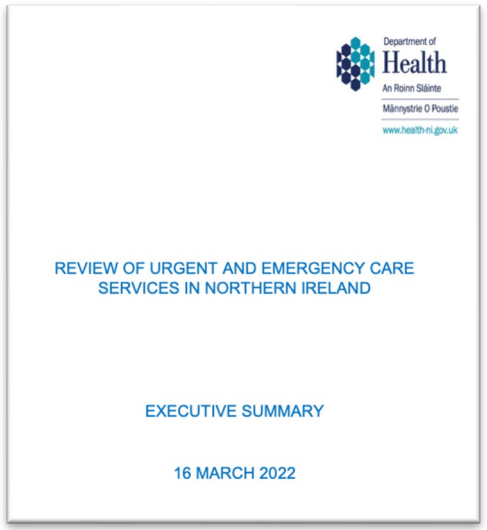
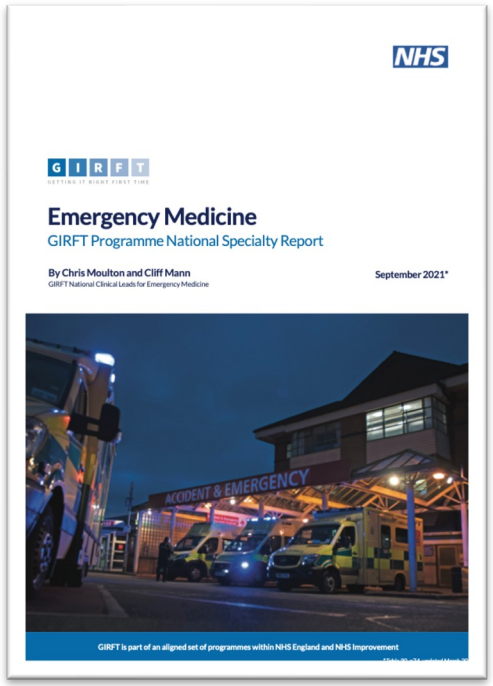



## Review of Urgent & Emergency Care Services (2022)

The ambition is to improve the 'service user' experience, by making it easier to access the most appropriate service as quickly as possible. In a location most suited to the user without having to attend an ED. Protecting access to emergency care, whilst providing alternative pathways for urgent but not life-threatening care.

The three key strategic priorities are:

- **Creating an Integrated Urgent & Emergency Care Service**
- **Capacity, Co-ordination and Performance**
- **Intermediate Care, A Regionalised Approach**

This builds on the experience of the No More Silos Programme, with one of the first recommendations being that the No More Silos Network should introduce an integrated urgent and emergency care system across all HSC Trusts, with a minimum set of standards.

The report also recommended the implementation of the NIAS Clinical Response Model to ensure equitable access to emergency care across NI. The report also sought a regionalised intermediate care programme to ensure an equitable service across NI, which is responsive, efficient and effective in providing enhanced clinical care in the patient's home and supporting hospital flow.

## GIRFT Review of Emergency Medicine NI

The 'Getting it Right First Time (GIRFT)' policy was in response to a 74% rise in ED admissions between 2012 and 2020. GIRFT focuses on getting more information (via data tools) to help them best meet the demand for emergency care and lead to better patient flow and outcomes.

The NIAS Complex Case team's work in identifying frequent callers, intervening with them and using identification markers have all been shown to reduce demand and lead to better patient outcomes. There is scope for closer work with ED and other Blue Lights organisations through the sharing of data and working together on complex cases. This requires a lot of human time in terms of going through records, creating markers, and issuing potential frequent caller notifications.

There is potential for a more data driven and standardised approach in the future (especially with increased digitisations of records/reports). This could lead to more accurate assessment of time/cost/risk per call and could use more complex case experience rather than valuable time to filter and classify frequent callers. There could also be potential to create and better distil lists of available community support, and to pinpoint areas of high-volume frequent calls to enable more targeted and preventative actions.

No single organisation or service can influence all the factors leading to self-harm & suicide. Protect 2 stresses the importance of services (incl. addiction services), families, communities and society to work together to prevent suicides. This involves better case and risk management; and targeted intervention/supported recovery.

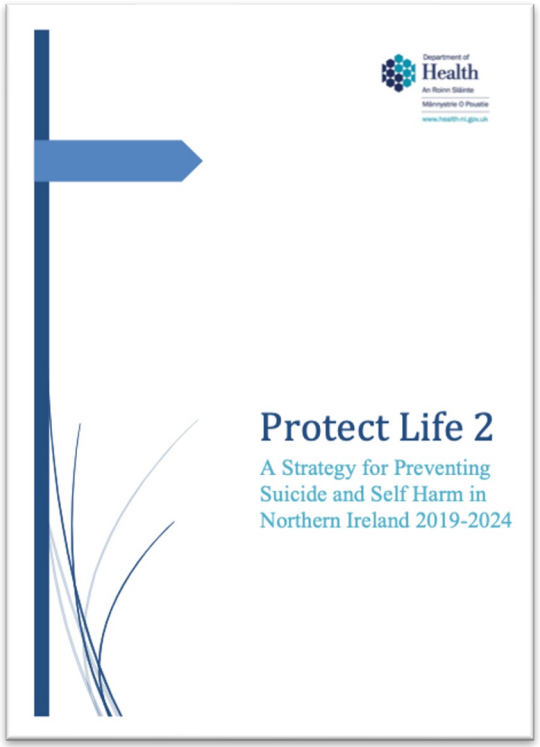
Consultations flagged a need for:

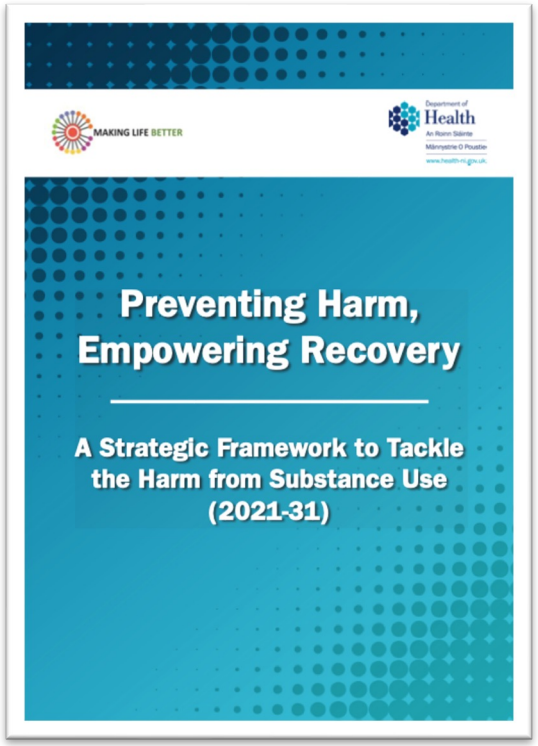
- A more holistic and flexible joined up service that supports people throughout their recovery journey
- Focus on prevention as well as treatment, and reducing stigma
- Early identification/intervention
- Not losing the focus on alcohol

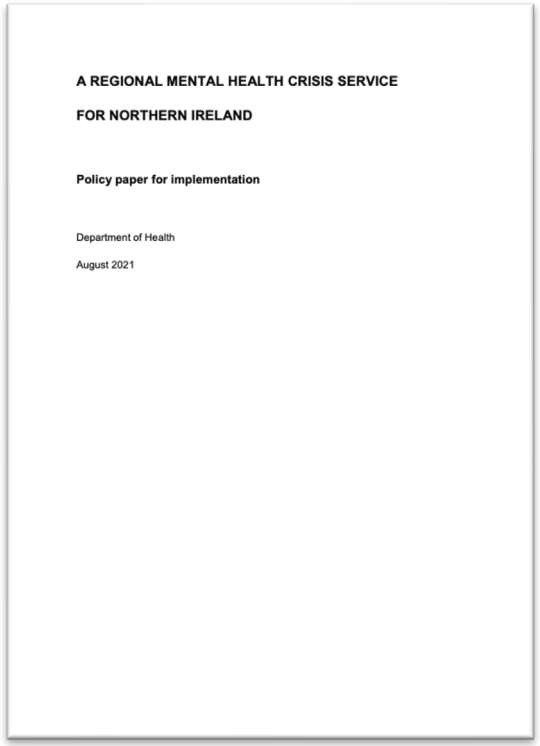
Need for MH and Substance Abuse to work together to help recovery.

Some services are working well, but there needs to be a more regionally consistent (co-produced) services which deliver the right person, right place, right time approach. 40% of MH patients have been forced to resort to emergency or crisis services. A patient, not system, centred approach is required that also reduces ED visits.

This seeks to build 'capacity in communities and prevention'. Part of it involves community development framework, new ambulatory pathways for unscheduled care and a desire to keep ED for emergencies. This reinforces the need for NIAS to reduce ED conveys, innovate, and seek preventative & often community-based pathways.




# key policy takeaways

- Regionally Consistent
- Person Centred (GIRFT)
- Reducing ED Visits
- Co-Produced Pathways (No More Silos)
- Holistic View & Awareness of Addictions
- Targeted Interventions and Focus on Preventions
- Supported Recovery Journey

# interact

# INTERACT

*"Implementation of a bespoke support service specifically designed to address NIAS Frequent Callers, many of whom have been adversely effected by Covid 19, ensuring that their health and social care needs are being met, whilst simultaneously reducing the demand on the NIAS and local Emergency Departments."*

**Project Summary, per p2 Application**

## Overview

A joint project between the CCT and the British Red Cross (BRC) to offer targeted non-clinical community support to people with complex needs. Needs that were not being met elsewhere, resulting in frequent calls to the NIAS.

BRC had extensive experience of dealing with high-intensity users in GB. They would provide training and employ key-workers to work more intensively with CCT identified frequent callers in Belfast and the SE Trust areas, like their previous projects in GB.

### Funding & Timeframe

INTERACT was awarded £189,370 over 15 months (3-month set-up and 12-month delivery); and promised savings of £1,151,567. The final PMR (15-Feb-24) stated expenditure to date of £178,384 (94.2% of total spend).

### Was it a success?

The project had a difficult bedding in period, but once issues were resolved, it supported 52 patients. Overall, it improved most patients' quality of life and significantly reduced their net demands on the NIAS and ED. There is little evidence as to wider objectives sought.

## Key Outcomes

The application stated 170 Frequent Service Users would be supported over the project. The progress reports indicated that 52 'patients' were supported between Feb-23 and Jan-24. **Equivalent to a 30.6% completion rate, and 17.3 patients per key-worker.**

### Explanation

BRC had, based on their GB experience, assumed a spectrum of complexity from low-high. INTERACT Key-workers were recruited on this basis. However, in practice most NI patients were highly complex requiring more time and expertise. Fortunately, the INTERACT key-workers had significant experience of dealing with people of similar backgrounds.

Unlike GB where mental health and addiction challenges can be addressed as one, NI mental health services require the person to have addressed their addiction first. This takes extra co-ordination, time, patience and willpower.

Together, the complexity and service provision pre-requisites necessitate more time per patient. Meaning less patients within a given time-period.

# Final INTERACT Progress Monitoring Report (PMR) 15-Feb-24

High Intensity Use Programme - INTERACT

## Activity

Nov 23 - Jan 24

### 319 phone calls

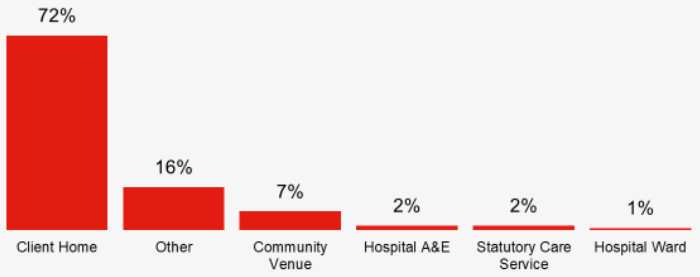
- 27% of phone calls provided ongoing practical and emotional support
- 39% of calls were to make an arrangement

### 226 written communication

Written communications with clients, social care professionals, relatives and GPs by HIU team. This includes e.g. WhatsApp messages, texts, emails, and letters.

### 115 appointments with clients

The flexibility of the service allows the HIU Leads to meet clients in the location where they feel most comfortable. The graph shows % of appointments and where they were held.




The average length of an appointment was **58** minutes.

### 53 signposts & onward referral

Signposts and onward referrals were made to services including:

- Lifeline
- Belfast Recovery College
- Inspire Wellbeing
- Advice NI
- Aware NI
- DVA

**Overview**

This was across three key-workers, in the final quarter of the year-long pilot. Only 5 new patients were taken on (out of 53 over the year according to the PMR). Therefore, there was more hand-off and transitioning people off the service required compared to previous quarters.

Key characteristics of the pilot are the level of home visits, and that 2 in 5 calls were to 'make an arrangement'. This indicates the time intensive nature of working with complex cases; and the need to record the level of data and interaction with frequent callers, and their support providers.

It also shows the reliance on third parties – as onward referrals and/or support providers. Where third party capacity is restricted (e.g. due to funding cuts) this may require further time and support from key workers.

# INTERACT

**As a project INTERACT had its challenges and had to reduce the target number of frequent callers.**

**However, as a pilot INTERACT provided valuable hard data and learnings. It also demonstrated that a more intensive non-clinical lead approach could significantly reduce frequent caller demand on the NIAS for the majority, but not all, of a sample of identified frequent callers. In this respect, and in the undoubtedly improved lives of many of its patients, it was successful.**

## Outcomes

The project's primary aims were improved outcomes for patients. With less NIAS calls, responses, conveyances. A target of 40% reductions was surpassed (per page 34-36).

### Other Outcomes

The application also mentioned:

- Specialist training to all project staff and volunteers across 11 subject areas; plus 6 months' mentoring and coaching for staff
- (Staff) monthly access to mental health support
- Creation of volunteer opportunities
- Enhancement of the existing dashboard
- Patients to receive personalised support – this led to eight sub-outcomes

Progress reports received only referred to patient numbers (and their associated frequent calls). The final PMR states that staff training was ongoing (in each quarter) and 6-months mentoring provided but little further detail on their impact on the project and there was the little mention of them in consultations with BRC & CCT staff. A list of the referenced outcomes is shown on the next page.

### Sustainability

The project ended with no interim continuation plans in place. Keyworkers employed were not retained, leading to a loss of valuable skills and connections. However, the pilot has provided successes, hard data and led to this evaluation. BRC have learned more about HIUs in NI. NIAS will use this evaluation to inform its approach to providing future support for frequent callers.

### Total Numbers

55 frequent service users out of an initial target of 170 were supported according to the PMR, and 52 (30.6%) according to the detailed records. This was much lower due to the greater complexity of individual cases and the greater level of individual support required.

According to the final PMR, BRC recorded the cumulative reductions as:

| | |
|---|---|
| **16%** | **Fewer 999 Calls** |
| **33%** | **Fewer Ambulance Responses** |
| **23%** | **Fewer Conveyances to ED** |

BRC noted an associated cumulative cost saving of £130,861 from reduced patient use of NIAS

# Final INTERACT Progress Monitoring Report (PMR) 15-Feb-24

## )utcomes & Feedback

Feb 23 - Jan

ıtcomes

people completed the outcomes questionnaire at the
d of their support:

**74%**
of people reported improved wellbeing at the end of their support

**79%**
of people felt that they had more control over their daily lives at the end of their support*
*29/31 people answered questions regarding control

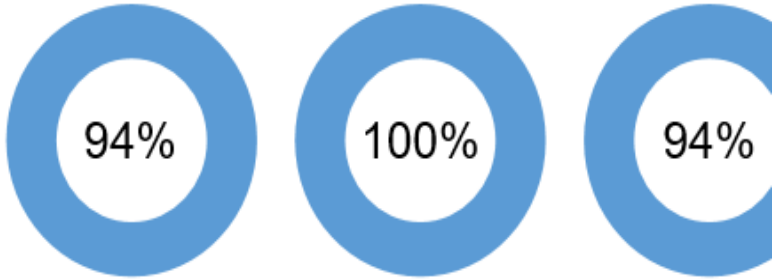
**71%**
of people felt less lonely at the end of their support

**94%**
showed an increase in activation*
*Health activation is a form of health self-management that looks at knowledge, confidence, motivation and beliefs, actions, and feelings of control. 16/31 people responded to questions regarding activation.

**78%** of clients achieved or made a lot of progress on at least one goal

Feedback

32 people (from all cohorts) completed the HIU Feedba
for:




Said they would be "extremely likely" to recommend the service to friends and family if they needed similar care or treatment

Felt the support "helped a lot" with their knowledge of community-based support that available to help them

Felt the support "he
a lot" to help the
manage their healt
wellbeing

"[The HIU Lead] was fantastic, really suited for the job. She gave me lots of information about who to go to and where I can get support. She came with me for a very difficult appointment also. She opened my eyes up as to what was out there."

**Impact**

BRC state that impact is measured via a client outcomes questionnaire asked at the start and the end of the intervention. With feedback also gathered at the end of support.

Testimonials

A list of positive testimonials (two examples below), testifying to big life changes and the time/care provided by keyworkers, were also provided but it is not clear how many people they are from. There also appears to be positive feedback from professional services but there is no detail on who this is from.

**'Now I can fight to not call the ambulance because I want to work towards getting my old life back'**

**'[Keyworker] has made the impossible possible, I now have a new start in life and I know I couldn't have achieved it without her'**

| | Ref | Outcomes (Differences) | Target | Actual | Comment | |
|---|---|---|---|---|---|---|
| Primary Outcomes | **1.1** | Reduction in the number of calls to ambulance services | 40% | 55.2% | Based on the immediate 3-months pre-intervention versus the most recent three months data. This target has been surpassed with net reductions of 55.2% and 61.1% respectively, as broken down on the next pages. *(NB BRC figures in the last PMR state figures, outlined in the previous page, all below 40%)* | ✅ |
| | **1.2** | Reduction in the number of conveyances to hospital | 40% | 61.1% | | ✅ |
| Service User Outcomes | **2.1** | People supported feel less lonely at the end of our support | 66% | 71% PMR Feb24 | BRC provided the dashboard style outcomes feedback on the previous page along with anonymous testimonials. This indicates improvement (above 66%) in well-being and people feeling less lonely for the 31 respondents (65% of the 48 living respondents with call details).<br><br>Between 94-100% of 32 respondents stated the programme had helped a lot and that they would recommend it. From discussions and the data to date, it would be reasonable to presume that most (est. 62.9% - 75.9%) enjoyed better personal well-being and positivity. | ✅ |
| | **2.2** | People experience improved personal well-being at the end of our support | 66% | 74% PMR Feb24 | | ✅ |
| Service User Feedback | **3.1** | People reporting a positive experience of our support | 80% | 94% PMR Feb24 | | ✅ |
| Case Studies | **4.1** | Number of case studies per quarter | 12 | 5* | Two were presented (and included within this report) by NIAS to evaluators. *Three were contained within final PMR (no other PMRs provided. Final PMR stated that 11 case studies provided across the four PMRs) | 🟨 |
| Service Delivery | **5.1** | Number of new referrals per annum | 170 | 52 | 54 patients were identified. Two had no records and four subsequently deceased. Analysis based on 48 patients. | 🟨 |
| | **5.2** | People progressing in at least one goal by the end of support | 90% | 78% | PMR 15-Feb-24 (see p32) states 78% of respondents (31 completed surveys) made progress on at least one goal | 🟨 |
| Financial Benefits (Guide) | | Estimated Costs Savings £1,151,567 and Return on Investment, ROI (509%) | | | Via a different approach, this report's cost & improvement savings are estimated at ~£2m, which indicates value for money. ROI calculation would need costing data for various referral partners & partner services used to provide an accurate estimate on a total project basis. | ✅ |

# intervention impact – immediate 3 Months & last 3 Months

### Hard Data

Of the 54 patients identified, two had no recorded visits or calls and were excluded. Four died during the period, and their results were excluded. Therefore, the evaluation **findings are based on 48 patients**, with details below.

### Standardising the data

Patients came on at different times. To standardise the information, we have aggregated the monthly figures and expressed them as per patient per month. Data was provided for 3 and 12 months before the intervention (left hand side, yellow); and per month after. This was then expressed in total post-intervention (ranging from 1-12 months depending on start date), immediate 3-months post intervention and last 3 months of recorded data (all green). There is some cross-over for post-July patients.

**PER PATIENT PER MONTH - IMPACT OF INTERACT**

| Patient Averages | | PRE intervention (12 months) | | | PRE intervention (3 months) | | | POST intervention (1-12 months) | | | POST intervention (FIRST 3 months) | | | POST intervention (LAST 3 months) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Month | Patients | No. of calls | No. of responses | No. of conveys | No. of calls | No. of responses | No. of conveys | No. of calls | No. of responses | No. of conveys | No. of calls | No. of responses | No. of conveys | No. of calls | No. of responses | No. of conveys |
| Feb-23 | 10 | 4.52 | 1.57 | 0.68 | 5.00 | 2.10 | 0.90 | 2.59 | 0.84 | 0.63 | 2.87 | 1.20 | 0.90 | 1.03 | 0.23 | 0.20 |
| Mar-23 | 9 | 7.54 | 3.15 | 1.81 | 15.11 | 5.93 | 3.15 | 7.46 | 2.31 | 1.10 | 10.44 | 3.70 | 1.93 | 4.93 | 1.26 | 0.89 |
| Apr-23 | 4 | 3.17 | 1.35 | 0.52 | 7.83 | 3.67 | 1.50 | 9.20 | 2.75 | 1.10 | 4.33 | 1.50 | 0.33 | 10.58 | 2.83 | 1.42 |
| May-23 | 5 | 8.02 | 1.38 | 0.81 | 5.25 | 2.17 | 1.00 | 2.96 | 0.98 | 0.62 | 2.93 | 1.00 | 0.73 | 3.33 | 1.00 | 0.60 |
| Jun-23 | 3 | 3.03 | 1.86 | 0.44 | 6.22 | 3.11 | 0.67 | 1.83 | 0.96 | 0.29 | 4.00 | 1.89 | 0.44 | 0.22 | 0.22 | 0.11 |
| Jul-23 | 4 | 6.33 | 1.65 | 0.38 | 7.25 | 1.92 | 0.83 | 9.18 | 1.54 | 0.43 | 12.00 | 2.25 | 0.33 | 7.58 | 0.83 | 0.50 |
| Aug-23 | 3 | 5.08 | 1.39 | 0.42 | 6.78 | 2.44 | 1.22 | 2.11 | 0.72 | 0.44 | 0.89 | 0.33 | 0.33 | 3.33 | 1.11 | 0.56 |
| Sep-23 | 4 | 6.17 | 1.75 | 0.83 | 17.17 | 3.50 | 1.67 | 2.25 | 0.50 | 0.20 | 2.75 | 0.58 | 0.17 | 1.25 | 0.25 | 0.17 |
| Oct-23 | 4 | 4.17 | 2.13 | 1.00 | 9.08 | 3.67 | 1.50 | 5.63 | 2.50 | 1.06 | 6.00 | 2.75 | 1.25 | 6.08 | 2.58 | 0.92 |
| Nov-23 | 3 | 2.94 | 0.86 | 0.39 | 8.78 | 0.44 | 0.44 | 0.56 | 0.22 | 0.00 | 0.56 | 0.22 | 0.00 | 0.56 | 0.22 | 0.00 |
| Dec-23 | 1 | 4.83 | 1.83 | 1.58 | 10.67 | 2.67 | 2.33 | 0.56 | 0.22 | 0.00 | 0.56 | 0.22 | 0.00 | 0.56 | 0.22 | 0.00 |
| NIAS Total | | 3,001 | 1,052 | 491 | 1,242 | 443 | 208 | 2,037 | 616 | 305 | 762 | 258 | 122 | 557 | 148 | 81 |
| Last 3 Month Share of Previous Year (12 Months) | | | | | 41.4% | 42.1% | 42.4% | | | | | | | | | |

No. of new INTERACT patients introduced that month

Average calls, responses or conveys per patient per month – creates a standardised metric for comparison purposes.

There is a reduction in calls, responses, & conveys after the initial intervention

The reduction increases beyond the first 3 months

# net INTERACT impact – key metrics & impact over time

| LONG-TERM IMPACT OF INTERACT | PRE intervention (3 months) | | | POST intervention (FIRST 3 months) | | | POST intervention (LAST 3 months) | | |
|---|---|---|---|---|---|---|---|---|---|
| | No. of calls | No. of responses | No. of conveys | No. of calls | No. of responses | No. of conveys | No. of calls | No. of responses | No. of conveys |
| **A.** NIAS TOTAL (48 Patients) | 1,242 | 443 | 208 | 762 | 258 | 122 | 557 | 148 | 81 |
| **B.** NIAS TOTAL PER PATIENT (A/48) | 25.9 | 9.2 | 4.3 | 15.9 | 5.4 | 2.5 | 11.6 | 3.1 | 1.7 |
| **C.** PER PATIENT PER MONTH (B/3) | 8.6 | 3.1 | 1.4 | 5.3 | 1.8 | 0.8 | 3.9 | 1.0 | 0.6 |
| REDUCTION (Against 3-Month Pre-Intevention Baseline) | | | | (38.6%) | (41.8%) | (41.3%) | (55.2%) | (66.6%) | (61.1%) |
| CALL-OUT/CONVEY TO CALL RATIO | | 35.7% | 16.7% | | 33.9% | 16.0% | | 26.6% | 14.5% |
| CONVEYANCE TO CALL-OUT RATIO | | | 47.0% | | | 47.3% | | | 54.7% |

| OVERVIEW | Calls | Responses | Conveys |
|---|---|---|---|
| Increased | 10 | 5 | 9 |
| Same | 2 | 5 | 9 |
| **Decreased** | **36** | **38** | **30** |
| Total | 48 | 48 | 48 |

| OVERVIEW % | Calls | Responses | Conveys |
|---|---|---|---|
| Increased | 20.8% | 10.4% | 18.8% |
| Same | 4.2% | 10.4% | 18.8% |
| **Decreased** | **75.0%** | **79.2%** | **62.5%** |
| Total | 100.0% | 100.0% | 100.0% |

There is an instant decrease in calls and call outs after 3 months of intervention.

The most recent results (last 3 months) show this decrease continues with more intervention.

Therefore, between the 3 months immediately prior to the intervention and the last 3 months measured – 36 (75.0%) of 48 patients reduced their no. of calls, 10 (20.8%) actually increased their calls and 2 (4.2%) had the same number of calls.

# INTERACT – summary statistical findings

**Per Patient**

- 3 in 4 patients had a reduction in ambulance calls
- 4 in 5 having a reduced number of ambulance responses
- 3 in 5 had less ambulance conveyances to hospital/ED

**Per Sample (of 48 patients)**

- net calls decreased by over half (55.2%)
- net responses decreased by two-thirds (66.6% )
- net conveyances reduced by 61.1%

**£1.94m**

**Estimated Net Cost & Improvement Savings per Annum (for 48 People)**

**Proportion of Calls Requiring a Response and/or Conveyance**

- The ratio of responses to calls fell by a third (from 35.7% to 26.6%)
- The number of patients conveyed to hospital, per call, fell from one in six (16.7%) to one in seven (14.5%)

# feedback from the keyworkers

## Recruitment & Background

Key-workers had experience in dealing with highly complex cases and were familiar with many of the key support organisations. BRC and the unique nature of the work appealed.

## Defining the Role

It was important at the outset to define the role, i.e. they are not a crisis or emergency service, but a support service.

## Working with Patients

They would try and call the patient at least once a week; and agree set-times for visits and calls. Some patients had difficulty with timing, so consistency was important.

## Safeguarding

Safeguarding and risk management (including risk assessments) was important. Having experience of these environments was critical. For high risks situations they would contact social workers, PSNI or the NIAS. Staff would always tell the team where they were going, when leaving and returning. They would chat with NIAS beforehand to be aware of known risks and used the BRC app when visiting patients. If they needed to, they could delay their visit. They would also go in pairs ('two pairs of eyes for safety') to the first visit. If a person was under the influence (most had alcohol issues) they would call back later.

## Safeguarding Risk & Admin Requirements

If key-worker had a concern (e.g. patient suicide ideation but no plan), they had to call the BRC incident team regards internal safeguarding. However, patients often had suicide ideation which then took up a lot of time. Feedback suggested that there should be a more streamlined and less resource intensive process. Key-workers had to be able to have professional boundaries, in-depth knowledge and able to look after their own mental health.

## First Visit

'You don't know people until you sit down and talk to them'; and find out what do they want, how can 'we' help, and what the main goal is (and what services may help). Being less official looking (e.g. having no uniform) helped with engagement. Engagement was slow as it takes time to build trust and reduce barriers.

## Finding Support

People with complex needs can find it difficult to travel, which impacts on support options. Being in Belfast makes this easier, although waiting lists can be long. Getting people out of the house can be a challenge and takes time; and hand-holding. Some can be suspicious and may need to be offered an alternative service. There is a need to empower them, work with them and increase their confidence.

## Managing & Exiting Intervention

Patients were contacted once a week, twice a week for high priority patients; with a staged exit after a maximum 6 months. To exit you needed to give patients a 2-8 weeks heads up and explain why you are doing it, which can be difficult. It also relates back to defining the role – a key worker not a befriender. You needed to make it a 'happy time for patient'.

Those taken on in the last few months – Patient intakes were higher in the first 3 months, and reduced after that, so 15 (31.3%) patients taken on from August would not have had a full 6-month period – may have ended more abruptly.

**“A key-worker is invaluable, as there is no-one else tying it all up together, and no-one else representing the patient. Lots of groups (e.g. MASH) can feed in, but no-one knows more about the individuals than the key-worker.”**

# feedback from the keyworkers

## Key Worker – Required Skills & Experience

Key-workers need to be compassionate, empathetic and genuine, as patients are not stupid and often suspicious. They also need to be good record-keepers, and able to work under high stress (e.g. trauma, mental health, suicide awareness) with relevant experience (e.g. support, psychology, social-work etc). This experience feeds into knowing the groups & organisations on the ground who can help.

## Lessons Learned

Key-workers enjoyed the role and had a good team (3 key-workers, with a manager who left during the project). There was good communication with Aidan and Claire.

## Range of Complexity

Their initial job description mentioned working with a range of complexity. However, in practice most were at the higher end of complexity ('there were no light-touches'). This necessitated more 1 to 1 time per patient, and hence less patient numbers overall. Meetings were always face to face, but it could take a lot of calls to set-up, plus many more calls to arrange wider support.

Also, if patients were under the influence, it could be a week or two before a key-worker was able to be meet them.

## Autonomy

Key-workers found it great being able to spend more time with patients. They also enjoyed having the autonomy and flexibility to arrange meetings with and support for patients. Especially, when building trust and relationships are key to creating positive change in people's lives.

## First Awareness

Calls were transferred from NIAS to the key-worker.

## Key & Repeat Issues

Alcoholism was predominant, sometimes with other drug addictions. There was a massive health anxiety, which was made worse by alcohol and not going to the GP. There was also often waiting lists for support services. With only 1, maximum 2, opportunities to get an appointment and if you missed them (e.g. through fate or being under the influence) you were back to square one.

## Support

Many already had a social worker, but often they needed someone (the key-worker) to go with them to an appointment and sit beside them in the waiting room. The social worker would often have to pick-up after the patient exited from INTERACT.

Unlike in England, NI mental health teams don't work with addictions. Which means people had to be clean before accessing mental health services. This resulted in 'going round in circles' and much wasted time. A different approach (like England) could lead to big improvements. If there was more support services, patients could have been exited earlier.

## Success

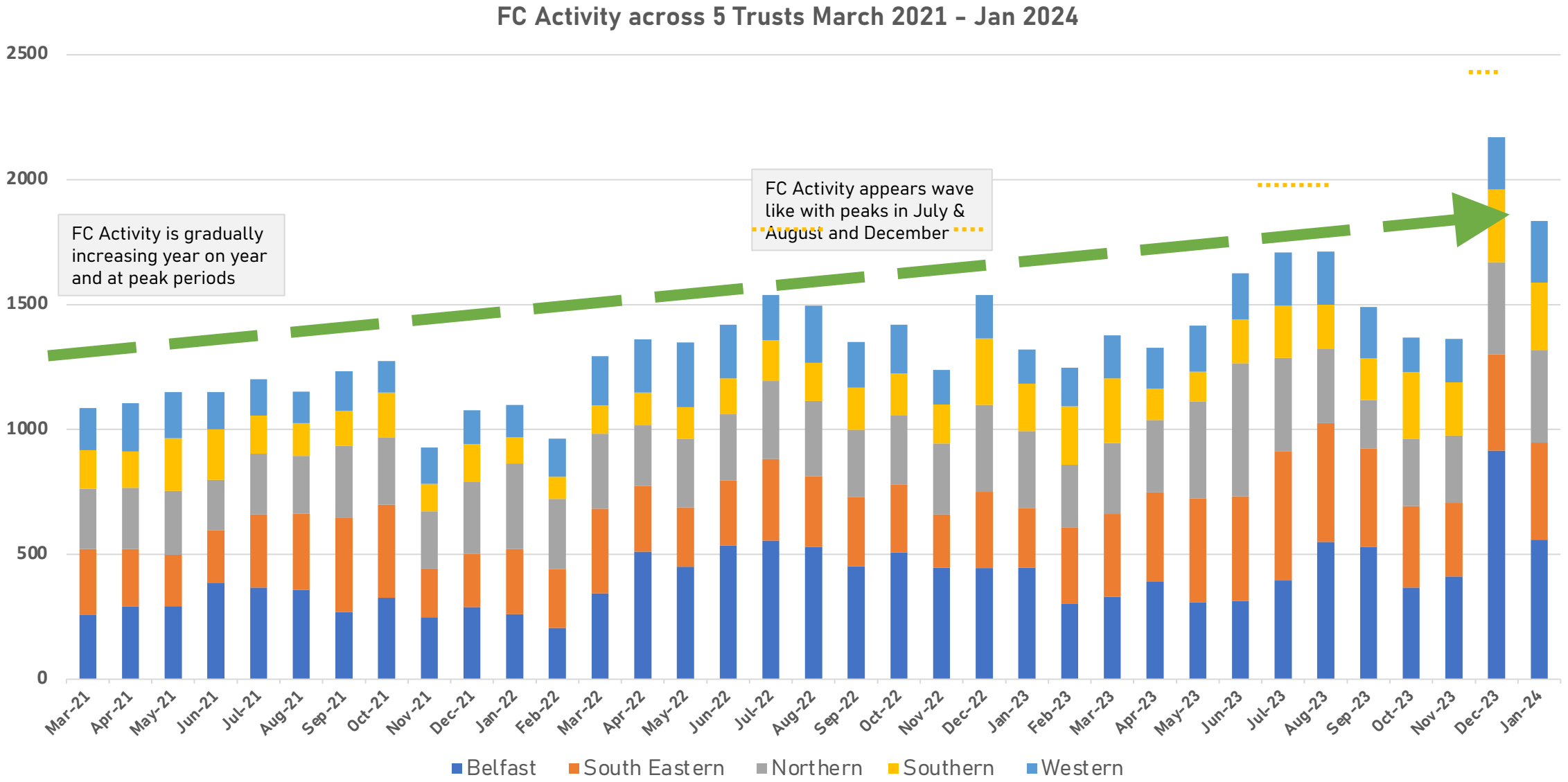
Described as 'Getting people to a point where they can manage'. Also, being able to give people the time that wouldn't get otherwise; and feeling trusted to do the work properly.

## Reflections

"Anyone could be that person we are trying to help, if life had worked out differently"

# complex case team

# increasing FC activity



# most from Belfast & the SE

### Volume of Frequent Calls April 2021 to January 2024

There have been 47,372 frequent caller calls over the 34-month period, equating to on average:

| | |
|---|---|
| 16,720 | calls per year |
| 1,393 | calls per month |
| 321 | calls per week |

The **volume of calls has been gradually increasing**. Call volume grew by 6.1% (2022 v 2021) before the rate doubled to 12.8% the following year (2023 v 2022). Furthermore, as the report will show - frequent calls are often more complex, resource intensive and drawn out.

**Belfast accounts for ~30% of all calls, with South Eastern (SE) next on 22.8%.** Combined they account for just over half 52.7% of all calls during the period. **Northern** accounts for more than 1 in 5 of all calls (21.5%), taken with **Belfast and SE**, the three Trust areas **account for three-quarters (74.2%) of all frequent caller calls**.

Interesting Issues of Note

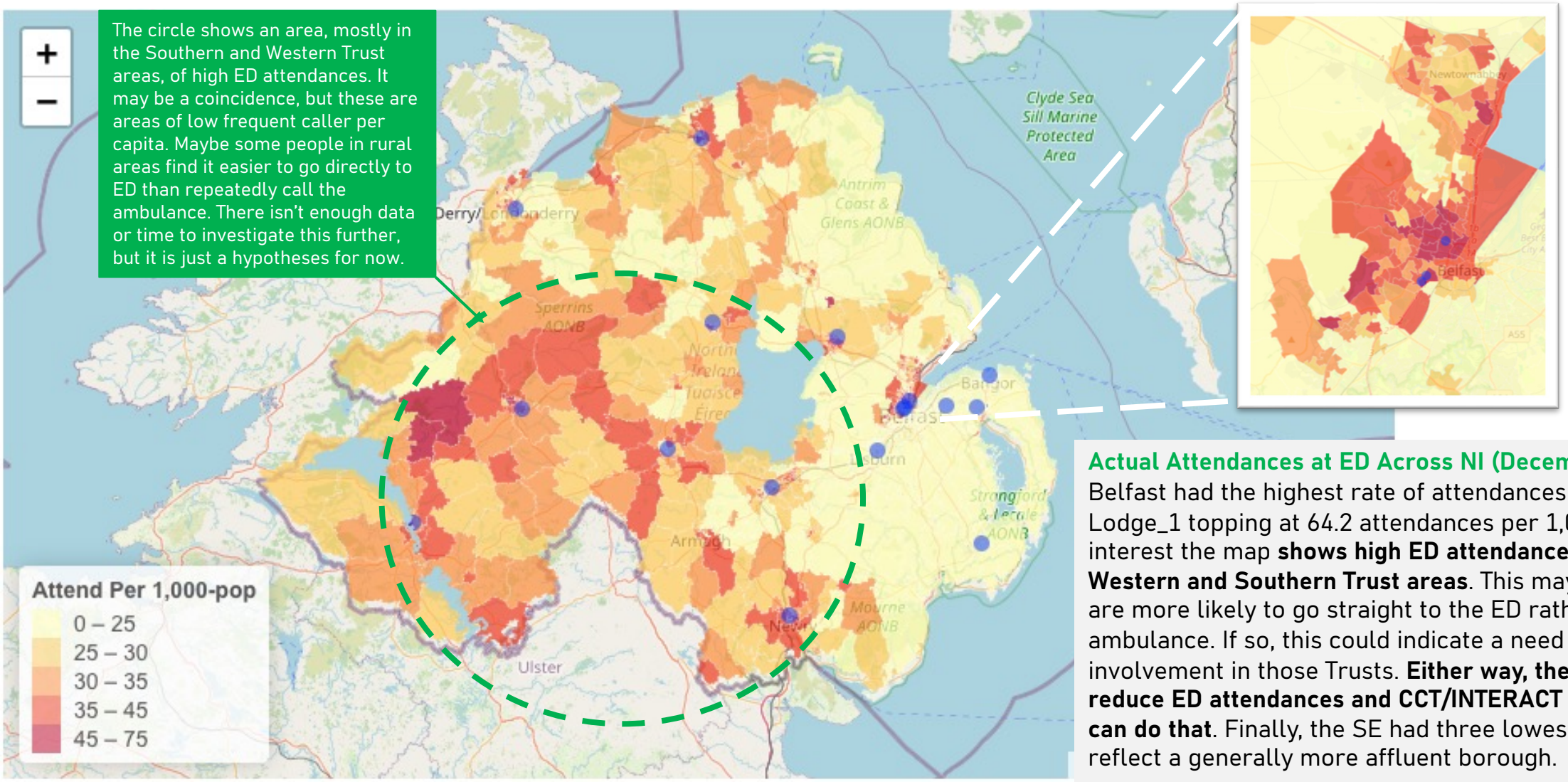
The small CCT covers NI, but predominantly works out of Belfast, SE and Northern. Theoretically, you might have expected to see a reduction in frequent caller numbers in these areas compared to the Western and Southern Trust regions. However, this is not obviously apparent. This may indicate the high level of needs (as evidenced by per capita figures) and growing volume of calls overall.

| NIAS Frequent Calls | 2021 (9) | 2022 | 2023 | 2024 (1) | Total | As % |
|---|---|---|---|---|---|---|
| Belfast | 3,086 | 5,240 | 5,261 | 558 | **14,145** | 29.9% |
| South Eastern | 2,663 | 3,276 | 4,459 | 390 | **10,788** | 22.8% |
| Northern | 2,493 | 3,493 | 3,825 | 371 | **10,182** | 21.5% |
| Southern | 1,579 | 1,789 | 2,428 | 269 | **6,065** | 12.8% |
| Western | 1,531 | 2,265 | 2,150 | 246 | **6,192** | 13.1% |
| **Total** | **11,352** | **16,063** | **18,123** | **1,834** | **47,372** | **100.0%** |
| Annualised Figures | 15,136 | 16,063 | 18,123 | 22,008 | | |
| Belfast & SE Share | 50.6% | 53.0% | 53.6% | 51.7% | | |
| Yearly Growth Rate | | 6.1% | 12.8% | 21.4% | | |

| NIAS Frequent Calls | 2021 (9) | 2022 | 2023 | 2024 (1) | Total |
|---|---|---|---|---|---|
| Belfast | 27.2% | 32.6% | 29.0% | 30.4% | 29.9% |
| South Eastern | 23.5% | 20.4% | 24.6% | 21.3% | 22.8% |
| Northern | 22.0% | 21.7% | 21.1% | 20.2% | 21.5% |
| Southern | 13.9% | 11.1% | 13.4% | 14.7% | 12.8% |
| Western | 13.5% | 14.1% | 11.9% | 13.4% | 13.1% |
| **Total** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** |

| Per 1,000 Population | 2021 (9) | 2022 | 2023 | 2024 (1) | Total | v Avg |
|---|---|---|---|---|---|---|
| Belfast | 849 | 1,442 | 1,448 | 154 | **3,893** | 56.4% |
| South Eastern | 724 | 890 | 1,212 | 106 | **2,932** | 17.8% |
| Northern | 520 | 729 | 798 | 77 | **2,124** | (14.6%) |
| Southern | 404 | 458 | 621 | 69 | **1,551** | (37.7%) |
| Western | 508 | 751 | 713 | 82 | **2,053** | (17.5%) |
| **NI (Average)** | **596** | **844** | **952** | **96** | **2,489** | **100.0%** |

# most ED attendances by SOA December 2023 (NISRA)

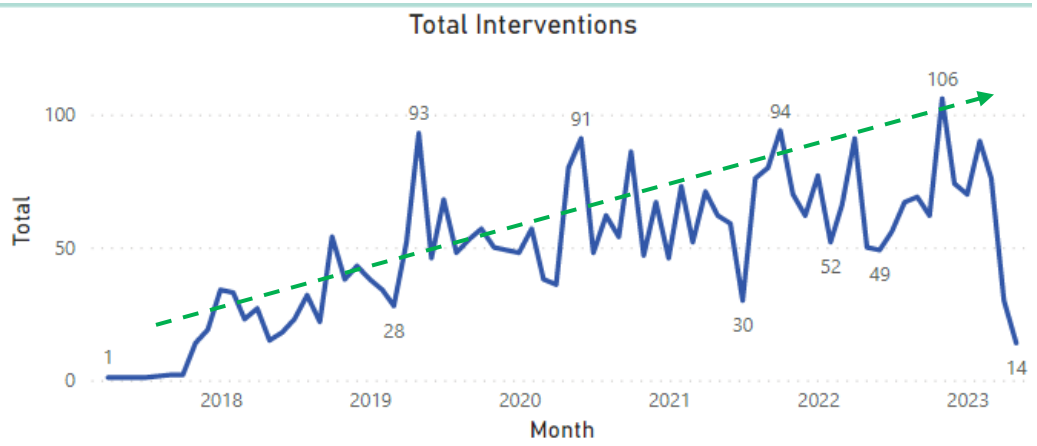



**Actual Attendances at ED Across NI (December 2023)**

Belfast had the highest rate of attendances with the SOA New Lodge_1 topping at 64.2 attendances per 1,000 population. Of interest the map **shows high ED attendance demand in the Western and Southern Trust areas**. This may indicate that FCs are more likely to go straight to the ED rather than call an ambulance. If so, this could indicate a need for more CCT involvement in those Trusts. **Either way, there is a need to reduce ED attendances and CCT/INTERACT have shown they can do that**. Finally, the SE had three lowest SOAs which may reflect a generally more affluent borough.

Map Source: https://datavis.nisra.gov.uk/health/hs-niwts-ecwt-interactive-q3-23-24.html

# 3,607 interventions over ~5 years (2017-2023)




| NIAS CCT Interventions (21-Apr-2017 to 12-May-2023) | | |
|---|---|---|
| Breakdown | No. | As % |
| Phone | 923 | 25.6% |
| Other | 705 | 19.5% |
| Home Visit | 321 | 8.9% |
| Potential FC Intervention | 300 | 8.3% |
| Multi-Disciplinary Team Meeting | 290 | 8.0% |
| Attempted Phone Call | 220 | 6.1% |
| Frequent Caller Letter | 167 | 4.6% |
| Attempted Home Visit | 161 | 4.5% |
| Joint Home Visit | 135 | 3.7% |
| Information Marker | 119 | 3.3% |
| | **3,341** | **92.6%** |

## Interventions (2017-2023)

Between 21-Apr-2017 and 12-May-2023, there were 3,607 interventions. Equivalent to **~700 per annum and ~13.5 a week**.

There are a variety of possible interventions, the most frequent of which is the phone call – accounting for a quarter of all interventions. For every four phone calls there was one attempted phone call, a 4:1 ratio.

## Home Visits

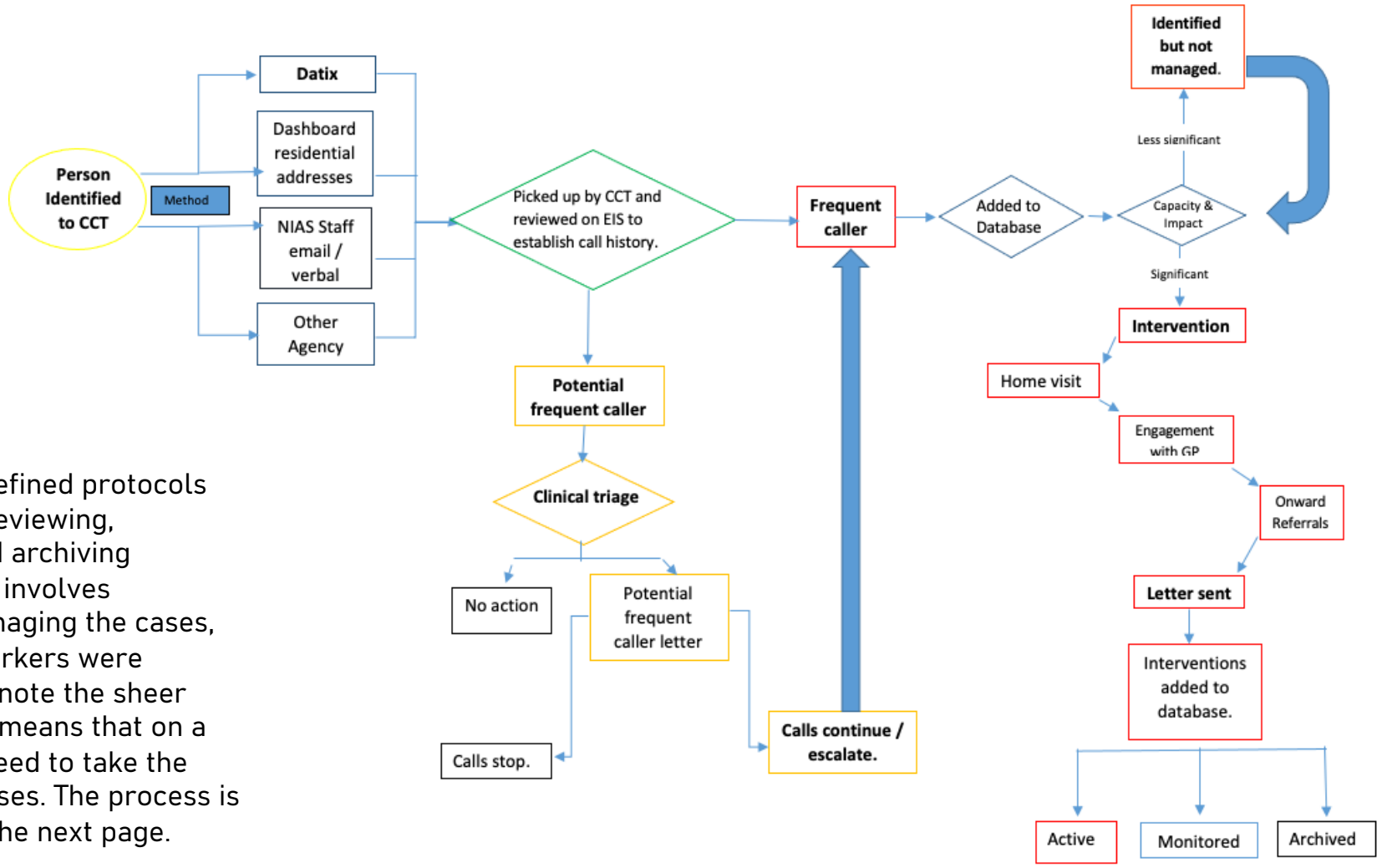
Home visits account for 321 (8.9%) with 161(4.46%) attempted home visits, for a total of 13.4%. On average that is about 1 visit a week (~53.5 a year); with one attempted visit every fortnight. For every two actual visits a third was attempted but unsuccessful, a 2:1 ratio.

## Dashboard

CCT have their own data base & dashboard system set-up to run reports and display data (e.g. opposite).

*NB the wave-like upward pattern for interventions is similar to the number of frequent callers (per page 41)*

# frequent caller – CCT process flow map



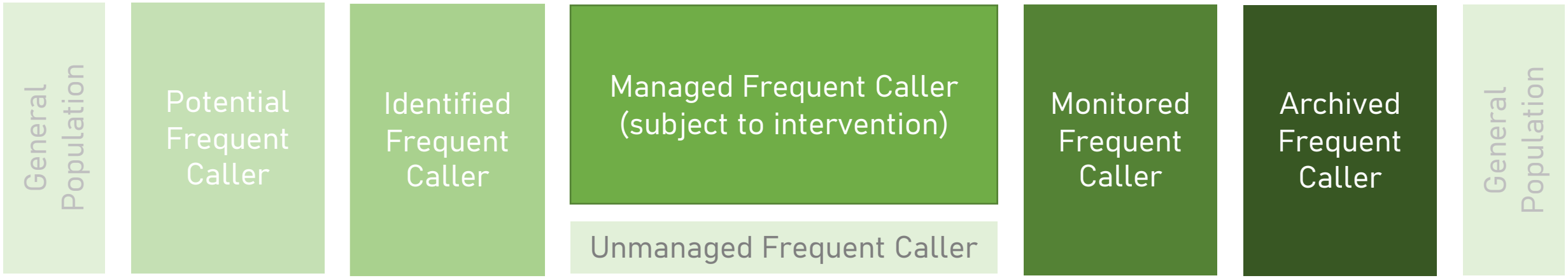

## CCT Process Flow

CCT have developed well defined protocols for identifying, assessing, reviewing, intervening, monitoring and archiving Frequent Caller cases. This involves experienced personnel managing the cases, and placing information markers were appropriate. The CCT team note the sheer volume of frequent callers means that on a practical level they often need to take the most urgent or pressing cases. The process is outlined in more detail on the next page.

# frequent caller pathway

**Terminology**
Other terms used to describe frequent callers:

| | |
|---|---|
| **FSU** | Frequent Service User |
| **HIU** | High Intensity User |
| **HISU** | High Intensity Service User |




**Database & Dashboard**
A dashboard (user interface) has been created specifically for the Complex Case team. This has **set thresholds** (no. of calls per month etc) **to identify Frequent Callers, and Potential Frequent Callers** (lower threshold). The dashboard can run queries and allows oversight of all NIAS Frequent Callers.

**Management & Interventions**
All Frequent Caller files are reviewed by experienced Complex Case Officers. These are then prioritised for intervention. **An intervention could vary from one or two calls to the patient and GP, to weeks or months** – involving multiple partners and keyworkers. All the steps are recorded in the Frequent Caller file.

**Transitions & Archiving**
Post intervention. Frequent Caller, when they fall below the threshold number of **calls are monitored for three months** (with a tab on the dashboard). **If there are no calls, they are moved to the archive**. Currently, if an archived Frequent Caller rings 999, again, even just once, their call history re-appears on the dashboard.

# what is an average frequent caller call?

Call #1 took 2hrs of 43mins of direct staff time. However, as it was on the stack for almost 17 hours it would have been monitored by several staff over 2-3 different shifts. Highlighting the indirect resources consumed by such calls.

Call #9 involved an initial 8 second call with an ambulance sent out. Two shifts of ambulance crews were on the call for 16hrs 51mins. In total this required over 34hrs of direct NIAS staff time, not including time in lieu, indirect NIAS time, vehicle costs, potential ED costs or PSNI time.

HSC Northern Ireland Ambulance Service Health and Social Care Trust

## Frequent Caller 10 Call Data Sample for CCT

**Source: C3 ODS2**
**Inclusions:** The following data only contains information about Frequent Callers where the Call Numbers are as following ( 5304742,5305542,4846294, 4794944, 4856331 , 5345656, 5346192 ,5025398, 4877064, 4857766) and the following data contains information from 2020-01-01 till 2024-03-09.
**Exclusions:** The Data has included Closed Calls Only.

| Sample Calls | Call Number | Time call taking started | Total time with EMDs | Total time with CSD staff | Time on Stack | Resource Note | Ambulance travel time to scene | Ambulance time on scene | Ambulance travel time to hospital | Total hospital waiting time | Time call closed | TOTAL TIME |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5346192 | 11/02/2024 18:38 | | 0.00000 | | CSD Ref 1 | | | | | 12/02/2024 12:24 | 2.71 |
| | 5346192 | 11/02/2024 18:38 | | 0.13306 | | CSD Ref 2 | | | | | 12/02/2024 12:24 | |
| | 5346192 | 11/02/2024 18:38 | 0.691898 | 1.69444 | 16.60556 | CSD Ref 3 | 0.09389 | | | | 12/02/2024 12:24 | |
| 2 | 5345656 | 11/02/2024 01:13 | 0.848333 | 0.57472 | 1.42278 | CSD Ref | | | | | 11/02/2024 03:50 | 1.42 |
| 3 | 5305542 | 06/01/2024 19:00 | 0.265579 | 0.00000 | 6.37389 | CSD Ref | 0.20528 | | | | 07/01/2024 04:20 | 0.68 |
| 4 | 5304742 | 05/01/2024 19:58 | 0.07 | | 0.07 | | | | | | 05/01/2024 20:02 | 0.07 |
| 5 | 5025398 | 21/04/2023 03:12 | 0.026389 | 0.17194 | 0.22 | CSD Ref | | | | | 21/04/2023 03:25 | 0.20 |
| 6 | 4877064 | 05/11/2022 04:51 | 0.143889 | 0.87250 | 1.01639 | CSD Ref | | | | | 05/11/2022 05:52 | 1.02 |
| 7 | 4857766 | 24/10/2022 15:41 | 4.721667 | 0.47528 | 5.19694 | CSD Ref | | | | | 24/10/2022 20:54 | 5.20 |
| 8 | 4856331 | 22/10/2022 23:39 | 0.003345 | | | | 0.11167 | 0.57917 | 0.27111 | 2.07472 | 23/10/2022 02:57 | 6.08 |
| 9 | 4846294 | 10/10/2022 21:18 | 0.002222 | | | Resource 1 | 0.08500 | 0.52306 | 0.32194 | 10.30083 | 11/10/2022 13:34 | 34.14 |
| | 4846294 | 10/10/2022 21:18 | 0.433125 | | | Resource 2 | 0.88917 | 0.00000 | 0.00000 | 4.73333 | 11/10/2022 13:34 | |
| 10 | 4794944 | 07/08/2022 00:23 | 0.076204 | | | | 0.08417 | 0.48278 | 0.27444 | 2.76944 | 07/08/2022 05:55 | 7.30 |

**Note:** The following Total time with EMDs, Total time with CSD staff, Ambulance travel time to scene, Ambulance time on scene, Ambulance travel time to hospital, Total hospital waiting time are in **Decimal Hour format**

CDS Based Calculations
Relief Resource Time to Hospital
New Columns

58.80

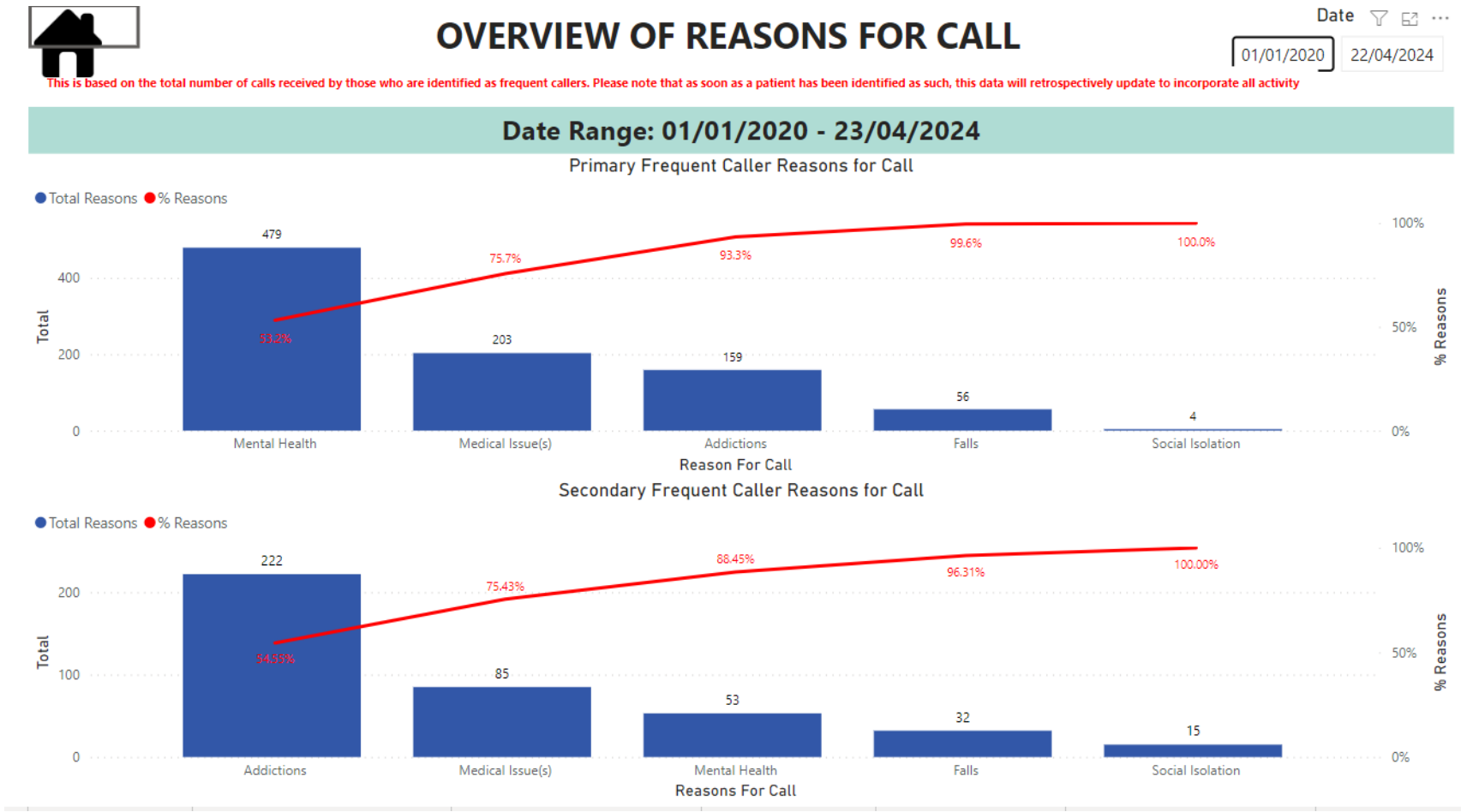
The EMDs were on call #7 for 4hr 44 mins, with CSD staff on for 29 mins. Even when an ambulance is not called out, Frequent Caller calls can be highly resource intensive.

(20

Call #4 took 4.2 mins and was resolved by EMDs. This highlights value of information markers, and the diversity of calls.

10 sample average is 6 hours per patient. Ranging from 4.2 mins to over 34 hours of **direct** NIAS staff time. Overall the average NIAS FC call duration was per patient was **2hr 39 minutes in** 2023 (p12).

# primary reasons for a call




## Primary Reason

NIAS presented a summary of primary and secondary reasons behind frequent calls, based on a 52-month sample (opposite). This shows that:

Over half (53.2%) of FCs have mental health as their primary reason for call

Three quarters of FCs have either mental health or medical issues as the primary reason for their call

## Secondary Reason

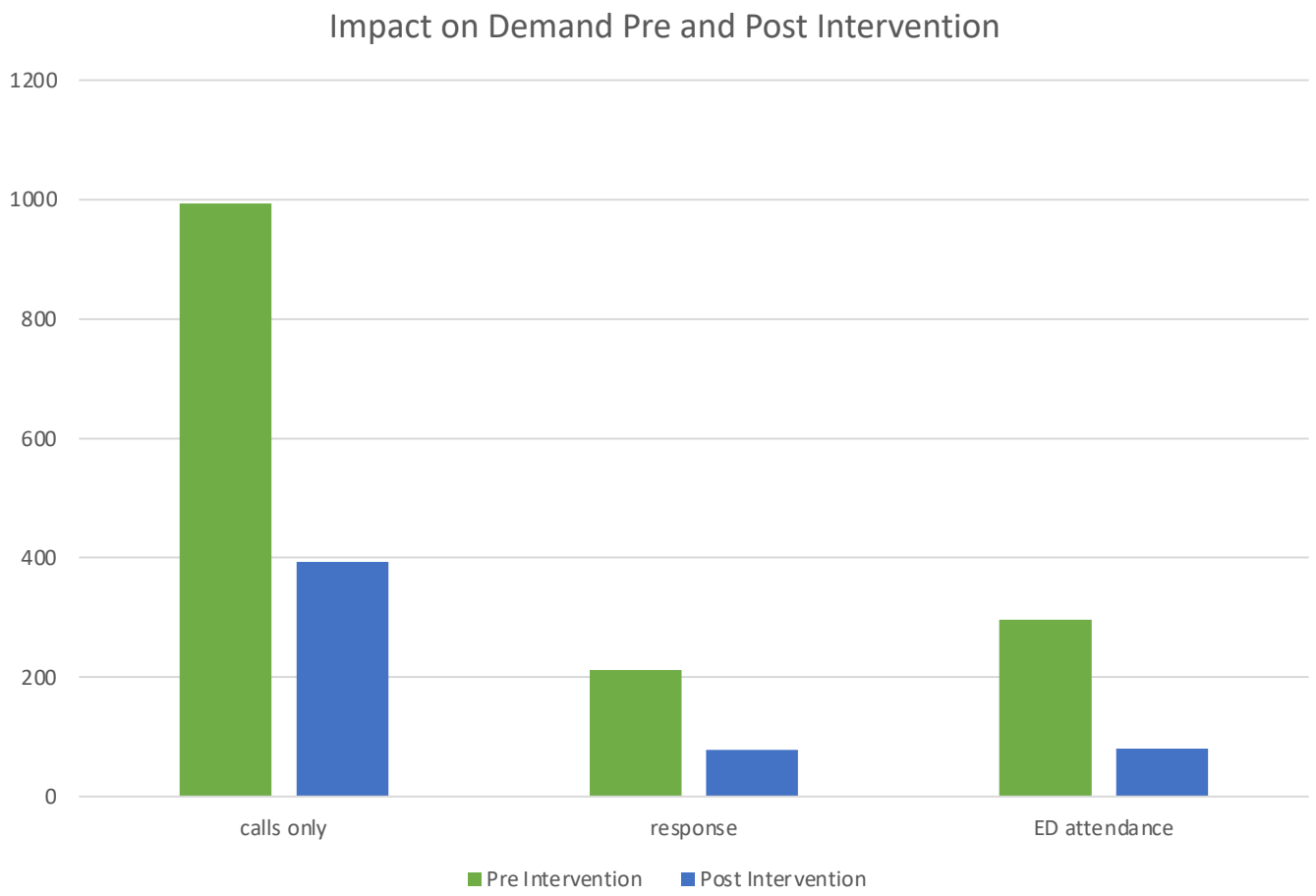
Over half (54.6%) of FCs have addictions as their primary reason for call

Three quarters of FCs have either addictions or medical issues as the primary reason for their call

## Other issues

Other issues may also include trauma, abuse, gender, gambling, self-harm.

# previous evaluation




**Previous Evaluation of 20 Callers**

NIAS presented the results of a previous evaluation they had undertaken. This found:

| | |
|---|---|
| 63% | overall reduction in demand |
| 60% | reduction in calls only |
| 63% | reduction in ambulance responses |
| 73% | reduction in ED admissions |

With an associated 68.7% reduction in costs (£128,187 to £40,010) to the NHS from the sample of 20 calls. Based on £7 per call, £214 for a response and £263 for a conveyance to ED.

Calls fell from 1,500 in the six months before intervention to 533 calls in the six months after.

# key target areas

**Key Takeaways:**
There is the potential for highly targeted preventative measures at an SOA level:

- One third (34.8%) of all NI Super Output Areas (SOAs) have no FCs
- 47 SOAs, equivalent to ~5.3% of the population, account for ~40% of all FCs
- Three SOAs have over 1,000 FCs

Loosely, the higher the level of deprivation the greater the probability of FCs. However, the relationship is not strictly linear, e.g. Magheralave_1 (below)

- The 20% most deprived SOAs (Rank 1-178) account for 30.5% of all FCs
- The 20% least deprived SOAs (Rank 713-890) account for 11.1% of all FCs.

**Top 5 - SOAs with Highest Unique Frequent Callers (Mar20-Feb24)**

| SOA | Unique Frequent Callers | MDM Rank | Council Area |
|---|---|---|---|
| Duncairn_1 | 1,356 | 49 | Belfast |
| Magheralave_1 | 1,242 | 753 | Lisburn & Castlereagh |
| Tullagh | 1,198 | 561 | Mid Ulster |
| Island_2 | 763 | 350 | Belfast and Lisburn & Castlereagh |
| The Mount_2 | 727 | 64 | Belfast |
| Total/Average | **5,286** | 355 | |

**Spread of Frequent Callers Across Deprived SOAs (May20-Feb24)**

| Most Deprived | No. of Unique FCs | As % of All FCs | Cumulative FCs | Cumulative % |
|---|---|---|---|---|
| 0 - 10% | 8,984 | 17.1% | 8,984 | 17.1% |
| 11 - 20% | 7,035 | 13.4% | 16,019 | 30.5% |
| 21 - 30% | 7,212 | 13.7% | 23,231 | 44.3% |
| 31 - 40% | 5,668 | 10.8% | 28,899 | 55.1% |
| 41 - 50% | 5,218 | 9.9% | 34,117 | 65.0% |
| 51 - 60% | 3,843 | 7.3% | 37,960 | 72.3% |
| 61 - 70% | 5,231 | 10.0% | 43,191 | 82.3% |
| 71 - 80% | 3,460 | 6.6% | 46,651 | 88.9% |
| 81 - 90% | 3,481 | 6.6% | 50,132 | 95.5% |
| 91 - 100% | 2,337 | 4.5% | 52,469 | 100.0% |

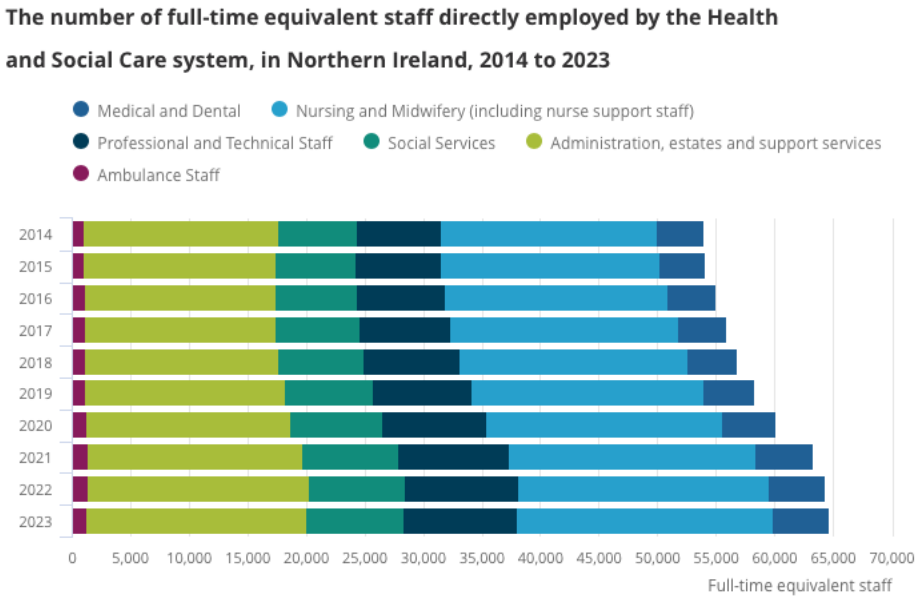
**Unique Frequent Callers per SOA (May20-Feb24)**

| Unique FCs in SOA | No. of SOAs | Total FCs | % of All Unique FCs |
|---|---|---|---|
| 0 | 310 | - | 0.0% |
| 1-5 | 25 | 63 | 0.1% |
| 6-10 | 62 | 511 | 1.0% |
| 11-25 | 97 | 1,764 | 3.4% |
| 26-50 | 127 | 4,676 | 8.9% |
| 51-100 | 112 | 8,116 | 15.5% |
| 101-250 | 110 | 16,683 | 31.8% |
| 251-1,356 | 47 | 20,656 | 39.4% |
| Total | | **52,469** | |

# indirect impact

## Other Impacts of Frequent Callers

The CCT has worked with a wide variety of organisations, especially as part of the Multi-Agency Response Hubs (MASH). MASHs are in each Council area and bring the PSNI, EDs, GPs, NIFRS, Social Workers etc together to address 'frequent callers'. CCT also shares its experience with others (e.g. opposite). This is important because FC can be more stressful to deal with for NIAS staff. This can impact on staff motivation training, recruitment and retention. Whilst NIAS FTE staff numbers have increased by 22% from 2014-2023, it has reduced by 2.5% between 2021 and 2023. [Source: ONS and NI HSC Workforce Census, 06-Mar-2024]




*"This project rose to the significant challenges of multiagency working and resulted in extremely positive feedback from families and individuals who truly appreciated the holistic approach."*

**Quality Improvement Awards 2019 Winners**

In addition to five individual categories, the overall HSC Quality Improvement Award was awarded to the individual/team category winner that has made the greatest contribution to quality improvement and safety in Health and Social Care.

**The winner of the HSCQI Overall Award and winner of the Integrating Care Across Boundaries Award went to Joanne Smylie and her NIAS team whose Frequent Callers Project demonstrated multiagency working to achieve positive outcomes for frequent callers.**

# information markers & letters

# information markers

**PRE**-Information Markers Being Applied (6 Months)

| | Calls | Responses | Conveys |
|---|---|---|---|
| **Total** | 679 | 214 | 148 |
| **Average** | 67.9 | 21.4 | 14.8 |
| **Min** | 7 | 0 | 0 |
| **Max** | 199 | 93 | 93 |
| **Response to Call Ratio** | 31.5% | | |
| **Conveyance to Call Ratio** | 21.8% | | |
| **Conveyance to Response Ratio** | 69.2% | | |

**POST**-Information Markers Being Applied (6-Months)

| | Calls | Responses | Conveys |
|---|---|---|---|
| **Total** | 340 | 58 | 40 |
| **Average** | 34 | 5.8 | 4 |
| **Min** | 6 | 1 | 0 |
| **Max** | 87 | 15 | 15 |
| **Response to Call Ratio** | 17.1% | | |
| **Conveyance to Call Ratio** | 11.8% | | |
| **Conveyance to Response Ratio** | 69.0% | | |

The proportion of ambulance responses and conveyances to hospitals have almost halved

## Information Markers

CCT applies information markers to frequent caller addresses to manage risk and reduce the frequency of responses.

There are 79 information markers (address based) applied to 75 frequent callers. Approximately 1 in 10 frequent callers have an information marker. An intervention will have begun by the time an information marker is placed.

Information markers are reviewed monthly, with the NIAS violence reduction team due to the crossover in this work. As NIAS use an address- based approach, this makes it difficult to share information markers with the PSNI and Hospital/EDs who use a person-based approach.

Information markers are tiered but are not currently standardised. An example would be **"if the call is triaged as a cat 1 or 2, normal protocols apply, all other calls should be sent to CSD prior to the despatch of an ambulance"**.

A review of a sample of information markers in February 2024 found their application resulted in significantly fewer calls, responses, and conveyances. However, this is not solely due to the information markers as there would be ongoing intervention, but it does highlight their potential impact.

# impact of information markers on NIAS resources

**49.9%** reduction in calls

**72.9%** reduction in responses

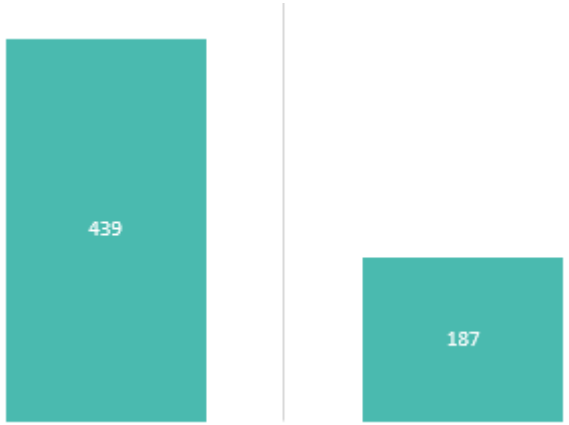
**73.0%** reduction in conveys

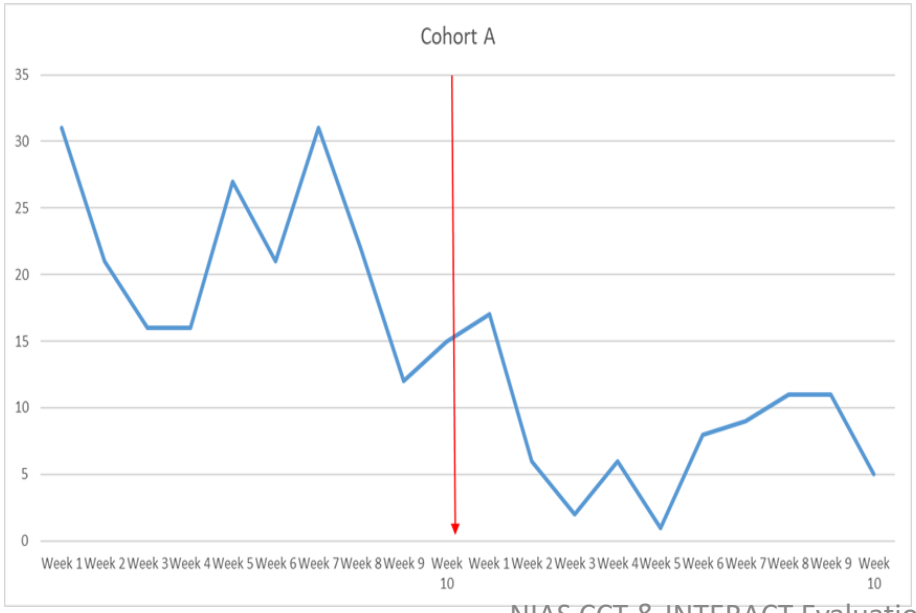
**45.9%** reduction in response to call ratio

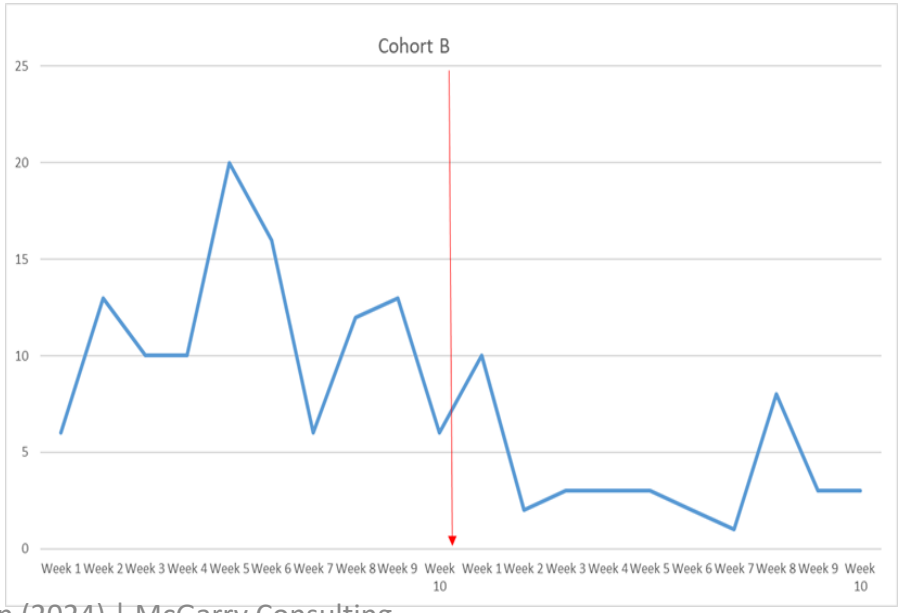
**46.0%** reduction in conveyance to call ratio

Less Calls
Less Responses
Less Conveyances
Fewer responses per 100 calls
Fewer conveyances per 100 calls
Same level of conveyances to responses

# potential-frequent caller letters



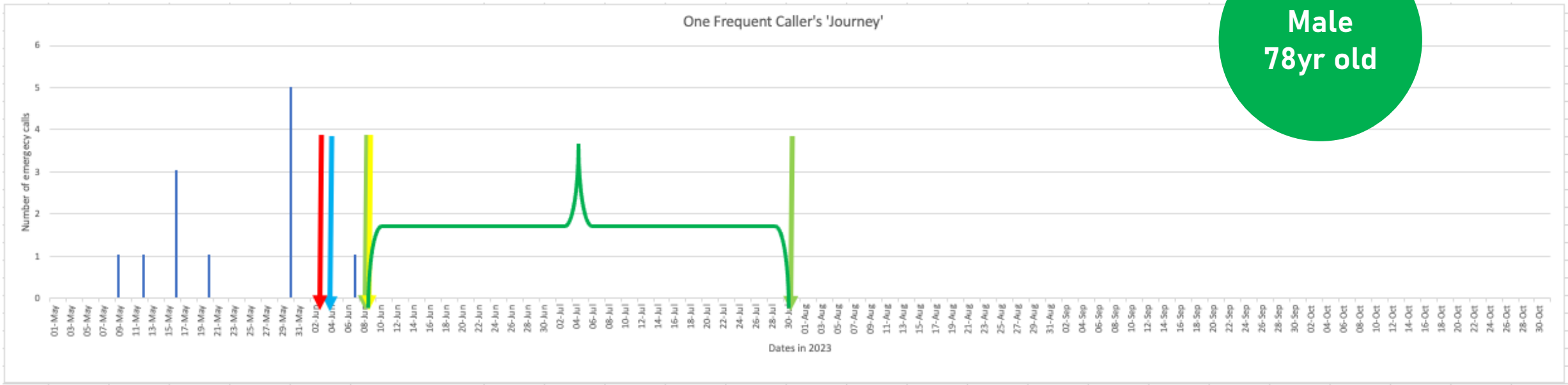

**Potential Frequent Callers**

The CCT will review the database and dashboard and seek out potential frequent callers. With the aim to engage them earlier, signpost support and dissuade them from making more calls.

This takes time to review, and thus on average there are only 6-10 letters issued a month. However, this can be successful. Based on letter drop to a sample cohort; they were **able to reduce calls by 57.5%. With calls reducing from 14.6 calls to 6.2 calls per week**.

# case studies

# #1 'Alfie'




**Male**
**78yr old**

| | |
|---|---|
| Home visit | 28-Jun |
| Engaged with GP | 30-Jun |
| Referral to INTERACT | 04-Jul |
| Letter to pt | 06-Jul |
| Closed to INTERACT | 06-Oct |

A 78-year-old male, Alfie*, experienced a medical emergency in May 2023. This experience left Alfie very shaken, leading to anxiety episodes and loss of confidence and independence. Alfie was identified by and visited/assessed by the CCT. The CCT engaged with Alfie's GP, highlighting the recent need for emergency assistance. Alfie was also referred to INTERACT and assigned a Key worker who met with him numerous times, made referrals to local support agencies and Social Services.

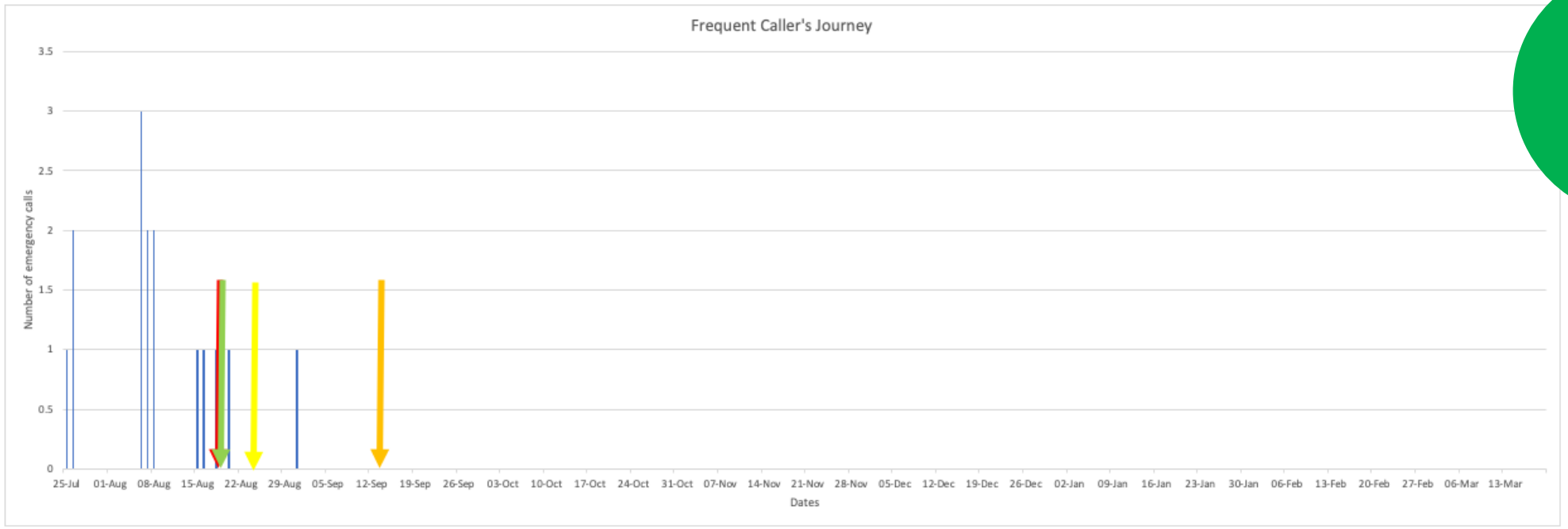
**outcome**

Alfie reengaged with his community, got the help he needed and met all the goals that were agreed with the INTERACT Key Worker, leading to an improvement in health & wellbeing and quality of life.

There have been no further calls to NIAS (i.e. between 06-Oct-23 and 19-Mar-24)

***not his real name***

# #2 'Betty'




**Female 63yr old**

| | |
|---|---|
| Phone Call | 17-Aug |
| Referral to Social Worker | 17-Aug |
| Home visit | 22-Aug |
| Letter | 12-Sep |

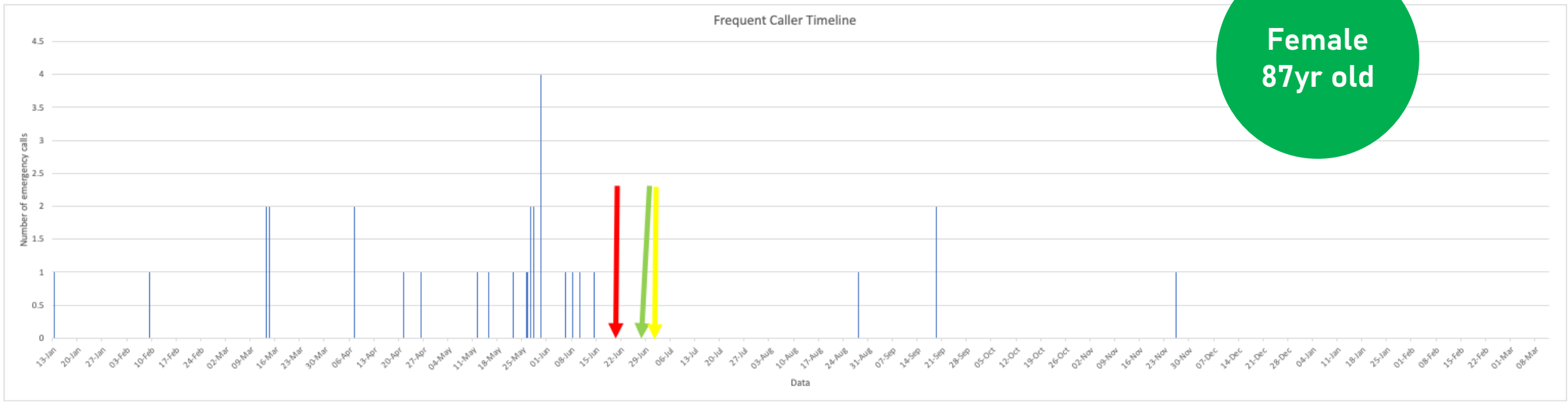
63-year-old female, Betty* lived along with family in other parts of NI. She experiencing worsening anxiety episodes. Betty reported that these anxiety episodes were becoming more severe, leading to NIAS and PSNI being called. The CCT conducted a telephone assessment to identify any unmet health and social care needs. With Betty's verbal consent, a referral was made to Social Services for further support. The CCT conducted a telephone assessment to identify any unmet health and social care needs. ***not her real name***

With Betty's verbal consent, a referral was made to Social Services for further support. The CCT followed up this telephone assessment with a home visit the following week. Betty confirmed that she had been contacted by social services and support was being arranged.

**outcome**

Betty thanked CCT for their support and for reaching out to her. There have been no further calls to NIAS (i.e. between 12-Sep-23 and 19-Mar-24)

# #3 'Ciara'




**Female 87yr old**

| | |
|---|---|
| Home visit | 19-Jun |
| Engaged with GP | 27-Jun |
| Letter | 27-Jun |

An 87-year-old female, Ciara, with advanced cognitive impairment reporting sensation of 'choking'. The CCT conducted a holistic assessment and identified some potential opportunities for assistance via medication.

The CCT engaged with Ciara's GP who arranged to conduct a medication review and link in with Ciara's family.

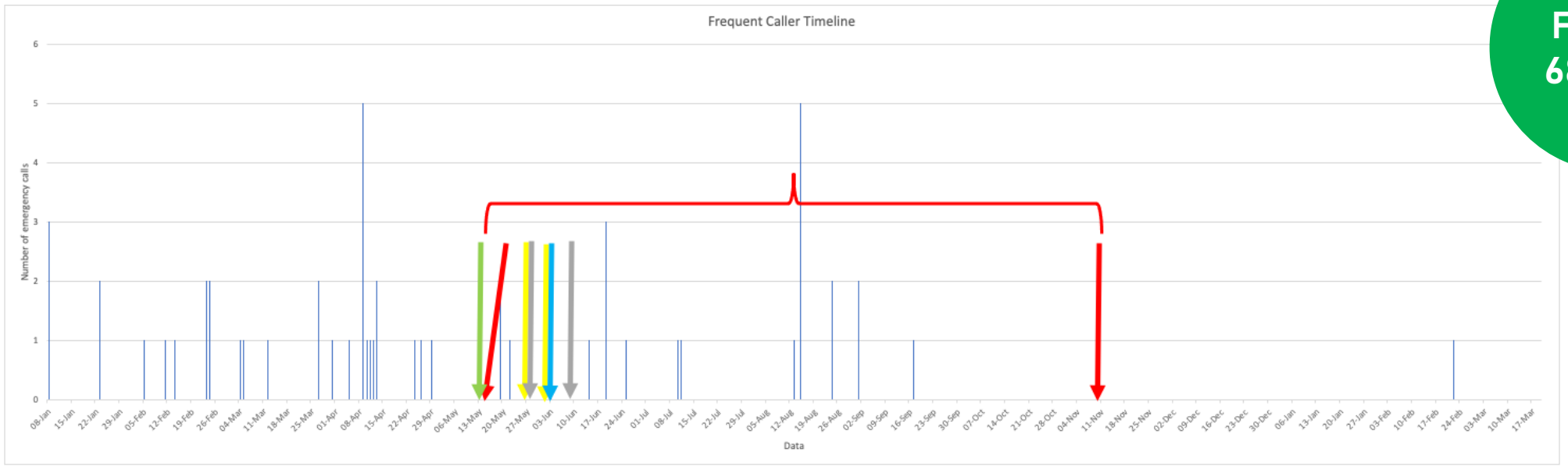
**outcome**

Any calls made after the CCT home visit were made by Health Care professionals, not Ciara or her family.

There were 4 calls to the NIAS between 27-Jun-23 and 30-Nov-23 (all from Health Care Professionals) and none between 30-Nov and 19-Mar-24

***not her real name***

# #4 'Delia'




**Female 68yr old**

| | |
|---|---|
| Home visit | 17-May |
| Referred to INTERACT | 17-May |
| Engaged with GP | 23-May |
| Letter | 24-May |
| Engaged with Social Worker | 01-Jun |
| Phone call with patient | 01-Jun |
| Letter | 05-Jun |
| Closed to BRC INTERACT | 06-Nov |

68-year-old female, Delia* with numerous co-morbidities, frequently calling 999 for assistance with both medical and social issues. Delia was identified by and visited/assessed by the CCT. The CCT engaged with Delia's GP, highlighting the recent need for emergency assistance. Delia was also assigned an INTERACT key worker who met with her numerous times, made referrals to local support agencies and offered support via helping engage with and co-ordinate health and social care services who were trying to assist Delia.

***not her real name***

Reportedly, Delia had been sleeping in an armchair in the living room. The property was given a deep clean and new furniture, including a hospital bed.

**outcome**

Since working with INTERACT, Delia has not needed to call 999 for assistance. The one call^ made in February 2024 was made by a Health Care Professional. (^ between 16-Sep-23 and 19-Mar-24)

# #5 'Elliott'

| Date | | Total | Total Duration with EMDs | Average Duration with EMDs |
|---|---|---|---|---|
| 2020 | Nov | 5 | 0:12:07 | 0:02:25 |
| | Dec | 0 | - | - |
| 2021 | Jan | 13 | 3:32:55 | 0:16:23 |
| | Feb | 173 | 18:52:14 | 0:06:33 |
| | Mar | 0 | - | - |
| | Apr | 0 | - | - |
| | May | 1 | 0:03:30 | 0:03:30 |
| | Jul | 0 | - | - |
| | Aug | 0 | - | - |
| | Sep | 0 | - | - |
| | Oct | 0 | - | - |
| 2022 | Jan | 0 | - | - |
| | Feb | 0 | - | - |
| **Grand Total** | | **192** | **22:40:46** | **0:07:05** |

**£17,664**
**Estimated Cost of 192 Calls**
(@ £92 per Call)

Elliott*, an elderly person – with diagnosis of cognitive impairment – made an extremely high volume of calls to NIAS (and other local Services) within a very short time frame. CCT met with Elliott and engaged with other statutory agencies to help identify the reason for this sudden increase in calls.

**outcome**
Changes were made to the service user's care plan and the volume of emergency calls decreased.

Since 2021 there have been no further calls from this address to NIAS.

***not their real name***

# in cash terms

# cost metrics & proxies

## How much does it cost to send an ambulance out?

The University of Kent's Personal Social Services Research Unit (PSSRU) details the cost of individual care and treatments on the NHS. It uses data from over 80 health and adult social care services across the UK, as well as other sources to compile this information.

Their latest report, Unit Costs of Health & Social Care 2022 was published in 2023. A 'unit cost' represents the total expenditure incurred to produce one unit of output in health and social care. For example, the cost of one hour of a nurse or GP's time, or an appointment with a social worker or the cost of ambulance services (below).

| **Ambulance Services** (Weighted Average) | £ (2022 Prices) | £ (2023* Prices) |
|---|---|---|
| Calls | £92 | £98.21 |
| Hear and treat and refer | £87 | £92.88 |
| See and treat and refer | £276 | £294.64 |
| See and treat and convey | £367 | £391.78 |
| Average of all | £276 | £294.64 |

*Based on ONS GDP Deflators for 2022 and 2023*

## NHS Recovery Costs

Under the NHS Injury Costs Recovery Scheme (applicable to England, Scotland and Wales only) the NHS can seek to recover costs. The latest costs, updated in October 2023, were as follows:

> 'Where an injured person is provided with NHS ambulance services, the charge is **£243** for each occasion' (up from £238),
> Therefore, the 2023 weighted average is **£239.25**

> 'Where the injured person receives NHS treatment but is not admitted to hospital, the charge is **£806'** (up from £788)
> Therefore, the 2023 weighted average is **£792.50**

The PSSRU and the Recovery Scheme costs appear the most robust, authoritative and up-to-date costs and will be used as the basis for costing ambulance services. The cost to the NIAS and to the Hospital will both be costed to more accurately reflect the full cost of a frequent caller call.

## Applying the costs to Frequent Callers (FCs)

The costs will be applied to the interact data.

## note

There are no specific cost metrics for the treatment of frequent callers. The evidence is mixed. In 2023, FC calls were 25% shorter to complete than non-FC calls.

However, the case studies and feedback from NIAS staff suggest FCs require more time and the shorter average call-time in 2023' is due to FC's calling multiple times.

Further the PSSRU and NHS ICRS costings do not appear to consider ambulance staff waiting times at Hospital. For example, if following clinical triage, the service user's condition is not deemed a clinical priority then they will have to wait longer for treatment.

*NB There are no alternative NI authoritative figures to use*

# net savings

## Chosen Period & Metrics

The period for the reductions is the 3-months immediately before the intervention and the last 3 months recorded post intervention. As that is the most recent data, and most applicable, as it post intervention.

The underlying INTERACT data is summarised on pages 35-36. Per patient per month is used as a common metric given the different lengths frequent caller patients were involved and supported via INTERACT.

If the NHS Injury Recovery Scheme 'ambulance cost' of £239.25 is used for both responses and conveys, the net savings is £1,075,539.40

## INTERACT Estimated Net Annual Cost & Improvement Savings - Calculation

| | | Last 3 Months POST v Immediate 3-Months PRE | | | | Total |
|---|---|---|---|---|---|---|
| | | Calls | Responses | Conveys | | |
| A | Total NIAS Reductions | 228.3 | 98.3 | 42.3 | | |
| B | Per Patient Per Month (48 Patients, A/48) | 4.8 | 2.0 | 0.9 | | |
| | **Cost Basis (PRSSU)** | | | | | |
| C | Unit Cost | **£98.21** | **£294.64** | **£367.00** | | |
| D | 3-Month Savings to Date (A x C) | £22,424.62 | £28,972.93 | £15,536.33 | | £66,933.88 |
| | **Per Frequent Caller Patient** | | | | | |
| E | NIAS Net Savings Per Month (B x C) | £467.18 | £603.60 | £323.67 | | £1,394.46 |
| F | NIAS Net Savings Per Year (E x 12) | £5,606.15 | £7,243.23 | £3,884.08 | | £16,733.47 |
| | **Across 48 Patients** | | | | | |
| G | NIAS Net Savings Per Month (E x 48) | £22,424.62 | £28,972.93 | £15,536.33 | | £66,933.88 |
| H | NIAS Net Savings Per Year (F x 48) | £269,095.40 | £347,675.20 | £186,436.00 | | **£803,206.60** |
| | **Add in Cost of Receiving Hospital Treatment** | | | | ED Costs | |
| I | Unit Cost (NHS Injury Costs Recovery Scheme) - ED Visit | | | | **£792.50** | |
| J | 3-Month Comparison Savings (I x A) | | | | £33,549.17 | |
| | **Per Frequent Caller Patient** | | | | | |
| K | Net Savings Per Patient Per Month (I x B) | | | | £698.94 | |
| L | Net Savings Per Patient Per Year (K x 12) | | | | £8,387.29 | |
| | **Across 48 Patients** | | | | | |
| M | Net Savings Per Month (K x 48) | | | | £33,549.17 | |
| N | Net Savings Per Year (L x 48) | | | | **£402,590.00** | |
| | **Sub-Total Estimated Net Annual Savings Across 48 Patients** | | | | | **£1,205,796.60** |

# valuing a frequent callers improved quality of life

**How much does the patient benefit?**

The 2021-2026 Draft NI Programme for Government's main goal is the improvement in peoples' quality of life. The various health policies adhere to the core principle of saving and improving peoples' lives.

In the UK, there is a lot of research currently being undertaken to accurately quantify the cost & quality of a life, as much of the existing data is based on historical small-medium scale surveys. In short, however there are two key metrics used by the UK Government when examining impacts on people's health:

| | |
|---|---|
| SLY | Statistical Life Year (valued at £60,000) |
| QALY | Quality Adjusted Life Year (£70,000 at 21/22 prices) |

There is also the Value of a Prevented Fatality (VPF), which is used by the Department for Transport and is valued at £1.8m (2016 prices). For, simplicity we will use QALY as it is most understood and best represents small improvements in life expectancy and quality of life. Although NICE uses a threshold QALY figure ranging from £15,000 to £30,000, this relates more to determining access to specific care and medicines.

Whereas the above figures are HM Treasury figures to ascertain whether a project represents value for money, and thus is more pertinent to this evaluation.

The UK QALY figure was raised from £60,000 to £70,000 in 2022 to account for inflation between 2014 (when originally calculated) and 2021/22 using GDP deflators.

Using the most recently available GDP deflators (ONS, 08-Mar-2024), based on calendar years £70,000 (2021) would be worth £78,888 (2023 prices). With £70,000 (2021/22 prices) being worth £74,727 (2022/23 prices). Given the high rates of inflation in 2022 and 2023, it is likely those figures would be higher for 2023/24. For the purposes of INTERACT, a conservative QALY value of £75,000 for 2023 will be used.

**Rationale for assessing healthy life improvement**

Further, the evaluation will assume that the persons lives have been improved by a factor of 0.3 QALY for a period of 3 years. This ignores the probability that a person may live longer because of the intervention; and limits the improvement to 3 years (as we don't have longer term data to verify likely longer-term benefits).

**calculation**

0.3 QALY (estimated improvement)

for 3 years = 0.9 QALYs

= 0.9 x £75,000

**= £67,500 per patient**

**Interact Savings:**

Savings determined by whether net improvement in calls (26 people), responses (33) and conveyances (21) is used as basis for QALY calculations.

**Call Reduction:**
26 x £67.5K = £1,755,000

**Response Reduction:**
33 x £67.5K = £2,227,500

**Conveyance Reduction:**
21 x £67.5K = £1,417,500

# total net health cost & improvement savings per annum

| | | | |
|---|---|---|---|
| | **Sub-Total Estimated Net Annual Savings Across 48 Patients** | | **£1,205,796.60** |
| | Add in NIAS Waiting Times at Hospital Emergency Departments | | |
| | Unit Cost Calculation | | |
| | Estimated Average ED Wait Time for Frequent Caller - 2hrs | | |
| | Estimated NIAS Staff in Attendance with Frequent Caller at ED - 2 | | |
| **O** | Proxy for 1 Hr of NIAS Staff Time (using Police Costs) - £66.69 | | |
| **P** | Estimated Cost for Average NIAS ED Wait = 2 x 2 x £66.69 = £266.76 | | |
| | Estimated NIAS ED Admission Waiting Time Savings | | |
| **Q** | NIAS (ED Wait Time) Savings Per Patient Per Month (P x B(0.9)) | £235.27 | |
| **R** | NIAS (ED Wait Time) Savings Per Patient Per Year (Q x 12) | £2,823.21 | |
| **S** | NIAS (ED Wait Time) Savings Across 48 Patients Per Month (R x 48) | £11,292.84 | |
| **T** | NIAS (ED Wait Time) Savings Across 48 Patients Per Year (S x 12) | **£135,514.08** | |
| | **Total Estimated Net Annual Savings Across 48 Patients** | | **£1,341,310.68** |
| | Add in Estimated Quality of Life Improvements (1 Year) | | |
| | Unit Cost Calculation | | |
| **T** | QALY (£75,000) x Improvement (0.3) Per FC Patient = £22,500 | | |
| **U** | Across Net Average (26.67) Improved Patients (T x 26.67) | | **£600,075.00** |
| | **Total Estimated Net Annual Improvement Across 48 INTERACT Patients** | | **£1,941,385.68** |

If the NHS Injury Recovery Scheme 'ambulance cost' of £239.25 is used for both responses and conveys, the net annual improvement figure is £2,082,156.54

# explanations and exclusions

**Rationale**

The calculations are based on 2023 prices, as far as possible, and relate to one year.

Exclusions

The ambulance waiting time accounts for crew time only. It does not include other costs such as vehicle costs, which according to the 'Healthcare Costing Standards for England, Ambulance Costing Methods 2020' report should consider:

- depreciation of vehicles
- lease of vehicles
- insurance for vehicles
- maintenance and repair of vehicles
- vehicle preparation/cleaning
- fuel
- support costs for vehicles

Costs such as overtime (or time in lieu), bank holiday pay and potential PSNI support costs – where police are required to support NIAS crew with a frequent caller – have been excluded. Further, potentially linked costs such as staff sickness, recruitment, training and retention have also been excluded.

Potential Benefit

The estimated quality of life benefit is estimated at 0.3. For someone, whose life has been transformed it could be argued the figure should be higher. In addition to excluding improvement beyond one year (at £406,542 pa), no consideration has been given to the additional months and years that those patients may now live.

Assuming at least £60,000 (Statistical Life Year, SLY, with a higher QALY figure), just one additional year lived for those net improved frequent callers would equate to £1.6m (26.67 x £60,000). This excludes any probable lives being saved (at circa £1.8m per life, Dept for Transport figures).

Cautious

In estimating NIAS staff time, costs from the Office of the Police & Crime Commissioner for Surrey has been used as a proxy. Our report uses the operational resource costs basis - not the higher full cost recovery basis - used by them to calculate costs for other public bodies. Further, our figure (£66.69) is conservative as it is based on the lowest ranked staff (constable) on a normal day with over 8 working days' notice.

**£1.94m**

**Estimated Net Cost & Improvement Savings per Annum (for 48 People)**

# basis for NIAS ED waiting time

**Rationale**

The data opposite is from the Department of Health. It shows that in December 2023:

The **median** waiting time for a patient discharged was **4hrs 1 min**

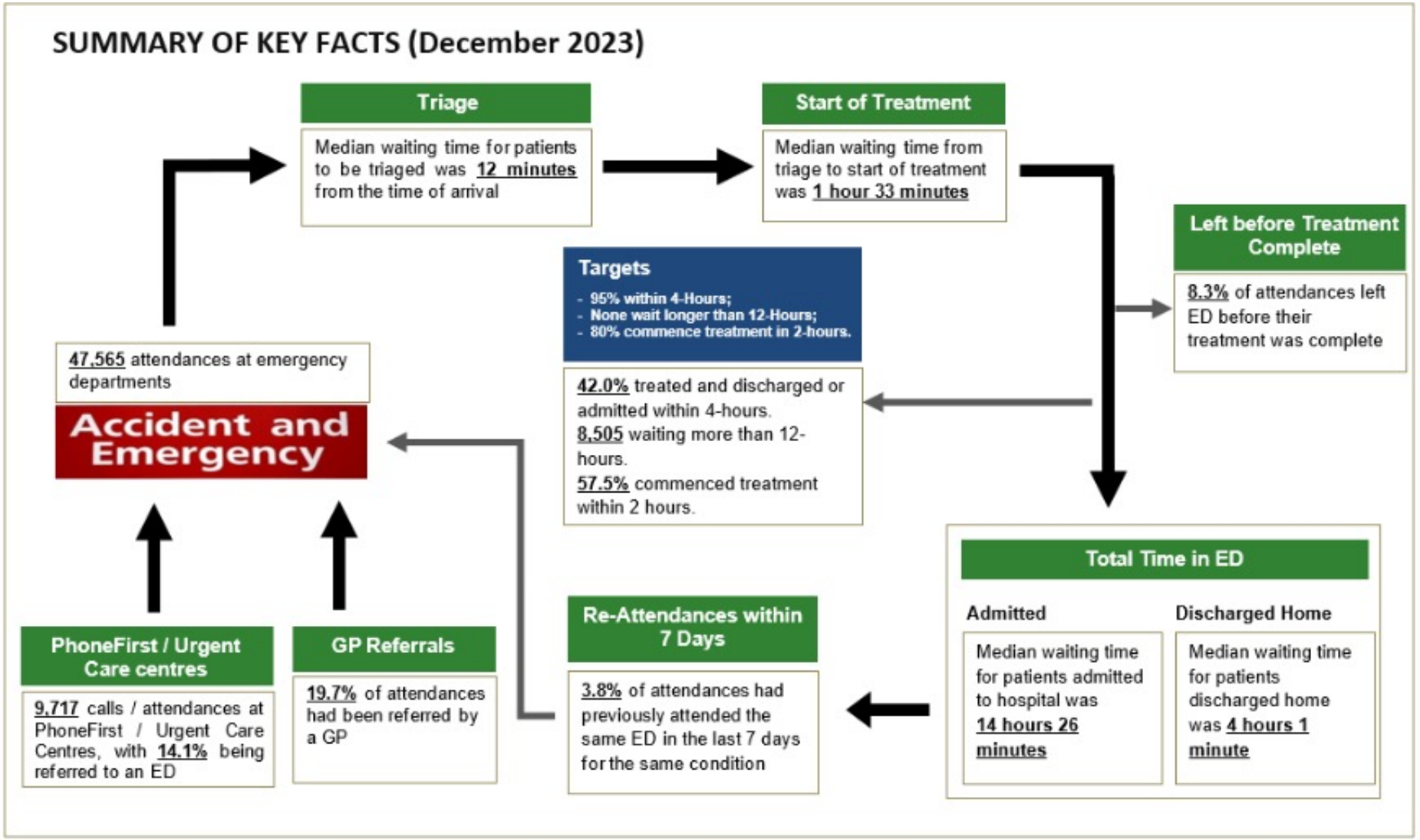
**58% of patients took longer than 4 hrs** for treatment and discharge or admission

**More than 1 in 6 (17.9%) patients waited >12 hours** for treatment and discharge or admission; for a total of 8,505 patients in December 2023

Summary

On this basis, and from speaking with CCT staff who indicated that Frequent Callers often take longer at the ED than the average non-Frequent Caller patient.

Source: https://datavis.nisra.gov.uk/health/hs-niwts-ecwt-interactive-q3-23-24.html



# proxy cost source information

There are no full-cost or operational resource cost details for NIAS staff, so the below have been used as a proxy.

## SPS OPERATIONAL RESOURCE COSTS

The rates below are the Operational Resource Costs and may be used as a starting point to calculate charges for services to other government bodies.

| Uniform and CID 2023/24 Rates | | Surrey | | Sussex | |
|---|---|---|---|---|---|
| | | Hourly Rates | Daily Rates | Hourly Rates | Daily Rates |
| | | £ | | £ | £ |
| Superintendent | NORMAL | 100.02 | 725.16 | 99.26 | 719.61 |
| | BANK HOLIDAY | N/A | N/A | N/A | N/A |
| | BH < 8 days' notice | N/A | N/A | N/A | N/A |
| Chief Inspector | NORMAL | 80.88 | 586.38 | 80.11 | 580.83 |
| | BANK HOLIDAY | N/A | N/A | N/A | N/A |
| | BH < 8 days' notice | N/A | N/A | N/A | N/A |
| Inspector | NORMAL | 76.18 | 552.32 | 75.42 | 546.77 |
| | BANK HOLIDAY | N/A | N/A | N/A | N/A |
| | BH < 8 days' notice | N/A | N/A | N/A | N/A |
| Sergeant | NORMAL | 82.68 | 599.45 | 81.92 | 593.90 |
| | BANK HOLIDAY | 110.24 | 799.27 | 109.22 | 791.87 |
| | BH < 8 days' notice | 165.37 | 1,065.70 | 163.84 | 1,055.83 |
| Constable | NORMAL | 66.69 | 483.51 | 65.93 | 477.96 |
| | BANK HOLIDAY | 88.92 | 644.68 | 87.90 | 637.28 |
| | BH < 8 days' notice | 133.38 | 859.57 | 131.85 | 849.71 |

Operational Resource Costs include Total Direct Costs, plus direct overheads.

## POLICE STAFF RATES

The rates below are calculated at Full-Cost recovery and should be used for charging of police staff costs for provided at commercial events or to non-governmental agencies. Non-commercial events rates and operational resource rates (for other government bodies) are available upon request.

| | Surrey | | | Sussex | | |
|---|---|---|---|---|---|---|
| | | Hourly Rates | Daily Rates | | Hourly Rates | Daily Rates |
| Type | Grades | £ | £ | Grades | £ | £ |
| NORMAL | C | 43.18 | 313.09 | SPA 5 | 40.47 | 293.44 |
| BANK HOLIDAY | | 57.58 | 417.45 | | 53.97 | 391.25 |
| NORMAL | D | 46.57 | 337.65 | SPA 6 | 42.50 | 308.13 |
| BANK HOLIDAY | | 62.10 | 450.20 | | 56.67 | 410.84 |
| NORMAL | E | 50.19 | 363.87 | SPA 7 | 44.64 | 323.67 |
| BANK HOLIDAY | | 66.92 | 485.16 | | 59.53 | 431.56 |
| NORMAL | F | 54.33 | 393.88 | SPA 8 | 47.43 | 343.84 |
| BANK HOLIDAY | | 72.44 | 525.17 | | 63.23 | 458.45 |
| NORMAL | G | 58.99 | 427.67 | SPA 9 | 51.23 | 371.41 |
| BANK HOLIDAY | | 78.65 | 570.23 | | 68.30 | 495.21 |
| NORMAL | H | 66.96 | 485.44 | SPA 10 | 58.83 | 426.52 |
| BANK HOLIDAY | | 89.28 | 647.25 | | 78.44 | 568.69 |
| NORMAL | I | 80.73 | 585.28 | SPA 11 | 67.72 | 490.96 |
| BANK HOLIDAY | | 107.64 | 780.37 | | 90.29 | 654.61 |
| NORMAL | PCSO | 60.95 | 441.88 | PCSO | 53.19 | 385.65 |
| BANK HOLIDAY | | 81.27 | 589.17 | | 70.92 | 514.20 |
| NORMAL | Controller/SOCO | 75.00 | 543.72 | Controller/SOCO | 64.94 | 470.81 |
| BANK HOLIDAY | | 99.99 | 724.96 | | 86.59 | 627.75 |
| NORMAL | Band 2 | 63.94 | 463.57 | M1 | 58.72 | 425.72 |
| BANK HOLIDAY | | 85.25 | 618.10 | | 78.29 | 567.63 |
| NORMAL | Band 1 | 85.07 | 616.77 | M3 | 79.60 | 577.12 |
| BANK HOLIDAY | | 113.43 | 822.36 | | 106.14 | 769.49 |

The Police & Crime Commissioner – Revised Fees and Charges for the Supply of Goods & Services 2023-2024
https://www.sussex.police.uk/SysSiteAssets/media/downloads/sussex/about-us/charge-rates/fees-and-charges-handbook.pdf

# the model

# lessons from elsewhere

# blue light approaches

## NI Fire & Rescue Service

- NIFRS will always turn out if a person calls or confirms fire (or smoke), with a target time of 6-8 minutes in Belfast.
- Control room notes 'frequent callers' and can **perform an initial risk-based challenge** (e.g. to check if smoke alarm on, if a fire mentioned)
- They had the highest number of false alarm calls in their history in 2023. To manage risk, they have implemented a new Fire Alarm policy. This means that the NIFRS will no longer respond to automatic fire alarm call outs at occupied commercial premises unless a fire has been confirmed
- Work with, and appreciate Multi-Agency Support Hubs (MASH), which is good for building relationships with partners. Issues can be solved quicker
- They would like to filter more calls via the control room using information markers. And to adopt the use of information markers across all teams as part of the ongoing drive for digitisation within the NIFRS.
- They note that in the US, the fire service is piloting teaming up with social workers, as the fire service don't have the skills to handle complex cases
- They appreciate MASH and the need to take more pro-active and risk-based approach. Increasing co-operation and digitisation should help.

# blue light approaches

## Police Service NI

- Police refer to 'repeat victims' and apply tiers. Repeat victimisation occurs when the same person or place suffers from more than one incident over a specified period of time (rolling 365 days).

- All victims experiencing 10 or more calls, and those aged Under 18 and Over 60 experiencing 6 or more calls in a one-year period are automatically identified, triaged and allocated to the most suitable resource.

- Repeat Victims who reach the 20+ call threshold are reviewed monthly by the relevant District Commander. The process is designed to provide a consistent approach to manage and support individuals within the community who are more vulnerable to being victims than others. The PSNI are drafting a new policy in relation to "Repeat Victims".

- Calls are collated from 999, 101 and online via the PSNI online reporting tool, which is currently being updated. It is rare for repeat calls to be emergency calls. If anti-social behaviour (ASB) is being reported the PSNI will often send Officers to the location.

- Repeat Victims are managed by specific teams (e.g. neighbourhood teams, public protection teams (if under 18) or a district team). If a call is about a repeat victim, (e.g. if they go missing) it is also linked to that person on Police systems.

- Where the call is about a perceived crime, the PSNI takes a victim led approach – even if it is about someone calling ten times a day about kids playing football near their house. It then moves to problem solving, which is considered from three perspectives: offence, location, and victim; and addressed accordingly.

- The PSNI do not see a rise in repeat callers but do find it difficult to address the complexity/underlying problem.

# blue lights – PSNI

- They view the Multi-Agency Support Hubs (MASH) as a vehicle to share and address concerns. Each partner (e.g. GP, NIAS, PBNI) can nominate people. The caller must first consent for their information to be shared, which then enables discussion between MASH members. Meetings have worked well due to the common collaborative approach taken.
- The PSNI are currently reviewing the amount of demand on the PSNI from the NIAS (e.g. when an ambulance can't be at an address in time). Some PSNI districts have more dealing with the NIAS than others regarding complex cases, but mostly it is through MASHs.
- The Blue Lights agreement is not up and running yet but will be excellent when set up. They had wanted to get information sharing consents in place for INTERACT but this did not happen.
- The PSNI are active participants in the Multi-Agency Triage Team, along with BHSCT and SEHSCT. This involves Police Officer and Community Mental Health Practitioners working together to response to people with mental health problems who have accessed the 999 system. NIAS were initially part of this scheme but stepped back from it in the last few years citing capacity issues.
- Joint funding and ownership of a key worker would be problematic even though they bulk of time they are dealing with the same people/issues.
- The PSNI fund permanent Support Hub personnel, within each District a Sergeant and 1-2 constables apply through internal PSNI recruitment processes specifically for these roles. Over time the PSNI realised that they needed dedicated officers to address and reduce demand.
- Approximately 70% of demand from the same people. Having dedicated officers allows for consistency, trust to be built up and awareness of the person's history.
- There is no specialist training, just on-boarding. However, officers must have served at least 3-years to provide them with the necessary skills, experience and exposure to complex cases.
- It is a cross between social and police work; and involves building up a relationship with the caller. Accordingly, it is an intensive resource. Teams review all calls over the last 24 hours. Through working with the callers, they can reduce demand on the PSNI and better meet the caller's needs.
- Each area team knows the list of support agencies and charities (e.g. Age Well Partnerships Good Morning Call service can be a valuable resource to monitor people). The MASH is for statutory agencies to build connections, share lists and speak with each other and discuss cases.

# “Having dedicated officers allows for consistency, awareness, and building relationships”

PSNI

# South Eastern

South Eastern Health and Social Care Trust

- Their **'frequent attender' team** is managed by a Band 7 Clinical Pathway Lead Senior Nurse, responsible for clinical pathways. She manages a team of four based in the Ulster Hospital, comprising two care navigators (Band 4 support workers) and two social/youth workers.
- The team started with two navigators, and then secured two youth workers to deal with assaults. However, due to the high rate of self-harm in that age group (under 25) they found they **needed to follow the young people into the community to link with support services**.
- The **navigators are very hands on and do more than signpost**. They, are patient led, and help bridge the gap between leaving ED and handover to another service (e.g. mentoring/going with them to appointments (e.g. addiction services), help with housing application, etc)
- The care navigators work Monday to Friday, whilst the youth workers operate more in the evenings (e.g. 8-12/midnight, 6-10pm and 11-3am). The Trust did an audit of youth attendees and **identified the busiest times**, and the youth workers hours correspond with those
- The team signpost to regular services (e.g. Simon, extern, Women's Aid) and link with a **list of 55 voluntary/charitable organisations**. However, they need to look deeper into other support services & providers
- The team is in the second year of a two-year pilot and are preparing a business case to expand the team and coverage to more hospitals
- They want to increase the team to eight people. Comprising **four navigators to enable a presence in hospitals (beyond Ulster), two youth workers and one social worker, managed by a clinical nurse**.
- The Trust receives 'an extensive number of calls' and find that the main underlying problems are social (e.g. abuse, addiction, mental health, homelessness.). They receive 11-16 referrals a month and **had 186 referrals (averaging 15.5per month) during 2022/23.**
- They find the volume of attendees is the same, but th**e cases are becoming more complex**. Patients have a multitude of issues, and it is important to find underlying reasons (and starting point). The top 3 referral reasons are alcohol, mental health, housing/homelessness, with the next tier of issues being abuse, gender issues and gambling
- The team has a 4-weekly review of frequent service users (called 'frequent attenders'), which also involves NIAS, PSNI, Social Workers, Mental Health and Addiction teams. **There is overlap, and it is important to build relations and co-ordinate with others**. Also, some people will pass from one service to the other (e.g. if a person can't get an ambulance, they might get a taxi to the ED instead).
- Would **be good to share information** (e.g. tracking, safety warnings) but there are different approaches to data. SHE&SCT and the PSNI use individual data, whereas the NIAS uses property/address-based data, which makes sharing information between them more difficult.

# South Eastern

- **Social factors** (e.g. job or relationship breakdown) **are adding to the complexity of cases**. It takes time to put in place plans to address the variety of complex issues. With **further time to crucially manage and implement those plans for a variety of users**. Often their plan may involve multiple support agencies and require support for as long as needs be.
- The Trust does not accept self-referrals. **Referrals must come from health professionals**. When people have reached a personal crisis point and don't know where else or who else to go to. January to March is a tough period for people.
- **Risk management is central to their approach**. They have 'any other relevant information' (rather than 'information markers' or 'safety alerts') on people. This can't be shared with NIAS, due to their property/address-based approach. Staff would be better protected if safety/risk information could be mutually shared. The new blue lights agreement doesn't include Eds, so there will continue to be an information gap..

- **Due to the multiple complexities that people now live with a more integrated approach to healthcare is needed**. Others are glad to have treatment. But the **ED can advocate for them**. the ED can expedite them, open doors for them **and help them access services**. There needs to be more support and more knowledge of this area. More awareness and an ability to fast-track support.

***"At times individuals feel unheard and unsupported. As health care professionals we need to look beyond the medical condition and support their individual needs."***

# innovations

# what are other UK ambulance services trying to do to address frequent callers?

A new AI pilot project was posted on Q Exchange in March 2024, with key details below and cover page (next page) by The North West Ambulance Service. NWAS deal with 1.7 million 999 calls a year.

## What does your project aim to achieve?

Our ambitious use of AI would allow us to proactively manage HIU's at an early stage to reduce long-term demand on 999 services and work with partners for the benefit of our patients. This project has the following objectives:

- **Early identification of high-intensity users** – AI can make suggestions using 'Directory of Services' e.g. Social Prescribing.
- **Bringing relevant data together**– social factors, health conditions, demographics, time/date etc. AI will allow us to spot trends which would take hours to manually locate, saving time and creating efficiencies.
- **Working collaboratively with system partners** – overcome silo working and be 'on the same page' with a digital platform.
- **Reducing health inequalities** – using demographic data to identify trends and navigate the complex mix of poor health outcomes, repeat 999 use, and social factors.

Through enhanced identification we can proactively manage HIU's earlier, preventing long-term demand on 999 services and the wider healthcare system. A case study example is below:

## How will the project be delivered?

The project will be delivered with a cross-working group, within our organisation; involving Digital and Innovation Team alongside our specialist HIU team.

We intend on delivering a proof-of-concept solution focused on two organisations within one ICB, with significant user testing and comparison to the current and historic ways of working.

We recognise that service users who are determined to be 'high intensity users' are often facing significant challenges which has a demand upon primary care, social care, police, mental health and other agencies. We plan to engage with these partners from the start, engaging with them to provide an AI solution that offers seamless working across system boundaries – not only improving productivity, but also patient experience.

Evaluation would be a key component of the project delivery, with ongoing evaluation and deciding key metrics; this would allow us to measure the success, both from a combined productivity and patient benefit perspective.

q.health.org.uk

Using AI to manage high-intensity users for the ambulance service | Q Community

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Q Exchange

# Using AI to manage high-intensity users for the ambulance service

This project will utilize AI to proactively manage high-intensity users (HIU), improving system collaboration and early intervention to reduce long-term demand on emergency and wider health and social services.

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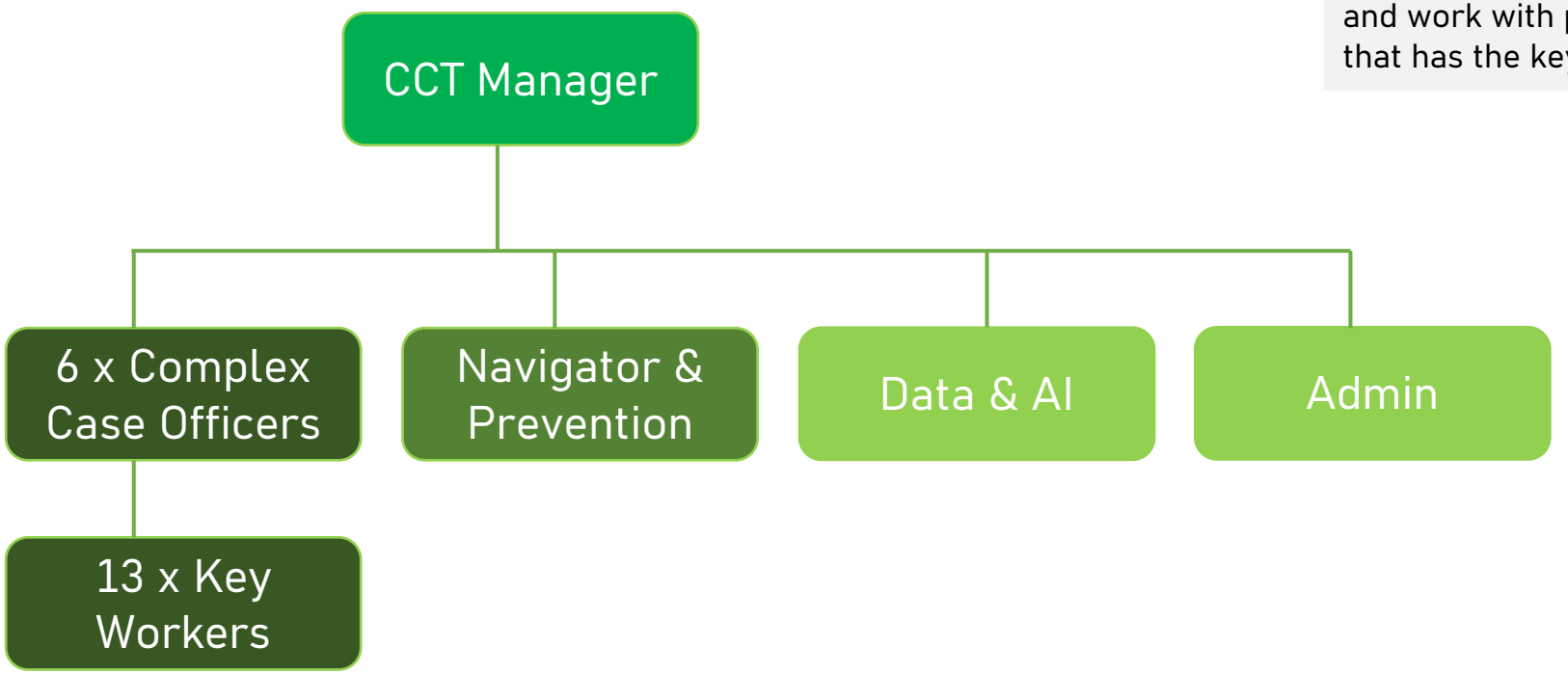
Other Ambulance Services in the UK are already seeking to explore new ways of using AI to address Frequent Callers.

NIAS could partner with them and/or seek to use their results within in their own system.

# proposed model

# proposed model




Rationale

The current team of four is significantly under-resourced and not reflective of the wider resources consumed. For example INTERACT encapsulated four full-time staff and there is regular call-upon the NIAS database & IT support team. It is also primarily focused on the east of the Bann.

As demand increases and other agencies increase their complex case teams this will place more demand on the NIAS, as a partner agency. Therefore, to provide a full in-house team that can provide a consistent service across NI and work with partners, a much larger team is required. One that has the key competencies at hand and in-house.

# proposed model – roles

**CCT Manager**

The manager would be responsible for the wider team, linking in with senior NIAS staff and wider partners.

**6 x Complex Case Officers**

There would be one designated NIAS complex case officer per Trust (most likely an experienced paramedic) to build relations & area expertise; with one extra floating probably between Belfast, SE and Northern HSCTs due to the higher FC rates. CC Officers would clinically review all cases, and take on the more complex cases.

**13 x Key Workers**

There would be two experienced key workers (similar to INTERACT) per Trust to build relations and area/support sector expertise. With three floating, probably more Belfast, SE and Northern HSCTs. However, there is scope for some of these to become subject matter experts e.g. addiction, abuse, youth etc.

**Navigator & Prevention**

The navigator would be a central resource to co-ordinate key-workers and build a repository of available support. They would also work on targeted prevention (e.g. potential-FCs) and intervention in areas with high FC rates.

**Data & AI**

An expanded team, with increased digitisation across the blue lights and requirement for more information will need a dedicated IT resource. The potential for AI to learn from the team's experience and data archive could reduce time (e.g. identify FC/potential FCs much quicker, standardisation, analysis) and help FC intervention and prevention.

**Admin**

The team's size and NIAS/partner needs will require a full-time admin assistant.

# conclusion & recommendations

# conclusion

NI has an increasing number of people with complex cases, who need help, and are dying 20 years too early. Many of them will look to the ambulance service for help. They call 999 because they feel their needs have not been met elsewhere, and they know they will get a response. Therefore, there is an operational need to manage these calls (frequent callers (FC)). There is also a clear policy and strategic need, and dare say ethical need, upon NIAS to put a plan in place.

The most accepted way to handle FCs across the emergency services is through having a team of experienced officers who can identify and engage with them. This takes time, and a collaborative approach with other agencies to find the most appropriate support or combination of supports (many non-clinical and community based) for them.

A detailed analysis of the INTERACT programme data, is consistent with previous sample CCT evaluations, and indicates that a dedicated approach to FCs can lead to significant (>50%) reductions in FC calls, responses, and conveyances.

The current team has done well, handling over 600 interventions a year. However, it needs expanded to provide NI wide coverage – the first such NI wide response to FCs/high intensity users. It also needs more specific roles (e.g. Data & AI) and to bring key-workers in-house. Such an approach could lead to various potential UK level innovations.

# recommendations

**1. A permanent Complex Cases/HIU team is put in place**
The team is highly experienced and have established valuable relations with diverse partners across NI. It is important that this capacity/credibility is retained and built upon. Especially, as it can reduce conveyances to ED in line with DoH guidance.

**2. An expanded team is kept in-house**
NIAS should expand the existing Complex Cases/HIU team to ensure it has the capacity at hand to offer a consistent high-quality NI wide service. The larger team should have scale and dedicated roles (e.g. mental health, data/IT), whilst conducting more innovation, feedback and learning. NIAS should seek resource contributions from other sources for this team.

**3. Create AI pilots and improve data tracking & reporting**
A lot of data is created and there are opportunities for AI (Artificial Intelligence) to determine patterns, predict frequent callers, retain an up-to-date archive of support services and gain from the significant experience of the team. This should include standardising terms and approaches and ensuring access to other *blue lights* and ED data. Dealing with FCs is time intensive and there may be ways to improve CCT's approach, especially with wider digitisation & IT trends.

**4. Need to improve transitions**
CCT should review how it transitions and exits people through different stages; to provide better data on longer term impact and introduce thresholds to avoid one FC call skewing the data.

**5. More targeted interventions and preventative actions**
CCT should target more preventative use of information markers, early potential frequent caller engagement and work with PHA and others to target areas with high numbers of FCs.

**6. NI wide coverage and expanded operating hours**
An audit of when FC calls, responses, and conveys occurs. The results should feed into the CCT's operating hours/availability, with the CCT offering a resource beyond normal office hours.

**7. Urgently review its risk management and safeguarding**
CCT and the NIAS should ensure there is full data sharing between the emergency services (and consider a person not address based approach) to help mitigate risks for NIAS staff. Before expanding, they should ensure they have all the training, policies, procedures and practical steps in place to ensure the safety of NIAS staff at all times and mitigate known risks. Further, experience of similar roles should be essential criteria for any new complex case officer or key-worker.

# “The good physician treats the disease; the great physician treats the patient.”

William Osler

thank you to all those who contributed to this report via taking time to take calls, attend meetings etc. Your insight, ideas and patience were much appreciated

# the end