

# Evaluation of the Cyrenians' Hospital In-reach Programme

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## Executive summary

Homeless people are at increased risk of experiencing ill-health. They are often readmitted to hospital even after discharge, usually for the same or similar reasons for initial hospitalisation. One way of addressing this issue is through hospital in-reach initiatives, which have been established to enhance the treatment and discharge pathways that patients identified as homeless receive after hospital admission. Since 2020, the Hospital In-reach programme has been piloted in two large hospitals in Edinburgh, this study describes an evaluation of the programme. Specifically, this study aimed to evaluate implementation and delivery processes of the Hospital In-reach programme and assess the impact of the programme in relation to readmission and health/housing outcomes.

The evaluation used a mixed methods approach, employing both qualitative and quantitative data collection and analyses.

The key findings are:

- More men than women were referred to the hospital in-reach project. However, the proportion of women referred appeared to increase over time
- Since the introduction of the Hospital In-reach project, there has been a significant reduction of 68.7% in readmissions compared to the 12 months prior to Hospital In-reach referral.
- A high proportion of study patients who were given targeted interventions completed inpatient treatment courses (86%), were linked with primary care providers (75%), or had appropriate accommodation sourced prior to discharge (56%).
- The qualitative element of the evaluation suggested that this reduction in readmissions was due to the work of the Hospital In-reach team in acting as a bridge, connecting hospital secondary care services and homelessness/housing services in the community.
- The improved identification of PEH was also attributed to the development and application of an algorithm to assist clinicians in identifying such individuals
- The Hospital In-reach project fills a gap in service provision by facilitating communication between hospital and community homelessness/housing services, which improved decision making. This was widely seen by staff and patient interviewees as key to preventing discharges to inappropriate accommodation, including discharge to the streets, and in reducing readmissions to hospital.
- Hospital secondary care staff viewed the Hospital In-reach team as an excellent resource in enabling people experiencing homelessness to engage better with treatment in hospital and to facilitate more timely and appropriate discharges into the community.
- Community homelessness/housing services attributed improvements in services to their ability to readily contact the Hospital In-reach team within secondary care settings to ensure housing was retained for people experiencing homelessness (PEH) during hospital admission and to start earlier planning for discharge.

- The person-centred, holistic and relational approach employed by the Hospital In-reach team was widely viewed as critical in engaging with, and reducing admissions, for PEH.
- The Hospital In-reach project was widely welcomed by all of the staff interviewed, both in hospital and community settings, given its success in reducing hospital readmissions and in supporting staff and patients.
- The introduction of Milestone House, the 10-bed step-down centre, during the Covid-19 pandemic was recognised by many of the patients and staff as having facilitated ongoing treatment adherence and allowed time for more appropriate discharge to the community.
- The two patients who had experienced homelessness and multiple hospital admissions previously were extremely positive about their experiences with the Hospital In-reach team and one of them described their work as ‘absolutely phenomenal’ in terms of the treatment, care and discharge planning they received.

The evaluation has demonstrated that the Hospital In-reach project has contributed to improved outcomes for PEH, by reducing readmissions. It has bridged an important gap between hospital and community services and facilitated safe, appropriate and timely discharges of PEH into the community. All stakeholders involved found the Hospital In-reach project valuable, but they also recognised the unique challenges of navigating the various bureaucratic processes in hospitals, especially for a third sector organisation.

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## Introduction

### Background

People experiencing homelessness are at a higher risk of cancer, cardiorespiratory disease, communicable disease, all-cause mortality and hospitalisation than the general population [1-5]. This is primarily due to a vicious cycle of a combination of factors such as a lack of adequate shelter, pre-existing physical and mental health conditions and higher rates of drug and alcohol use [6] which in turn make both accessing appropriate healthcare and maintaining a healthy lifestyle difficult for this vulnerable population group. These issues culminate in an increased need for acute and emergency healthcare among people experiencing homelessness [6-8].

A significant issue that persists with homeless patients is the frequency of readmission to hospital after discharge, often for the same or similar reasons for initial hospitalisation [9-11]. Reasons for this are multifactorial, and while initial poorer health is a factor, there is evidence of other social and organisational/infrastructural factors that may lead to repeat admissions. For example, epidemiological studies have shown that both initial hospital admissions and readmission rates are significantly higher for people classed as homeless than non-homeless individuals from low socioeconomic status (SES) groups, a population that has similar incidence of poor health [10, 11].

One way of addressing the effect homelessness has on hospital readmission in the UK context is hospital in-reach programmes [9]. Hospital In-reach initiatives have been established across multiple National Health Service (NHS) hospitals in England since 2010, and utilise a multidisciplinary team of GPs and specialist nurses, in addition to outreach workers with lived experience to enhance the treatment and discharge 'pathways' that patients identified as homeless receive after hospital admission. A randomised controlled trial of one such hospital In-reach programme (Pathways) demonstrated significantly improved quality of life scores among intervention participants compared to control [12]. Additionally, while average emergency department reattendance within 12 months was only marginally lower in the intervention group, the proportion of individuals sleeping on the streets after discharge was significantly lower in the Hospital In-reach arm in comparison to the control (3.8% and 14.6%, respectively;  $P=0.034$ ). A more recent audit of multiple programmes nationwide further supports the effectiveness of such services, reporting a 66% and 37.6% decrease in hospital admissions and A&E admissions respectively, in the 90 days post Hospital In-reach implementation [13]. Furthermore, process evaluations of these programmes employing qualitative methods have added

further context to the findings from the perspectives of both clinical and service delivery staff. It was reported that the culture and expertise to deal with homeless patients was developing due to Hospital In-reach, as clearer avenues for treatment and discharge were developed with a historically difficult to treat and heterogeneous patient population [14]. Currently, no Hospital In-reach programmes have been implemented at scale in Scotland, however a small pilot of such a programme is being carried out by the Cyrenians in two acute hospitals in Edinburgh since 2020. This study describes an evaluation of the programme in Edinburgh, Scotland.

### Project context, aims and delivery

The Cyrenians Hospital In-reach Project was developed in response to a recognition of the high frequency in which people experiencing homelessness (PEH) are hospitalised, before being readmitted to hospital a short time after discharge for the same or related health issues. The Cyrenians is a non-profit organization, which operates to combat homelessness and related health and social issues within Edinburgh and the Lothians. There are several contributing factors, which lead to this issue, one of which is a general lack of infrastructure and procedural mechanisms to enable homeless services across health and housing to remove the barriers and facilitate maintenance of health and wellbeing among hospitalised individuals after discharge from hospital. Cyrenians recently received funding to deliver the Hospital In-reach programme, which aims to cut hospital readmissions among PEH through a multicomponent intervention delivered at time of admission, through to discharge with follow-up beyond this point to stabilise community-based healthcare and housing circumstances.

Specifically, the project has been delivered at the Western General and the Royal Infirmary hospitals in Edinburgh, and involves the following: 1. Holistic approach to care at admission, including conduct of a needs assessment in preparation for discharge. 2. Continuing community support after discharge until individual is stabilised and at low risk of readmission. 3. Working with clinical staff to educate them on the increased needs of PEH, and to establish stronger links with secondary care and community-based homeless services. 4. Development of a specialised “Hospital In-reach team” dedicated to early intervention and focused case-management consisting of GPs and nurses from the Edinburgh access practice (a specialized homelessness GP practice), link workers, and care navigators (specialised homelessness keyworkers who themselves have lived experience of homelessness). 5. Stronger links and establishment of clear Hospital In-reach into secure housing after discharge (through existing partnerships such as Social Bite village and Housing First). This study aimed to evaluate implementation and delivery processes of the Hospital In-reach programme and assess the impact of the programme in relation to readmission outcomes.

The programme was first implemented in February 2020, and the evaluation study period ran for 18 months up to September 2021. This included a 6 month recruitment/baseline period from February-September 2020, and a subsequent 12 month follow-up period from October 2020-October 2021.

## Impact of Covid19 pandemic

The implementation and delivery of the Hospital In-reach project mainly occurred during COVID-19 and this context should be considered when interpreting the findings from this evaluation. The COVID-19 outbreak, which started in the UK in March 2020, and the series of national lockdowns that ensued, placed a renewed focus on homelessness. Aside from key workers, people were not allowed on the street, which culminated in people experiencing homelessness being housed in various places, including hotels. The qualitative data collection for this evaluation was collected during a period when lockdowns were being eased and the quantitative data collection periods overlapped with the national lockdowns.

## Methodology

This study employed an exploratory sequential approach of mixed-methods, where the qualitative data and analysis received more emphasis and also informed the quantitative data and analysis. A pre/post-test design was used to test the effect of the programme on quantitative outcomes such as hospital readmission rates and accommodation. Qualitative methods were employed to gain insight into the processes involved in the implementation and delivery of the programme from the perspectives of staff and stakeholders. Qualitative data was analysed prior to the analysis of quantitative data.

### Qualitative data collection

Seventeen one-to-one semi-structured interviews were conducted between March and September 2021. Participants were purposively sampled to include a majority of staff/stakeholders who had worked closely with the Hospital In-reach project team over the previous year from both hospitals and the community setting (n=10), staff who are employed as part of the Hospital In-reach team (n=5). Two people with lived experience of homelessness also volunteered to share their personal experiences.

The 10 interviews with hospital staff and stakeholders included a purposeful sample from housing, health and social care community services, and from both of the acute hospitals in Edinburgh. All of these interviewees work in close contact with the Hospital In-reach team and/or PEH and included clinical nursing and medical staff, housing and homelessness staff, and managers, amongst other roles.

An interview topic guide informed the interviews, and the primary focus for staff/stakeholder interviews was on the perceived barriers and facilitators to delivery of the programme, and how the programme has impacted future practice and collaborative working between partner organisations. For PEH who were recipients of the intervention, the interview focused on the perceived effects of the programme on their general health and wellbeing, any changes to accessibility of services, accommodation, or health behaviours as a result of the intervention, in addition to their perceptions regarding how the intervention was delivered. Data was collected using video (Teams/Zoom) or telephone interviews due to the COVID-19 restrictions in place at the time.

## Quantitative data collection

Cyrenians and NHS/partner organisations are responsible for the set-up, recruitment and delivery of the intervention. Cyrenians have a purpose-built electronic records management system for this project and they used to send the research team aggregate and anonymized data for this evaluation. This quantitative part of the evaluation aimed to determine the impact of the Hospital In-reach project, mainly on hospital readmission rates. Historical referral data for the 12 months prior to initial referral to the Hospital In-reach intervention were used from February-September 2020 (Baseline/recruitment phase). Prospective referral data were also collected by the Cyrenians at six and twelve months follow-up (October 2020 - March 2021 and April 2021 – September 2021 respectively) for the patient cohort that were recruited following referral to the programme during the baseline period. The Cyrenians anonymised and securely shared aggregate data with the research team for analysis.

By using aggregated data rather than individual data, it was not possible to identify any individuals from the data. For example, Cyrenians supplied the research team with total and mean number of readmissions at each time point, percentage of male/female readmissions at each time point, proportion of patients within each housing status category (rough sleeper, hostel accommodation, emergency accommodation, private tenancy etc) and referrals specified age groups.

## Data Analysis

*Qualitative analysis:* Thematic analysis [15] was used to analyse the qualitative data. Transcripts were read and re-read by two of the research team and then coded to develop a coding framework. One researcher independently coded the interviews from the key hospital and community staff/stakeholders and the other researcher individually coded the transcripts from the Hospital In-reach project team and people with lived experience of homelessness. Both researchers then met to refine the coding framework to be used for the remaining analysis. All transcripts were held securely on the University of Edinburgh Datasync system, where coding was applied to all transcripts, before codes were then developed into broader themes. A consensus meeting was held to agree upon any discrepancies identified in the coding and agreement reached on the final findings.

*Quantitative analysis:* Descriptive analysis using proportions were calculated for important variables across baseline (implementation-6 months), 6-12 months post- implementation and 12-18 months post- implementation. During the first 6 months of the Hospital In-reach implementation, patients referred to specific interventions on the programme were recruited to the study cohort and followed up over the following 12 months. The percentage change in readmission rates were assessed using the Wilcoxon signed rank test to compare patient's historical admission rates in the 12 months prior to Hospital In-reach referral with their readmission rates at follow-up (12 months post-baseline). Results were presented as means and proportions. Level of significance for all analyses was set at  $p \leq 0.05$ . All analyses were conducted using SPSS statistical analysis software.



## Ethics

Aggregate data from the Cyrenians recording system was the primary source of routine data collected to evaluate the intervention. Data transfer complied with GDPR regulations, and was securely supplied onto a password protected laptop. Ethical approval for this study was granted by the School of Health in Social Science, University of Edinburgh Ethics Committee. Written informed consent was obtained from all participants prior to interview and all interviews were recorded and transcribed verbatim prior to data analysis.

## Findings

### Qualitative findings

Analysis of the 17 participants' data (including two participants - male and female - with lived experience of homelessness) resulted in the following seven themes:

1. Bridging a gap between hospital and community services
2. Ensuring better care in hospital and treatment adherence
3. Facilitation of safe, appropriate and timely discharges into the community
4. Improved decision making through more informed communication between community homelessness/housing and hospital services
5. Ongoing support in the community
6. Factors influencing the successes of the Hospital In-reach project
  - Facilitating dialogue between services
  - Knowing, and respecting, role boundaries
  - Tenacity and time
7. Cautions and challenges

### **Bridging a gap between hospital and community services**

All of the staff/stakeholder participants spoke about the multiple ways that hospital and community services struggle to work well together to meet the needs of PEH and the urgent need for a service such as the Hospital In-reach project. A lack of communication between services was identified as a key issue. There was a strong consensus among both community and hospital staff/stakeholders that the Hospital In-reach project acts as an essential bridge between acute hospital and community homelessness/housing services to reduce homelessness.

*'They [Hospital In-reach team] are bringing assistance to navigate the often complex bureaucracy of the health and social care system. So there's a clear benefit to the people experiencing homelessness.'* [R5, hospital staff/stakeholder].

*'On hospital discharge they do not end up on the streets with their belongings in storage any more... it is definitely making an impact on actual homelessness.'* [R3, community staff/stakeholder].

Staff/stakeholder interviewees particularly benefited from the high levels of expertise and knowledge that the Hospital In-reach team had in housing and homelessness services.

*'The best thing about them [Hospital In-reach team] is their expertise and advice on housing and homelessness. They know who to ask and the system out there and they are really helpful. It saves us hours sometimes going round in circles trying to get in touch with housing and the wrong people and all that.'* [R10, hospital staff/stakeholder].

All of the staff/stakeholders interviewed were extremely positive about the Hospital In-reach team and, without exception, thought that the team were extremely helpful to their day-to-day working lives.

*'I think overall, categorically from feedback from staff, they've [Hospital In-reach team] been really, really helpful...They are proven to be very, very beneficial and helpful, and it's taking that chunk of time that nursing and medical staff need to do their jobs.'* [R8, hospital staff/stakeholder].

*'I think it's gonna need to stay in the long term if we can help people to kind of get rehoused and stabilised and their health and their medication and they want to make positive changes. It makes sense to do that, 'cause otherwise there is the cost to in-hospital beds think...I would love it to continue as I think it has been really successful.'* [R15, community staff/stakeholder].

Interviewee R14 articulated the opinion of all of the participants in the study that the Hospital In-reach project was an asset to their work, and lives, and they thought it should continue:

*'I hope it [Hospital In-reach programme] can continue because it's certainly an asset when they are involved. People do move on too much safer conditions and safer environment and actually have somebody shouting and arguing their case when they [PEH] are unable to, really helps too.'* [community staff/stakeholder].

This positivity was echoed by the two interviewees with lived experience of homelessness. One of the interviewees, who had experienced over 12 years of homelessness and multiple hospital admissions, expressed:

*'I couldn't be more happier like, the [Hospital In-reach project] staff were phenomenal... absolutely phenomenal. When told about my discharge, they were there every day, or when*

*they could, making sure that I had some accommodation from when I came out of the hospital' [LE1].*

These accounts were in stark contrast to staff and patient experiences prior to the implementation of the Hospital In-reach project. All of the interviewees gave accounts of previous experiences when the health, housing and social needs of PEH had not been adequately met, contributing to frequent readmissions to hospital. Hospital staff/stakeholders spoke of inappropriate discharges onto the streets and other unsuitable environments.

*'I do think the bottom line is we need to ensure somebody has somewhere safe to go to when they leave hospital and often they don't.'* [R4, hospital staff/stakeholder].

There was a general feeling expressed of being 'driven by the system' [R9, Hospital staff/stakeholder] and staff/stakeholder participants spoke of how difficult it was to get appropriate and timely housing resource for discharge. These interviewees asserted that there were huge pressures on the whole health and social care system to ensure a rapid turn-over of hospital beds, which resulted in unsafe and rushed discharges.

*'There's a lot of pressure within the NHS and especially through the covid times and I think that culture unfortunately is embedded in the NHS. No matter how much we talk about looking at a person holistically, it's what we're all taught to do as nurses. But actually how well we practice it is something else... so I think people are aware they should be looking at the social aspects, but in practice, I don't think they are. They are driven by the system. We need to turn over our beds. We need to get people out'* [R8, hospital staff/stakeholder].

The difficulty seemed often to be that the patient was seen as medically fit for hospital discharge, but multiple social issues – including suitable housing - remained unresolved:

*'Yeah, I found the patient quite tricky because the consultants - from our point of view – they said that they're good to go [for discharge] and even though the patient has capacity, yes they were... they were very healthy. They didn't need OT [occupational therapy], they didn't qualify for that and they didn't need physio but they had nowhere to go.'* [R1, Hospital staff/stakeholder].

In addition to these system level drivers, many of the hospital staff/stakeholders gave examples of how discharges were inappropriate due to: 1) a lack of knowledge by hospital staff of appropriate community homelessness/housing services and an inability to contact the relevant services; and, 2) lack of understanding of the needs of PEH by general hospital staff. Interestingly, clinical staff/stakeholders in the hospital setting did not discuss a lack of appropriate housing as an issue, although this was recognised by the Hospital In-reach team as a key issue.

*'It was always really difficult to get in touch with housing. And even if people were asking you to help them with. Like ongoing concerns or even layers of concerns. I've rolled with an issue and just going back and forward and you could never get to speak to any of the housing officers that were involved.'* [R10, hospital staff/stakeholder].

*'There are so many of these community services that are for patients that they [PEH] don't predominantly fit into that they need rehab..but they're younger than 65, so it's they're kind of like the forgotten group of people...so I sometimes feel like I spend my days chasing these complex discharges. oh, I wish, I wish..I wish that someone would point me in the right direction so I could at least speak to this right person.'* [R1, Hospital staff/stakeholder].

In addition, patients and staff/stakeholders said that they felt that PEH were often stigmatised in hospital and found treatment adherence difficult:

*'Quite a lot of stigma is attached to those patients [PEH] both in hospital and even the team seeing them. So if you spoke to countless unnecessary experiences of stigma on behalf of other staff because they see them, you know there... it's quite a skill set to manage well and you don't get managed very well in hospitals, so it's just horrible to conform to very rigid, very structured places. The patients have to fit in with the structure that's imposed upon them, and that can be very difficult for homeless people or drug users.'* [R9, hospital staff/stakeholder].

On the community side, homelessness/housing services spoke of how they were frequently not informed of hospital admissions, resulting in patients losing their accommodation. Several community interviewees explained how it was very difficult being on the outside of the hospital system and to contact the most appropriate member of hospital staff about discharge or ongoing care.

*'Before the Hospital In-reach team were there, it really was kind of a mess getting through to the hospitals. Everybody recognises how much pressure the wards are under but sometimes trying to get through to a ward was an impossible task or obviously also for confidentiality  
And GDPR reasons they were unable to share more than surface information'* [R6, community staff/stakeholder].

They also explained that it is not compulsory for clients to tell landlords that they have been admitted to hospital, so landlords are often not aware of the reasons that rooms are empty. Explaining further, interviewees said that B+B/boarding house accommodation is flexible but accommodation might not be held for more than 24 hours if someone misses the evening curfew, which may result in them losing their accommodation. They went on to explain that if landlords know that somebody is in hospital, it means that it is possible to arrange to hold the accommodation open for longer.

The introduction of the Hospital In-reach team was seen as critical in addressing all of these issues by acting as an essential bridge in connecting hospital and community services in several important ways: 1) ensuring better care in hospital and treatment adherence; 2) facilitating safe, appropriate and timely discharges into the community; and, 3) improved communication with staff and patients, enabling longer engagement by patients with treatment and services, and more informed decision making between community homelessness/housing services and hospital.

## Ensuring better care in hospital and treatment adherence

Hospital staff/stakeholders frequently said that they felt that the work of the Hospital In-reach team ensured better care in hospital and treatment adherence. Interviewee R14 gives a clear explanation of how they see this working in practice:

*'Yeah, I think that if we can get people in and get them to stay. And then [since the Hospital In-reach project has been in place] most people have successfully managed to stay to the end of their admission, which means they've managed to stay abstinent from both drugs and alcohol. They've been prescribed opiate replacement therapy, or they've detoxed from alcohol. They've had their antibiotic treatment finished and that includes IV (intravenous) antibiotics..and we've had people who have had severe and musculoskeletal injuries. They have continued their physio treatment and being discharged from the hospital but also discharged in a much better kind of physical condition.'* [R14, community staff/stakeholder].

Several of the interviewees commented on the relational and holistic approach of the Hospital In-reach team with PEH. Building relationships with PEH, breaking down barriers and stigma, and offering additional support was widely seen by the hospital staff/stakeholders as crucial to the success of the Hospital In-reach team's work:

*I think for some of our client group they feel very neglected and they don't feel they're being listened to. So having the input from people who actually do spend the time with them and actually investing in them, it does help with ward management and people stay with treatment better* [R4, hospital staff/stakeholder].

One of the interviewees with experience of homelessness over many years explained how they had expected to 'recycle' through the hospital system again, but their involvement with the Hospital In-reach team has resulted in very different outcomes to previously:

*'At the beginning I thought, like oh yeah, just another organisation, you know, recycle - here we go again, they just want to know who you are. It cannae be just a numbers game, but I was completely wrong absolutely completely wrong with it.* [LE1]

*'As I said before, I just, I was thinking, oh, here we go, another organisation who just want to know who you are, just being nosy, so I wasn't really first taken with them. But then they persevered they kept coming back and back and back and then it was so nice to have somebody actually caring about you and being in the hospital. No one comes to see your home, or your family's not involved...but they came in and they helped me they made sure that I was okay'* [LE1].

Some of the hospital clinical staff/stakeholders acknowledged how difficult they sometimes find it to engage appropriately with people experiencing homelessness, especially harmful drug users, and said how much the Hospital In-reach team supported them:

*'So they have helped a lot with us because they can help to persuade people you know or we just need to stay. A lot of people want to come into hospital and leave, yeah, but they may need IV antibiotic therapy or something, so it's that persuasion as well that you know we just*

stay here. It gives us a bit of time to work in their housing and it helps them get better [R4, hospital staff/stakeholder].

*'There's also a clear benefit [of the Hospital In-reach team] to the nurses and other healthcare staff who are trying to do their best for that individual, but you lack the experience in these more social aspects around welfare benefits, housing and so on, and they don't have the time or the expertise to do that so they're almost universally delighted when the Cyrenians approach them to say hello...I think, by and large, they've been you know, warmly welcomed particularly there are particular wards and departments that see a disproportionate number of people experiencing homelessness.'* [R5, hospital staff/stakeholder]

### **Facilitation of safe, appropriate and timely discharges into the community**

There was a very strong consensus by staff/stakeholders that one of the biggest impacts of the Hospital In-reach project was that the team had enabled more discharges to be delayed until appropriate housing solutions had been put in place, which, they asserted, resulted in much better health outcomes for patients and reduced hospital readmissions.

*'I think in terms of the kind of hospital in-reach [Hospital In-reach] team, there's been that kind of huge kind of drive to delay discharges and avoiding quick discharges and we know that nowadays to get kept in hospital, you still have to be fairly acutely unwell and medically unwell for them to keep you at all.'* [R14, community staff/stakeholder].

*'The outcome is just so much better [due to the Hospital In-reach project], so I suppose it gets a bit more continuity to discharges and then they're aware that someone would be discharged within a certain time and they are able to plan and the best place for people to go.'* [R10, hospital staff/stakeholder].

This stood in stark contrast to the previous experience of many of the hospital staff where they had sent people in a taxi to The Access Point, the statutory homelessness/housing hub, where accommodation was often not found and people were discharged on to the streets. This was particularly acute for people discharged on a Friday afternoon when community services were closing for the weekend.

Some of the hospital staff/stakeholders also saw that the impact of the Hospital In-reach project was to empower staff on the wards to advocate for delayed discharges too.

*'I think it's highlighted to the ward staff how complicated and how difficult some peoples living situations actually are, so I think it's kind of brought it to the forefront of a lot of staff members, You know, so they're more understanding and they will actually certain wards anyway and now they will delay discharge until housing is in place or until they the Hospital In-reach project have seen them.'* [R13, hospital staff/stakeholder].

Many of the staff/stakeholder interviewees said that the 10 beds in the 'step-down' facility, Milestone House, had made a significant impact to enable planned discharges, especially

when someone had nowhere to go, or needed some additional support before moving on to appropriate housing.

*'A lot of patients have managed to go from hospital and continue their recuperation at Milestone. So that's been a huge help as well.'* [R13, hospital staff/stakeholder].

*'Since the in-reach [Hospital In-reach] team started, there's a high proportion of the people that have been in here [Milestone House] and have all gone on to stay in safe, secure accommodation...in fact, nobody's been asked to leave and sent out into nothing, so everybody's been discharged to safer accommodation,'* [R14, community staff/stakeholder].

### **Improved decision making through more informed communication between community homelessness/housing and hospital services**

For the community staff/stakeholders, the most important benefit to them of having the Hospital In-reach project was that they were informed of hospital admissions and could therefore manage the housing tenancies much better. One housing manager, who deals with some PEH who present with the most complex of issues, asserted that:

*'The Hospital In-reach team will forward us [housing service] emails just to let us know that somebody has been admitted so it just cuts through the bureaucracy and gives us another opportunity to just step in immediately and stuff'* [R3, community staff/stakeholder].

They went on to explain how difficult it is to phone an acute hospital and get information on whether someone has been admitted due to bureaucratic and confidentiality issues:

*'If they [PEH] don't return to their accommodation, so the fact that we can phone them [Hospital In-reach team] and see if somebody has been admitted makes a huge difference because they will usually tell us that so and so has been admitted, is expected to maybe be discharged and then there will be some leeway with the B+B's'* [R6, community staff/stakeholder].

*'So now to know that there is a Hospital In-reach team is there and they have that link [/in the hospital] makes it easier for us to get information or pass on information and just to ensure that everybody was involved with the client so that the client is obviously always at the core of our services'* [R3, community staff/stakeholder].

To illustrate the difference the Hospital In-reach team had made to reducing hospital re-admissions, several of the staff/stakeholders gave specific case-study examples of patients who had not returned to hospital following the Hospital In-reach team interventions and asserted that, *'I think they [Hospital In-reach team] are absolutely instrumental in reducing hospital re-admissions* [R8, hospital staff/stakeholder].

*'One of the things that we see it certainly that makes our service work better is that people are seen in the hospital before they come into us [Milestone House], so the engagement starts quite early on. We'll know what to expect when they're coming in, because it's already been talked about. It's already been agreed and I think that the in-reach [Hospital In-reach]*

*team are very good at looking at what needs to be put in place to make that that transition from hospital to here much smoother and nine times out of ten, that's around their medications and prescriptions. If they're not right, people won't stay and they won't engage and so that the in-reach team are fantastic at that.'* [R14, community staff/stakeholder].

### **Ongoing support in the community**

*'the Cyrenians have been really supportive and get as much information. I know even people. I can ask them questions anytime I want and they are you really supportive and give me the best kind of advice as well when I need to as well for somebody else that they're not working with.'* [R15, community staff/stakeholder].

Many of the hospital staff/stakeholders talked at length about the ways that the Cyrenians Hospital In-reach team worked with patients to ensure that they had appropriate prescriptions on discharge, which helped improve medication adherence. Furthermore, they ensured that follow-up appointments were arranged and accompanied them to these appointments if needed.

*It [Hospital In-reach team] definitely helps with medicine adherence for sure, and just that ongoing support and encouragement* [R4, hospital staff/stakeholder].

*And if somebody doesn't...if they fall off their script. You know they're able to help them get back on us, and they have the Contacts and they know who to go to, so I think it's, it's huge even with antibiotics simple things as well. Yeah, it's just that we remind us that somebody on the outside not in a uniform going come on take your medication is really important* [R8, hospital staff/stakeholder].

*'being able to go to Milestone and treatment can continue at milestone so people have finished an antibiotic therapy in wound care, and hep C treatment you know and stabilized on methadone... and other pain relief.'* [R13, hospital staff/stakeholder].

Many of the staff/stakeholders, in both hospital and community, commented on the time that the Hospital In-reach team spent with PEH and how they felt that this contributed to a much better uptake of follow-up appointments for specific patients.

*'The Hospital In-reach Project will go above and beyond. You know, ensuring that people attend medical appointments. Kind of the following patients and take them to kind of follow up appointments.'* [R13, hospital staff/stakeholder].

*'I think a lot of my patient group would just never attend [outpatient appointments] previously so I think they [Hospital In-reach team] did manage to go to get them to continue with physio things like that and it's all the things that we would never have happened before.'* [R13, hospital staff/stakeholder].

### **Factors influencing the successes of the Hospital In-reach project**



The majority of the patients and staff/stakeholder participants interviewed identified the relational aspects of the work of the Hospital In-reach team as central to the success of the project. Factors specifically identified were: 1) constant dialogue between services; 2) knowing their role and not 'stepping on toes'; and, 3) tenacity and time.

### ***Facilitating dialogue between services***

Interviewees spoke of the ways that the Hospital In-reach team adopted an inclusive approach to relationships with staff and patients, and facilitated excellent communication between and within service areas:

*'The consistency, the great communication, kind of from the Hospital In-reach team with us. There's a constant dialogue with the Hospital In-reach team and the housing first, because our paths crossed so often, so that's certainly one of the main drives for success and there's a real safety net [R6, community staff/stakeholder].*

They continued by explaining that the Hospital In-reach team made sure that everyone was involved and 'in the loop', including patients:

*'It [Hospital In-reach team]... make sure that they know everybody is in the loop.'* [R6, community staff/stakeholder].

*'They [Hospital In-reach team] were in conversations and chats with the patient all the time, so it was very much like and she would keep us up to date...so there was always very clear lines of communication so you know I found it. I found it helpful.'* [R1, Charge Nurse].

One of the factors that was commonly cited by the staff/stakeholder participants was the friendly, non-judgemental and approachable attitude of the Hospital In-reach team.

*'They've got great personalities and they've... they've definitely got the right attitude to deal with the client group.'* [R4, hospital staff/stakeholder]

*'At the end of the day as well and not just about qualifications and actually being able to engage with somebody [experiencing homelessness and/or harmful drug use] is probably the most important thing.'* [R8, hospital staff/stakeholder]

Both interviewees who had lived experience of homelessness described the positive, caring, genuine attitude of the Hospital In-reach team towards them as very important for their engagement with services and recovery. Participant LE1 explained the difference it made to them:

*'I had such a warm feeling, to know that that they [Hospital In-reach team] actually did care and they did have my best interest at heart, now that was the best feeling ever...I can't describe the how much [member of the Hospital In-reach team] changed my life for the best.. the best that's come out of this is all due to the Cyrenians and it's unbelievable how such a small act of kindness can go such a long way'.*

### **Knowing, and respecting, role boundaries**

Several hospital staff/stakeholders commented on the positive ways that the Hospital In-reach team worked very well together and respected the role boundaries of other staff.

*'I think it is having a team where their expertise is not overlapping with my expertise and it's entirely additional and separate and adds as much as the medical expertise to their patients outcomes, if not probably more'* [R9, hospital staff/stakeholder].

In addition, many of the staff/stakeholders commented on the strong existing networks that the Hospital In-reach team had with housing, homelessness and community services, and the value that this brought to partnership working.

*'It's not just knowing people in the wider third sector but also within the City Council and social work...it is the social network of people working within the wider sector.'* [R5, hospital staff/stakeholder]

### **Tenacity and time**

A number of the staff/stakeholders drew attention to the tenacity of the Hospital In-reach team and how they would not give up on sorting an issue out for a patient/client.

*'Kind of, I think they all like, dogs with bones, but for all the right reasons that cause the case for the client.'* [R3, community staff/stakeholder].

*'They're very clear with people when they're doing it, and that's what they're going to do. And then they follow it through.'* [R15, community staff/stakeholder].

There was also recognition that it took a considerable amount of extra time and energy to keep going and to 'follow through' on problems. The Hospital In-reach team were often compared to the work of social workers and staff/stakeholders perceived that the Hospital In-reach team had more time to sort these issues.

*'If a social workers involved, they can't spend that intensive time that the hospital in reach can [Hospital In-reach team]. It's all about that discharge and that transition to somewhere else. So they are able to spend a huge amount of time in putting the things in place and I haven't seen any other service doing that as effectively as they have, so I would like to think it would continue.'* [R14, community staff/stakeholder].

Several of the interviewees commented on the 'can do' attitude of the Hospital In-reach team:

*'They [Hospital In-reach team] did everything – they arranged the discharge to Milestone house...they basically spoon fed me what to do.'* [R1, hospital staff/stakeholder].

*'The in-reach [Hospital In-reach team] are just so good at saying, OK, I'll take that on. I'll go and speak to the consultant or algorithm. Pick up the medications and you know that they're*

*very, very good at addressing as much as they can before people get even through the doors.'* [R14, community staff/stakeholder].

Nonetheless, they did caution that this approach to service delivery can be labour intensive for the team, and this was identified as one of the challenges for the Hospital In-reach project.

## **Cautions and challenges**

Many of the hospital staff/stakeholder interviewees highlighted the bureaucratic difficulties that a third sector team working within an acute hospital environment encounter and the protracted length of time that it took to overcome these barriers. After over a year, the Hospital In-reach team still didn't have access to the NHS medical record system, which was widely recognised by staff/stakeholders as extremely frustrating and limiting to the work of the project. Several hospital staff also commented on how difficult they felt it must be for the Hospital In-reach team not to have an office or base in the hospital. There was concern that the Hospital In-reach team had to make phone calls in the middle of the corridor or in other people's offices and this raised issues in relation to confidentiality.

*'Bureaucracy and coronavirus have been the big two barriers [for the Hospital In-reach team to overcome.]'* [R5, hospital staff/stakeholder].

Following on from these concerns, some anxieties were expressed in relation to the governance structures within the project. Most staff/stakeholders knew who to contact in the Cyrenians Scotland if they had concerns with the Hospital In-reach team, but some questions were raised as to whether the Hospital In-reach team were held to the same stringent health, safety and confidentiality regulations as NHS staff.

*'What you're seeing and what you understand and what you can take from what you're reading on track because it is very medicalised. Yeah, and I think a lot of if they're going to be doing that, I think there is a lot of support that's needed in confidentiality and information sharing, which I think we all need to be better at.'* [R8, hospital staff/stakeholder].

There were ambiguities expressed by several of the hospital staff/stakeholders as to the exact role, responsibility and referral criteria for the Hospital In-reach team. A number of staff/stakeholders both within and out with the hospital environment acknowledged that they did not fully understand the distinction between the Hospital In-reach team and other services, particularly social work and occupational health services. There were a small number of instances where staff/stakeholders had found it confusing to know which service was the most appropriate to contact, or there had been a misunderstanding between these services and the Hospital In-reach project. All of the interviewees who highlighted this issue asserted that this would improve over time as the role of the Hospital In-reach project became clearer and more established over time.

*'Maybe social work are kind of passing things on to the Hospital In-reach project, which it would maybe be more appropriate for the social work and team to be involved in.'* [R13, hospital staff/stakeholder].

Many of the participants who were hospital staff said that they needed to publicise the service more. Some staff were unsure and wary at first, such as social workers and OTs.

The Hospital In-reach project seemed to be well known in certain areas: respiratory, orthopaedics, infectious diseases, drug and alcohol services [R13, hospital staff/stakeholder]. It was widely recognised that it had been very difficult for the team to get to know all areas in the hospitals due to COVID-19 and widespread optimism that this would improve as covid restrictions were relaxed.

Several of the staff working within the hospital environment were concerned for the health and well-being of the Hospital In-reach team coming into a very busy acute hospital environment and one interviewee described it as a 'baptism of fire',

*'I don't know whether baptism of fire coming into that environment. Maybe more about how they are looked after as a team and what their needs might be in terms of, you know, training, rank, trauma, exposure, things, because even just walking into a hospital environment is quite shocking and daunting.'* [R4, hospital staff/stakeholder].

It was widely agreed by the majority of interviewees that the demand for the project outweighed supply and that the fragility of the funding was a difficulty going forward.

*'The demand is more than they can meet, I think so more staff yeah better more awareness around the hospital... I think this this kind of collaboration with third sector needs to grow...it is not mainstreamed at all and so that also makes it fragile going forward.'* [R9, hospital staff/stakeholder].

## Quantitative findings

Table 1. Total referrals to the Hospital In-reach programme

Variable	Baseline (0-6 months post-implementation) n=245 (%)	6-12 months post-implementation, n = 209 (%)	12-18 months post-implementation, n = 314 (%)
Sex			
Male	193 (79)	156 (75)	208 (66)
Female	52 (21)	51 (24)	106 (34)
Unknown	0	2 (1)	0
Age			
16-24	10 (4)	10 (5)	31 (10)
25-34	49 (20)	41 (20)	61 (19)
35-44	74 (30)	74 (35)	105 (34)
45-54	49 (20)	50 (24)	72 (23)
55-64	23 (9)	15 (7)	29 (9)

≥ 65	9 (4)	7 (3)	10 (3)
Unknown	31 (13)	12 (6)	6 (2)
Accommodation type on admission			
Tenancy	12 (5)	21 (10)	37 (12)
Temp. tenancy	53 (22)	37 (18)	65 (21)
Shared housing (B&B)	56 (23)	50 (24)	97 (31)
Hostel/supported	29 (11)	33 (15)	33 (10)
No fixed abode	95 (39)	68 (33)	82 (26)
Intervention type			
Casework	38 (16)	16 (7)	16 (5)
Light touch	33 (13)	35 (17)	76 (24)
One touch	35 (14)	65 (31)	93 (30)
D/C prior to contact	79 (32)	39 (19)	48 (15)
Service not required	60 (25)	54 (26)	81 (26)

Table 1 shows the total number of referrals to the Hospital In-reach project, from February 2020 to October 2021. 245 referrals were made to the Hospital In-reach project during the baseline period (implementation to 6 months post-implementation). However, the number of referrals decreased to 209 six months post Hospital In-reach implementation and increased to 314 twelve months post implementation. These total referral figures may also include multiple referrals of the same individual. Overall, more men than women were referred to the Hospital In-reach project. However, it appears that the proportion of women referred to the Hospital In-reach project increased over time. For instance, at baseline, of every five referrals, about one (21%) was a woman. This increased slightly to 24% six months after the Hospital In-reach programme was implemented and at 12 months post implementation, slightly over a third (34%) of the total referrals were women.

Regarding age groups likely to be referred to the Hospital In-reach project, people aged 35-44 years were most commonly referred. This was consistent across the three data points. In terms of accommodation type on admission, 39% of those referred 12 months before the Hospital In-reach project was implemented indicated that they had no fixed accommodation. At 6-12 months post implementation, 33% were of no fixed abode and at 12-18 months post implementation a fewer proportion (26%) of those referred had no fixed abode.

Once individuals are referred to the Hospital In-reach project, support after discharge is often provided. However, across the three data points, it was clear that about a third of those referred did not require any further intervention. For those who required support, the proportion of those who received D/C prior to contact halved from 30% of total referrals at baseline to 15% twelve months post Hospital In-reach implementation. This is similar to those who received the casework intervention. Sixteen percent received a casework intervention during the baseline period. However, at 12-18 months post implementation, only 5% of the total number of referrals received support from case workers. On the other hand, it appears the proportion of those who received light touch and one touch interventions increased during that period. For instance, only 14% of the total referrals at baseline received one touch intervention, but this rose to 30% twelve-eighteen months post implementation.

Table 2. Mean number of hospital admissions (of any kind) in the 12 months prior to Hospital In-reach referral, 6-12 month post-implementation and 12 -18 months post implementation.

<b>Intervention (number of patients)</b>	<b>Baseline (Mean no of Admissions 12 months prior to Hospital In-reach programme referral)</b>	<b>Mean no of readmissions from baseline to 6 months</b>	<b>Mean no of readmissions from 6 months to 12 months</b>	<b>Mean no of readmissions from baseline to 12 months</b>	<b>% change from baseline to 12 months</b>
<b>All interventions (n= 66)</b>	3.2	0.5	0.6	1	-68.7%**
<b>Casework (n= 18)</b>	3.2	0.5	0.6	1.2	-62.5%*
<b>Light touch (n= 22)</b>	4.4	0.7	0.6	1.6	-63.6%**
<b>One touch (n= 26)</b>	2.2	0.3	0.1	0.4	-81.8%**

\* = P<0.05; \*\* = P<0.01.

Eighty-eight participants were referred to one of the three Hospital In-reach interventions over in the initial 6 month baseline/recruitment period. However, 17 patients had no historical admissions data available and were excluded from the analysis. A further one patient died prior to 6 month follow-up, and two died between 6 and 12 month follow up and were excluded from the interim and final analysis, respectively. A total of 66 participants were included in the overall analysis (table 2). For the whole sample with complete admissions data, receiving any Hospital In-reach intervention resulted in a significant reduction of 68.7% in readmissions compared to the 12 months prior to initial Hospital In-reach referral (p<0.01). For the 18 patients who received a casework intervention, a statistically significant reduction in readmissions of over 60% was observed (p<0.05). Similarly, significant reductions in readmissions were observed in participants who

received either the light touch or one touch interventions, with 63.6% and 81.8% less readmissions, respectively (both  $p < 0.01$ ). Of the seventeen patients with missing historical admissions data, only one readmission was observed over the 12 month follow-up period, meaning their exclusion from the analysis would have been unlikely to have changed the results obtained.

Table 3. Casework interventions provided and outcomes. N= total number of referrals requiring intervention. (%) = percentage of those requiring intervention for which a successful outcome was achieved.

<b>Area of support provided</b>	<b>1<sup>st</sup> data collection point N=31 (%)</b>	<b>2<sup>nd</sup> data collection point N=21 (%)</b>	<b>3<sup>rd</sup> data collection point N=18 (%)</b>	<b>Mean percentage across three time points</b>
Completion of inpatient treatment	27 (87)	21 (100)	13 (72)	86%
Support follow-up treatment acute	13 (42)	13 (62)	11 (61)	55%
Access primary care services	19 (61)	19 (91)	13 (72)	75%
Appropriate accommodation sourced for discharge	24 (77)	10 (48)	4 (22)	49%
No fixed accommodation to appropriate housing	15 (48)	10 (48)	13 (72)	56%

Table 3 describes the proportion of patients who were successfully managed with regards to treatment completion/support, linking with primary care, and sourcing of appropriate accommodation prior to discharge. Across the Hospital In-reach programme cohort, 86% of those receiving interventions completed their inpatient treatment course, with 55% successfully following up acute treatment, while linking patients with primary care access post-discharge was achieved in 75% of admissions. Sourcing of appropriate housing post-discharge was achieved for 49% of individuals, while 56% of patients who had no fixed accommodation at admission were discharged to appropriate housing.

## Conclusion

This evaluation examined the implementation and delivery of the Hospital In-reach project from the perspective of stakeholders such as hospital and community staff, and Hospital In-reach project team members. It also examined the impact of the programme in relation to

readmission outcomes. It was clear that the Hospital In-reach project has significantly reduced readmissions by approximately 69% compared to the 12 months prior to Hospital In-reach referral. The qualitative element of the evaluation suggested that this significant reduction in readmissions was due to the work of the Hospital In-reach team in acting as an essential bridge, connecting hospital secondary care services and community homelessness/housing services. The Hospital In-reach project fills a gap in service provision by enabling improved decision making through more informed communication between community homelessness/housing and hospital services. This was widely seen by staff and patient interviewees as key to preventing discharges to inappropriate accommodation, including discharge to the streets, and in reducing readmissions to hospital.

Hospital secondary care staff viewed the Hospital In-reach team as an excellent resource in enabling PEH to engage better with treatment in hospital and to facilitate more planned, timely and appropriate discharges into the community. Community homelessness/housing services attributed improvements in services to their ability to readily contact the Hospital In-reach team within secondary care settings to ensure they were informed about admission to hospital. This allowed them to retain housing for PEH during this period and enabled early planning for discharge.

The project was widely welcomed by all of the staff interviewed, both in hospital and community settings, given its success in reducing hospital readmissions. The person-centred, holistic and relational approach employed by the Hospital In-reach team was widely viewed as critical in engaging with, and reducing admissions, for PEH. Across the period of the Hospital In-reach project, an increasing number of PEH had received either one touch or light touch interventions as they transitioned from hospital. However, during that same period, the number of PEH receiving casework intervention reduced, likely indicating that the Hospital In-reach project is contributing to reducing the number of PEH who may require more intensive intervention upon hospital discharge.

The introduction of Milestone House, the 10-bed step-down centre, during the COVID-19 pandemic was recognised by many of the patients and staff as having facilitated ongoing treatment adherence and allowed time for more appropriate discharge to the community. Additionally, the development of the algorithm to identify patients likely to be experiencing homelessness was highlighted as important during interviews. The addition of this within hospital information systems likely allowed for a significant number of PEH to be identified and referred to the programme, than would have been possible without this technology.

The increasing number of women referred to the Hospital In-reach team across the study period was interesting. It is recognised that women often constitute a higher number of the hidden homeless, who are less visible sleeping in hostels or with friends. It is likely that the challenges of the COVID-19 pandemic might have exposed this issue and brought these women to the attention of services. Nevertheless, the two participants who had experienced homelessness and multiple hospital admissions before were extremely positive about their experiences with the Hospital In-reach project, especially regarding treatment, care and discharge planning.



This evaluation has demonstrated that the Hospital In-reach project has contributed to improved outcomes for PEH, by reducing readmissions. It has bridged an important gap between hospital and community services and facilitated safe, appropriate and timely discharges of PEH into the community. All stakeholders involved found the Hospital In-reach project valuable, but they also recognised the unique challenges of navigating the various bureaucratic processes in hospitals, especially for a third sector organisation.

## Recommendations

- Requirement for proper long-term funding might be useful considering the impact of the project. A possible funding scheme between health and social care partnerships could be explored.
- Adequate publicity should be provided to the project to ensure that other departments or specialties within hospitals are aware of the Hospital In-reach project and its goals.
- Development of specific criteria for roles, responsibilities and criteria for referral to the Hospital In-reach team.
- Stronger and more transparent governance structures to be put in place, which align with NHS.
- Support for emotional needs of Hospital In-reach staff to ensure they are able to deal properly with hospital environment.

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