



THE UNIVERSITY *of* EDINBURGH

## Edinburgh Research Explorer

# Evaluation of the implementation of Street Support Edinburgh in response to the predicted increase in homelessness in Edinburgh following the COVID-19 pandemic

### Citation for published version:

Cuthill, F, Turner, K, Wolters, MK, Dadzie, A-S, Adams, E & Mercer, SW 2023, 'Evaluation of the implementation of Street Support Edinburgh in response to the predicted increase in homelessness in Edinburgh following the COVID-19 pandemic', *International Journal of Homelessness*.  
<https://doi.org/10.5206/ijoh.2023.3.14863>

### Digital Object Identifier (DOI):

[10.5206/ijoh.2023.3.14863](https://doi.org/10.5206/ijoh.2023.3.14863)

### Link:

[Link to publication record in Edinburgh Research Explorer](#)

### Document Version:

Publisher's PDF, also known as Version of record

### Published In:

International Journal of Homelessness

### General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

### Take down policy

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact [openaccess@ed.ac.uk](mailto:openaccess@ed.ac.uk) providing details, and we will remove access to the work immediately and investigate your claim.



ORIGINAL ARTICLE

International Journal on Homelessness, 2023, 3(3): page 1-15.

## Evaluation of the Implementation of Street Support Edinburgh in Response to the Predicted Increase in Homelessness in Edinburgh Following the COVID-19 Pandemic

Fiona Cuthill <sup>1</sup> | Kieran Turner <sup>1</sup> | Maria Wolters <sup>2</sup> | Aba-Sah Dadzie <sup>2</sup> | Emily Adams <sup>3</sup> | Stewart Mercer <sup>3</sup> |

<sup>1</sup> Centre for Homelessness and Inclusion Health, School of Health in Social Science, University of Edinburgh,  
<sup>2</sup> School of Informatics, University of Edinburgh  
<sup>3</sup> Advanced Care Research Centre, Usher Institute, University of Edinburgh

Corresponding Author: Stewart Mercer  
Email: [Stewart.Mercer@ed.ac.uk](mailto:Stewart.Mercer@ed.ac.uk)

All content published in IJOH is licensed under a Creative Commons Attribution-Non-Commercial-Share Alike 4.0 International license (CC BY-NC-SA 4.0).

Received: 20 April 2022  
Accepted: 22 Aug 2023

### Abstract

In response to the predicted increase in homelessness in Edinburgh, Scotland, following the Coronavirus disease of 2019 (COVID-19) pandemic, a 'live' digital resource, Street Support Edinburgh (SSE), was launched in the city in January 2021. SSE is a website and smartphone application run by Street Support Network (SSN), a registered charity, working online and offline, connecting and supporting local people and organisations to tackle homelessness. The resource is the first of its kind to be implemented in Scotland. This study aimed to assess the implementation of SSE in response to the predicted increase in homelessness in Edinburgh following the COVID-19 pandemic. A qualitative approach was taken to understand users' experiences of SSE. The evaluation found a generally positive response to SSE from organisations in the homelessness field. We report on nine themes developed through analysis of the qualitative data: positive feedback on SSE; need for SSE resources; uses of SSE; joined up-working; user-friendliness of SSE; suggestions for alterations to SSE; COVID-19 and other implementation challenges; need/opportunities for promotion and engagement; potential wider rollout across Scotland. In conclusion, initial responses to the launch of SSE have been generally positive, but further awareness raising is likely required to increase SSE reach as in-person services and COVID-19-related protections reduce. Ongoing evaluation is required to track progress over time.

### Keywords

homelessness, rough sleeping, mobile phone technology, smartphone application, app, mHealth, signposting, support services, citizen lead network, COVID-19.

## Introduction

### Background and Context

People who experience homelessness have the worst health outcomes in society (Fazel et al., 2014), are more likely to die at a young age (Homeless Link, 2015), and are less likely to access health improvement interventions due to

a range of different factors (Aldridge et al., 2018). Although much of the evidence on very poor health among people with lived experience of homelessness tends to be based on cross-sectional data collected on people living rough and in emergency accommodation, which tends to oversample people with multiple and complex

needs, a detailed report by the Scottish Government covered all forms of homelessness and used a range of data sources to report on health (Scottish Government, 2018). The focus of health and social care policy and practice in recent years has been on effective community-level interventions and prevention measures (Luchenski et al., 2018).

A decade ago, researchers suggested that mobile phone technology has the potential to enhance prevention, treatment, and research with homeless populations (Eyrich-Garg, 2010; Rice et al., 2011), and in the intervening years, mHealth has increasingly been used successfully as an intervention for people experiencing homelessness to improve connectivity with health and well-being services, and to better meet the health needs of this vulnerable group (Post et al., 2013). mHealth is defined as 'the delivery of health care services via mobile communication devices (Torgan, 2009), which can be used to access the Internet, in particular social networking sites, enable asynchronous messaging, and, in the case of smartphones, allow the download of customized apps. It should be emphasised though that digital inclusion does not necessarily lead to social inclusion (Bure, 2005).

There are an increasing number of digital mapping applications signposting those who are vulnerable to support services. Calvo et al. (2019, 2020) evaluated an app for people who inject drugs (both people experiencing homelessness, and those not) in Girona, Catalonia—the Populi Needle Exchange Point Finder. This app has a primary function of determining the geolocation of the nearest Needle Exchange Programmes in relation to the user based on their geolocation, and to provide useful information about these services. The app was evaluated by both service providers and those who inject drugs. People who inject drugs were positive about the app, and would use it, contrary to service providers' expectations. They noted that the app helped reduce stigma and manage the acquisition of needles. However, participants criticized an overload of information on prevention.

Greeson et al. (2020) evaluated the app Youth Matters: Philly, which was developed for youth experiencing homelessness or unstable housing. It was designed to help young people navigate the complex web of available services. Youth

Matters provides a searchable database of more than 350 resources aimed at young people aged 14-26, that are accessed through a map function based on geolocation. Ten young adults with foster care experience rated the app using the Mobile App Rating Scale (MARS) (Stoyanov et al., 2015). Overall, the app performed well on the MARS dimensions of engagement, functionality, aesthetics, and information, and less well on perceived impact, where the median rating was neutral.

Fischer et al. (2021) published a protocol for the development and evaluation of a digital health intervention for substance use reduction in refugees in Germany; the intervention will be a standalone smartphone app, accessible in several languages and utilising cognitive behavioural therapy and culturally adapted elements to encourage safer substance use and behaviour change. The primary outcomes are intervention feasibility and acceptance. Despite these developments in Europe and United States of America (USA), there are very few such apps in the United Kingdom (UK). In the section below, we explain the development of such an app in the UK, which we further developed in Scotland.

### **The Street Support Network and Street Support Edinburgh**

Street Support Network (SSN) are a registered charity working online and offline, connecting and supporting local people and organisations to tackle homelessness in the UK. Thirty locations at present are part of the SSN. There was concern at the beginning of the COVID-19 pandemic in March 2020 that there would be a detrimental impact on those experiencing homelessness (Tsai & Wilson, 2020) – and the lockdowns experienced have since impacted the economy and led to increased risk to jobs (Crisis, 2020).

Several groups called for a digital resource helping to bring together homelessness services in Edinburgh – as a way of centralising information, and also facilitating partnership working amongst those in the sector. In January 2021, Edinburgh became the first Scottish city to implement such a resource, as the University of Edinburgh partnered with SSN and Simon Community Scotland to create Street Support Edinburgh (SSE). To our knowledge, there have

been no peer-reviewed evaluations of resources implemented in Scotland. However, a recent UK-based study offers some insight into how people who are experiencing homelessness identify and locate appropriate health and social care services - mixed methods study in southwest England demonstrated that 49% of those currently sleeping rough found it very difficult to know how to access services during the COVID-19 pandemic (Heaslip et al., 2021).

The SSE was launched to the public in January 2021 following a videoconferencing event with approximately 40 representatives from organisations in Edinburgh involved with homelessness, held in December 2020, introducing them to, and providing an in-depth understanding of the resource. The public launch consisted of conventional and social media promotion, with the local press reporting on this. Electronic flyers were sent to included and partner organisations, and paper flyers were provided to drop-in centres and to community link workers in the summer of 2021. Through our partnership with Police Scotland, 2000 SSE business cards were printed, with a QR code, to distribute. It should be noted that the intention of SSE was only to help those at the extreme end of homelessness (rough sleepers) but also to help those at risk of homelessness.

### **Context: Local Response to Covid-19 Pandemic**

The study was originally designed with the purpose of evaluating the impact of SSE on homelessness in Edinburgh. However, the COVID-19 pandemic brought about substantial societal and policy change, necessitating altering the study focus. In response to the COVID-19 pandemic, the Scottish Government introduced the Coronavirus (Scotland) Act in April 2020, providing increased protection to renters by extending the notice period needed to be given by landlords, to six months (ScotGov, 2021a). Eviction bans were also put in place by the Scottish Government throughout the winter of 2020, and these were extended to the end of March 2021 for those living in areas affected by continuing localised lockdowns. The UK government furlough scheme, first announced in March 2020, provided support to reduce redundancies, and has been extended several times, with a plan to wind down by September

2021 (House of Commons, 2021). Locally, in Edinburgh, a scheme to minimise rough sleeping, and reduce COVID-19 transmission was put in place throughout the peak of the pandemic. The Rapid Re-accommodation Welcome Centre operated from October 2020 to May 2021, run by a partnership of organisations in Edinburgh - utilising a city hotel to provide accommodation but also to reduce COVID-19 transmission and ensure no homeless persons through lockdown was put in place (Bethany Christian Trust, 2020a) was held after a similar service was provided from April-July 2020 (Bethany Christian Trust, 2020b).

As a result of these COVID-19 measures, there were fewer evictions than anticipated during the pandemic, and for many people, emergency accommodation mitigated returning to street sleeping. For example, upon the introduction of COVID-19 restrictions, the number of new homelessness applications declined 9% from the year 2019/20. However, on balance, the number of those housed in temporary accommodation with open homeless cases increased by 12% (ScotGov, 2021b).

Given the continuing support services in Edinburgh discussed above, along with lack of in-person services taking place for most of 2020, and parts of 2021, we determined it would be difficult to understand the impact on homelessness of the introduction of SSE. As such, we instead primarily sought to undertake an evaluation of the initial experiences of SSE by stakeholders, and its implementation. Our primary aim was to evaluate the implementation of SSE in response to the predicted increase in homelessness in Edinburgh following the COVID-19 pandemic. Our objective was to understand the early experiences of SSE, from the perspective of those likely to engage with SSE.

## **Methods**

### **Study Design**

The study was a qualitative evaluation utilising in-depth semi-structured interviews to meet our objective: to understand participant's early experiences of SSE and its implementation.

### **Sampling**

We created a pragmatic sampling framework that categorised organisations and their services (based on categories of support listed within SSE - e.g., accommodation services, food banks, debt advice, mental health services), and by the sector of that service (e.g., third or charity sector, religious organisation, local authority, health/emergency services, private sector). Purposive sampling was utilised to ensure representation across varying areas of homelessness services and associated areas of delivery, different sectors providing those services, and where possible, from people with lived experience of homelessness.

### **Recruitment**

An initial recruitment email was sent in May 2021 to representatives from 43 organisations – those with their details included on the SSE resource, and other key organisations not directly listed (e.g., Police Scotland). Individual emails were sent, and telephone calls to key contacts were made within organisations when interest was registered. A follow-up email was sent to organisations that had not responded in early July. Twenty-six organisations did not respond to the invitation, and four organisations indicated interest but interviews were unable to be scheduled.

### **Data Collection Procedures**

Fifteen interviews with 16 participants (interview number five included two development workers as shown in Table 1) were conducted between May and July 2021 – with SSE having gone ‘live’ in January 2021. All interviews were conducted on Microsoft Teams or by telephone and lasted between 11 and 43 minutes. Potential participants were provided with an information sheet and were given the chance to ask questions before providing written informed consent. All interviews were one-to-one, apart from one interview where two participants were present. All interviews were conducted by one male researcher (KT). The topic guide (Appendix 1) covered participant knowledge of SSE and any use of the resource; the perceived need for SSE; their views of the launch and ideas for further engagement of SSE; challenges to implementing and engaging with

SSE (including COVID-19) and suggested changes/services missed on SSE; potential governance and funding models for a resource like this; and wider rollout across Scotland.

### **Data Analysis**

All interviews were recorded, and transcribed verbatim and any identifiable information was removed to pseudonymise the data. All interview audio recordings were held on a secured University server. Braun and Clarke’s (2006, 2019) thematic analysis was used, broadly incorporating the six stages of analysis, including familiarisation with the data; coding; building of a thematic framework; arranging and indexing the data; developing a framework matrix; and comparing and contrasting the data. One reason for the current popularity of thematic analysis in qualitative research is that it provides a clear and structured process for data coding and analysis, along with a broad philosophical base that can be used across a range of different research theoretical positions (Ritchie et al., 2013).

An important part of thematic analysis is that it allows the researchers to move iteratively between the data to a level of abstraction, while not losing sight of the raw data as a whole. The findings were then interpreted within the wider context of homelessness and the framework agreed across the whole data set. KT led the coding and development of themes, and these were then agreed upon by the wider research team.

### **Ethics**

Ethical approval was obtained from the School of Health and Social Science at The University of Edinburgh.

### **Findings**

#### **Participants**

Sixteen participants took part in fifteen interviews. Detailed participant roles and the sector/scope of their organisations can be found in Table. 1. Participant affiliations included the local authority, emergency services, third and charity sector organisations, and religious organisations. One participant had lived

experience of homelessness. The fifteen participants interviewed in a professional capacity (all apart from the lived experience **Table. 1.**

interviewee) were based across thirteen different organisations.

*Interview Participant Roles and Sector/ Broad Scope of Their Affiliated Organisation.*

<u>Interview no.</u>	<u>Organisation</u>
1	Manager - Homelessness accommodation charity
2	Homelessness strategy - Local Authority
3	Communications coordinator - youth homelessness charity
4	Manager - homelessness charity
5	Development workers x2 - housing and homelessness charity
6	Outreach coordinator - homelessness charity
7	Individual with lived experience of homelessness
8	Street outreach team leader - charity
9	City Centre Sergeant - Policing
10	Manager - Mental health charity
11	Community Link Worker - homelessness charity/health service
12	Service manager - Local authority
13	Team leader - homelessness charity/religious organisation
14	Minister - Religious organisation/Charity
15	Manager - training/employability charity

We report on nine key themes that were developed through analysis of the qualitative data.

**Positive Feedback on SSE**

The general response to SSE from organisations in the field was positive – with many discussing looking forward to the launch of this when being invited to be listed on SSE. The success of enrolling sixty organisations, comprising of approximately 200 support services, onto SSE is perhaps evidence of the positive perception of the application. Several participants discussed as such during interviews: “if there’s anything that Police Scotland can do to support this because it’s obviously seen as a very valuable service, I thought it would be worthwhile to get involved in it” (Int 9 – City Centre Sergeant – Policing). Another participant added:

*it’s the new staff that are coming back to me and saying, this [Street Support Edinburgh] is great, ...now this is the first place they go before they have to google.*

*“if that [lockdown] hadn’t been happening I would have known a bit more about it and maybe have been able to be involved a bit more, but yes,*

*never mind, it looks great and I’m glad that I’m able, you know, speak to you now about it.”* Int 11 – Community Link Worker – homelessness charity/health service

**Need for Street Support Resource in Edinburgh**

Participants identified that there has been a need for a resource aggregating up-to-date information on support services for those at risk or experiencing homelessness – and connecting those trying to tackle homelessness. This was identified as being a key draw to SSE:

*at the moment, what they do is, they’re just asking another member of staff, well where do I go for this, where do I go for this, because services will open and close so many times. It’s always something we can have that’s only paper, sometimes on a wall, on a very torn looking piece of A4 sheet, mental health services. Half of them are shut. So, to have this live, it’s great. And to have the detail that it’s got in it as well is fantastic.* Int 1 – Manager – Homelessness accommodation charity

One representative from the local authority indicated that they had been investigating how

best to aggregate support service information in the city:

*That is where we say that it is one of the actions and the council drafted a community transition plan was to find a way to make sure our information was more freely available and accessible about all the services that happen in Edinburgh. I was absolutely delighted but was also thinking, how am I going to do that. When you said that you were doing that and basing it on the Manchester one, which I thought was fantastic. I was delighted. Int 2 - Homelessness strategy - Local Authority*

### **Uses of SSE**

The individual interviewed who had lived experience of homelessness and vulnerability stated they would now use it as a resource, should they need to identify support services: *“Like if I was to ever run into trouble with benefits or stuff like that or needed anything, help for things with the house, that was what I actually focused on myself. That would be something I would access”* (Int 7 - Individual with lived experience of homelessness).

Representatives from the third and public sector both identified SSE as a useful tool for their own staff to utilise when working with clients (at least in the first instance) – and having the application downloaded on smartphones of those working in support services was deemed particularly so:

*but if the person comes to me asking me for advice and where to go, if I'm with them, then we would just do it together anyway. So, I think I would use it on a one-to-one with people, more than telling people about it as such. Int 11 - Community Link Worker - homelessness charity*

*What we've done with Street Support is the Saturday meal we have a core team, so as many...eight of us or so that'll, kind of, rotate and we'll lead it a week and so on. So, all the core team now have the App on their phone. Int 14 - Minister - Religious organisation/Charity.*

*So, I think that, yeah, I would like to have that as part of the checklist, when my staff are speaking to people, to say, by the way, there's a really valuable resource, go away and sit and look through it. Int 12 - Service manager - Local authority*

Moreover, it was discussed how it could be a particularly useful tool for new recruits – either to an organisation or homelessness services/social care, who may benefit from a resource providing an overview of support services. One managerial participant described how they would likely incorporate SSE into inductions for new staff:

*when I resent it out, it's been the newer staff. Now I'm talking less than four months old within our sector, never mind our accommodation... These people are the ones that are coming back to me and saying, this is fantastic, this is, like, a one resource for everything. So, if it's just going to get bigger and better, then I can't say that's a bad thing for us. Int 1 - Manager - Homelessness accommodation charity*

The Police Scotland participant indicated that as well as being in the process of downloading the SSE smartphone application onto Edinburgh-based officers' devices, their engagement has led to security guards downloading it to be able to assist those needing support:

*One thing we've noticed we provide information to a lot of security guards with, you know, they work in shopping malls, and they find it really useful as well. ...they've had, you know, rough sleepers or homeless persons coming in to get shelter, or the security staff engaging with them and looking at what they need and what support that they can get. Int 9 - City Centre Sergeant - Policing*

Participants also identified SSE as an important prevention piece to be promoted in settings where people may be at particular risk of homelessness e.g., schools and prisons:

*But no, in the large part no but there is obviously that [setting/context] where homelessness and stuff might get raised or they might identify issues with some children in terms of prevention and whatever ...Maybe even prisons and stuff as well Int 5 - Development worker - housing and homelessness charity*

### **Joined Up Working**

The opportunity that SSE would allow for joined-up working and signposting between support services was identified by several participants: *“Hopefully also to link in with the other users that are involved within the network, bit of*

*reciprocal signposting and awareness-raising of the sector and the city and what we can all do” (Int 4 – Manager – homelessness charity).*

*One of the challenges that we have, there’s a temptation to try and do everything and then you do all the things really badly because you’re not setup to... So, to have a place [Street Support Edinburgh] that’s like, you know what, let me just see what you need and so on, it’s really helpful... together we’re stronger, that, sort of, idea that actually hey, look we can help you a little bit but why don’t I put you in the direction of people who are setup. They’ve been doing this for years, they’re experts in their field... Int 14 – Minister – Religious organisation/Charity*

Specifically, a representative from a Scottish Mental Health organisation offering services in Edinburgh had identified becoming part of SSE as useful, as there was a desire to link up mental health and homelessness services:

*we know from evidence that there’s a high incidence of mental illness and mental health issues amongst people that are experiencing homelessness. Now, not all of them will come to our centres, perhaps an environment for some and not for others, and their first port of call in most instances is going to be a homelessness service. But from speaking to colleagues elsewhere in the sector, particularly around homelessness charities, I think there is a desire for mental health to be a bit more joined-up with their service, and whether that’s just initially signposting and a better understanding of what each other are doing and how we can work together, or whether it’s a more formal partnership.... Int 10 – Manager – Mental health charity*

### **User-Friendliness of SSE**

Several participants described SSE as being “user friendly” (interview 9 – City Centre Sergeant – Policing): For example, the Participant with lived experience of homelessness stated:

*In all honesty, of the websites I’ve looked at I thought this one’s the best I’ve seen so far. And I said that to support worker 1 and support worker 2, there’s a lot of helpful things there. It’s easy to work out when you’re on it as well. And it’s all positive. ...It’s not something that for me, with anxiety, would go onto it, get all flustered and give up. Because it’s easy to get into. ...‘Cause as soon as you get into it, it’s self-explanatory” Int 7*

Similarly, a coordinator of one homelessness charity added “[the Street Support Edinburgh] interfaces are like straightforward and like the symbols for the different council help and stuff like that can be pretty easy to navigate, I think” (Int 6 – Outreach coordinator – homelessness charity). Further, the map-based visualisation of services was identified as useful: “What I do like is it shows them on a map as well, which is fantastic” (Int 4 – Manager – homelessness charity).

### **Suggestions for Alterations to SSE**

Interview participants provided ideas for potential improvements and alterations to SSE. Regarding content – participants suggested splitting up ‘health services’ – currently a catch-all support category in to separate mental and physical health services: “and I don’t want to take this away from social care staff, just...for social care staff to move quickly to what they’re looking at. So mental health services maybe being split from health services” (Int 1 – Manager – Homelessness accommodation charity). Given the uncertain environment regarding immigration – participants also requested clearer and more prominent immigration support and information around recourse to public funds:

*there could be some sort of indication where the services are open to people with no recourse to public funds ...So, I was just thinking it would maybe be helpful if there was some little, like, checkpoints or something that said how you can use the service even if your immigration status makes you a little [more vulnerable].” Int 6 – Outreach coordinator – homelessness charity*

### **COVID-19 and other implementation challenges**

There was a perception that the impact of the rollout of SSE has not been as would have been planned and that it had not been given a ‘fair crack’ (Int 3 – Communications coordinator – youth homelessness charity) due to COVID-19 and the associated lockdowns, as organisations have been focused on providing their own core services:

*I think the app’s brilliant but I think this year’s not been the right year to give it a right good run on the ground. ... what we’ve not really been able to do is completely push it forward and advertise*



*it to members as effectively as we would do. Without COVID we could have sat down with them and just showed them the app, downloaded it on their 'phone, helped them navigate it.* Int 4 – Manager – homelessness charity

As such, there was a lack of confidence about the extent to which there was awareness of (and as a result, use of) SSE amongst the public/those in need. However, there was the anticipation that SSE would become an increasingly important resource. The Welcome Centre shut for the season in early May 2021 until Edinburgh moved out of lockdown when meaning evictions could once again take place:

*when we closed [The Welcome Centre], we closed with no one staying there. They had been able to move everyone else on to other accommodation. But, yeah, obviously people become homeless all the time, so there will be people that will be missing the service, yeah.* Int 13 – Team leader – homelessness charity/religious organisation

Whilst a digital resource like SSE allows for greater 'agility' for relaying current service information, in relation to paper directories as raised previously, several participants proposed that SSE would only be effective if information entries were kept up to date:

*To make sure that that information...it is never going to be 100 per cent but as close to real time live as possible. The last thing you would want is somebody, particularly a service user, looking on that thing and saying, oh there is a fantastic service, and it doesn't exist any longer.* Int 2 – Homelessness strategy - Local Authority

The issue of digital inclusion was an issue identified by participants – as access to smartphones, mobile data. and utilities to maintain charge etc. are likely to be some element of a barrier: *"I think it's really good, but it's again the thing that I said, people need the access to it. how's anybody supposed to get it because even if they've supplied a 'phone it's like the wee Nokia things"* (Int 7 – individual with lived experience of homelessness). However, there was discussion about how it would only require one person having access to a device to have use amongst a group:

*I think it would be of...well it will be of use to people who have iPhones, who are on the streets, even if they talk to each other and sometimes when*

*somebody is new ...Now that kind of person is the person who had already been on the streets, had your app, so that would be very useful to talk to the new person on the streets, to tell them what's available.* Int 8 - Street outreach team leader – charity

### ***Need/Opportunities for Promotion and Engagement***

One key theme throughout interviews was the importance of further marketing and promotion of SSE – with some innovative ideas posed. The usefulness of greater social media presence was raised; paid social media adverts as a route to increasing the reach of the resource were suggested:

*But I do think having quite a good social media sort of strategy in that way in terms of just...that's how things go – not viral – but, you know. Not saying it will but you've got to just keep the conversations going. And I'm just thinking about online advertising. Maybe a few social media ads are quite good, just for localised.* Int 3 - Communications coordinator – youth homelessness charity

There were also calls for an active network to be created for SSE partners to facilitate ideas sharing:

*I wonder if there's something possible or something useful around a quarterly meeting with some of the agencies that are involved with the app? Where they can then discuss a bit more about it? And then that would possibly push that this isn't one shared project, this is a collaborative piece of work.* Int 4 - Manager – homelessness charity

*and we could quite easily facilitate some kind of awareness-raising session of what Street Support is with our service users, I think that would be quite an easy thing to do. ...or even better, if somebody involved with Street Support was to come in and give a talk on it...* Int 10 - Manager – Mental health charity

It seemed that our evaluation served as a prompt for organisations to conduct their own work around street support – supporting the notion that more promotion is needed to move SSE to being embedded as "usual practice". Participants described how they could incorporate SSE promotion into their own social

media strategies and update their own staff in internal newsletters. They also stated how they could utilise surveys with their staff to identify areas for improvement relating to SSE: *"I've never actually asked them for feedback to see how they're doing and stuff, so yeah, I think that's important, that I pick up on that... so I could do some kind of Survey Monkey"* (Int 12 - Service manager - Local authority). Further, another participant added: *"But then when you said you were coming to do the questionnaire I thought, oh well I better actually promote this a bit more. So, I've sent it out again on the Teams"* (Int 1 Manager - Homelessness accommodation charity). Finally, one participant suggested implementing a shared responsibility for the maintenance of SSE on a rolling basis, indicating this would be of benefit for those involved:

*my suggestion would be that you give a charity like ours or like any others, maybe on a three or a six-month rota, a lead role coordinating all the other charities to get these things together. ...It gives the charities a bit of a feel-good factor too if they were nominated to do that...* Int 15 - Manager - training/employability charity

This could be an effective way of ensuring the sustainability of SSE from a number of angles. It would ensure the engagement of several organisations and thus encourage greater usage of and engagement across organisations - in turn making the process less burdensome to ensure information stays accurate and relevant.

#### ***Potential Wider Rollout Across Scotland***

Several participants were excited about the thought of Street Support being rolled out more widely within Scotland: *"Yeah, I think if it's a success in Edinburgh and there's evidence to say that, then absolutely, I think that should almost be the kind of...the model for any good practice in the sector"* (Int 10 - Manager - Mental health charity). Another participant stated:

*Yeah, I think it would be ideal in, I mean, you know, the bigger cities, Glasgow, Aberdeen, Dundee and so on, ...Glasgow in particular, I think they could use this...definitely use this, sort of, system. ...It's something for the bigger cities, I think would be invaluable for them to have a place.* Int 9 - City Centre Sergeant - Policing

There was discussion about whether it would be most appropriate to be rolled out by local authority, vs. a national rollout (i.e., a single Street Support Scotland):

*so I think it's probably an advantage to keep in the, like, Edinburgh so maybe then we could have a different one for Glasgow, but like, it wouldn't, I don't think you could have a full Scotland one ...Because I think there's quite...yes, just sort of different approaches in the way, because, like, the issues around housing are very different in Edinburgh than it is in Glasgow and stuff like that,...* Int 6 - Outreach coordinator - homelessness charity

Whilst some participants proposed it would be most appropriate for larger population centres, it was also suggested it would be important for it to cover all local authority areas.

#### **Discussion**

This evaluation has provided an opportunity to attain valuable feedback on a novel digital resource for improving access and communication around homelessness services in Scotland. The feedback from those whom we interviewed as a part of this qualitative evaluation has been generally positive, being seen as a valuable resource to be added. There was a perceived need to connect this digital resource with other similar resources available, so that information is shared across the widest of audiences. There was positive feedback on particularly the smartphone application, and on the breadth of services and information provided.

Interestingly, SSE was seen as a useful resource for everyone experiencing homelessness, not only for young people, which has been the focus of the majority of research studies into the use of mHealth with people experiencing homelessness over the last decade. These studies have predominately been based in the USA and have focused on youth homelessness (Calvo et al., 2020). They have tended to focus on the use of mHealth in two ways: 1) the development of mobile phone apps to identify health and social care providers of specialist homelessness services in a particular geographical location; and/or, 2) targeted health information and/or interventions via mobile phone apps for specific health conditions, such as

sexual health, mental health or harmful substance use. This is likely due to the widespread usage of mobile phones and the increasing availability of free public WiFi in many urban spaces (Calvo et al., 2019). Park et al. (2021), investigating young adults' experiences of homelessness, found that online information resources are an important engagement strategy for young people experiencing homelessness and reduce discrimination.

While most research studies focus on the benefits of mobile health for people experiencing homelessness, this study highlighted the potential for SSE to increase communication and joined-up working between services; several participants discussed the potential for SSE to allow for reciprocal signposting. Monthly forums were also recommended, for those involved to share ideas and promote particular services that may be taking place amongst other service providers.

Despite these encouraging findings about SSE, we are cognisant of wider theory around human-technology interaction, and the socially constructed nature of technologies and the impact they have on the world of work and human interactions (Bijker et al., 1987). A danger of SSE implementation and its ongoing development and spread would be to assume that the uptake of this technical 'fix' will be a simple, linear process – whereas such theory would predict that its use will very likely be multi-directional, and socially constructed (in potentially different ways) by different social groups. SSE has many different potential users - organisations dealing with the homeless, people experiencing and at risk of homeless, the general public, the police, etc.. These groups may have different views on the utility of SSE, on what it needs to contain, and different views on usability. Indeed, by interviewing a variety of people from different user groups/contributors to SSE in the current study we were somewhat able to explore these different actors' perspectives. Future work could explore through ethnographic methods how the SSE app/website is being used by practitioners/people experiencing homelessness, not just asking people for their perspectives.

Similarly, views and needs may differ depending on things like age and access to and familiarity with digital tools. Indeed, issues of digital exclusion were raised, particularly for

those who couldn't afford phones or for older people. While mobile phone use in the general population was around 95% in the UK in 2018 (Statistica, 2019) it is very difficult to ascertain how widespread mobile phone use is within the population of people who experience homelessness. However, Lemos and Frankenburg (2015) found that 91% of the 341 homeless and recently homeless people in their UK study owned a working phone. Though the proportion of people experiencing homelessness with mobile phones may be high, phone access does not guarantee access to digital services.

Digital resources that are incompatible with mobile phones can lead to usability issues, as for example has been found in welfare forms in the UK (Harris, 2020). Furthermore, mobile phones themselves can be problematic technologies for people experiencing homelessness, potentially limiting the use of mHealth resources. For example, research has highlighted that people experiencing homelessness have difficulties finding places to charge mobile phones, were frustrated with the short battery lives of their smartphones, experience data restrictions because of a lack of wireless broadband access, have difficulties storing files, and experience thefts, especially for people living in shelters or insecure congregate accommodation (Baggett et al., 2019; Harris, 2020; Lemos & Frankenburg, 2015; Woelfer & Hendry, 2009).

The fact that the launch of SSE during the continuing COVID-19 pandemic, and the impact this would have had on engagement by staff members and their clients was identified. In the research literature, generational differences exist with young people who are more recently homeless having the ability to use the internet to access services, while older people who have longer-term homelessness require high levels of support to access services and to complete welfare forms online (Harris, 2020). For these older people, face-to-face advice is associated with better engagement with welfare services and communication (Balmer et al., 2012; Burton, 2018). However, accessing information and support via the Internet may be even more important for this population than for those who are housed, as it may be the only means of access (Park et al., 2021).

The potential usefulness of a 'relaunch' was described – with dedicated social media channels

as well as paid-for social media advertisements were proposed. This is now planned for March 2022. Other ideas for widening the reach of the resource were to hold workshops for staff members within relevant organisations (e.g., local authority housing officers), and engagement with schools and prisons. Interview participants also saw the potential for applying Street Support across other towns and cities across Scotland.

### **Study Limitations**

It should be acknowledged that there are limitations to this study, particularly as SSE was implemented during the COVID-19 restrictions from January to August 2021. The qualitative findings provide a snapshot of the experiences of some of the organisations that were involved in the implementation of SSE in one city in Scotland. The findings are intended to provide insight into their involvement at that time and are not intended to be generalisable or representative of the experiences of the implementation and use of Street Support Network resources in other cities. We were only able to recruit one person to the study who had experience of homelessness, and more participants would have strengthened our insights into their experiences and use of SSE. The difficulty recruiting was down to the lack of face-to-face contact and extremely busy frontline services meaning it was difficult to access those with lived experience for research purposes. The workload of organisations in this field at the time the research took place likely contributed to some of the organisations not opting to participate in an interview. Very few organisations wished not to be listed on SSE – one organisation did not want a particular service listed due to it being in its infancy, and instances of organisations not responding were typically when national-level generic email addresses were contacted.

We were unable to obtain useful quantitative data about the use of SSE, since the reporting and analytics available to us were very limited. This made it difficult to triangulate the feedback from the interviews with observed usage patterns. The context of the study setting is also an important consideration.

### **Implications for Policy, Practice, and Research**

For maximum impact, a clear and strategic ongoing marketing plan should be developed in conjunction with the implementation of the SSE digital resource. In practice, the utility of the resource will be sustained if dedicated people are identified in each organisation to ensure the resource is kept up-to-date. Further, all organisations working in the field of health, housing, and homelessness should consider implementing SSE as a resource for staff, particularly for newly recruited workers, for signposting of homelessness and wider services. It is acknowledged that SSE has a significant role to play in homelessness prevention, as well as for those already homeless in the future. Implementation of the Street Support resource can be recommended in other cities and settings in Scotland, and the wider UK. However, Edinburgh has a well-established and relatively well-coordinated homelessness sector, with joint working having been in place across many organisations prior to the introduction of SSE. Thus, the implementation of Street Support resources in other areas may face different sets of challenges, for example, if there is a lack of pre-existing coordination among homelessness services. Further research is needed to evaluate the use of such support in other cities and settings, particularly in a time of non-COVID-19 restrictions.

### **Conclusion**

This study has highlighted the positivity towards, and importance of supporting service providers of SSE; further awareness raising is likely required to increase its reach further as in-person services and COVID-19-related protections reduce. Other locations may wish to implement a Street Support Network if they are looking to implement a central digital resource to tackle homelessness. Future research is essential in order to evaluate the use of Street Support in this setting post-COVID-19 restrictions.

### **Acknowledgments**

We would like to express our sincere thanks to the staff working in the homelessness sector in Edinburgh, including one person currently experiencing homelessness, for generously sharing their participation in the implementation

of the Street Support Edinburgh in the city. We would also like to thank the article reviewers for their time and contributions to revising and enhancing this manuscript.

### Funding

The Simon Community Scotland and St Paul's and St George's Church Micah Fund contributed to the funding of the implementation of Street Support Edinburgh, along with a research grant awarded from Economic and Social Research Council Rapid Response Impact Funding [EDIN-20/21-P0021]. The evaluation was also funded by a Data Driven Innovations Build Back Better Open Call [University of Edinburgh] award. We want to thank all funders for their generous contributions to this project. The views expressed in the report are those of the Authors and should not be attributed to the funder of any other organisation. Emily Adam's role in this research is part of her PhD research project which is funded by the Legal & General Group (research grant to establish the independent Advanced Care Research Centre at University of Edinburgh).

### References

- Aldridge, R. W., Story, A., Hwang, S. W., Nordentoft, M., Luchenski, S. A., Hartwell, G., Tweed, E. J., Lewer, D., Vittal Katikireddi, S., & Hayward, A. C. (2018). Morbidity and mortality in homeless individuals, prisoners, sex workers, and individuals with substance use disorders in high-income countries: A systematic review and meta-analysis. *The Lancet*, 391(10117), 241-250. [https://doi.org/10.1016/S0140-6736\(17\)31869-X](https://doi.org/10.1016/S0140-6736(17)31869-X)
- Baggett, T. P., McGlave, C., Kruse, G. R., Yaqubi, A., Chang, Y., & Rigotti, N. A. (2019). Smoke free TXT for homeless smokers: Pilot randomized controlled trial. *JMIR Mhealth Uhealth*, 7(6), e13162. <https://doi.org/10.2196/13162>
- Balmer, N. J., Smith, M., Denvir, C., & Patel, A. (2012). Just a phone call away: Is telephone advice enough? *Journal of Social Welfare and Family Law*, 34(1), 63-85. <https://doi.org/10.1080/09649069.2012.675465>
- Bethany Christian Trust. (2020a). *Bethany Christian Trust: Crisis Intervention: Rapid Re-accommodation Welcome*
- <https://www.bethanychristiantrust.com/services/crisis-intervention/>
- Bethany Christian Trust. (2020b). *Bethany Christian Trust Care shelter annual report 2019-2020*. <https://www.bethanychristiantrust.com/wp-content/uploads/2020/09/Care-Shelter-Annual-Report-2019-2020.pdf>
- The social construction of technological systems. W.E., Bijker, T.P., Hughes, & T. Pinch; Cambridge, MA: MIT Press (1987)
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589-597. <https://doi.org/10.1080/2159676X.2019.1628806>
- Bure, C. (2005). Digital inclusion without social inclusion: The consumption of information and communication technologies (ICTs) within homeless subculture in Scotland. *The Journal of Community Informatics*, 1(2), 116-133. <https://doi.org/10.15353/joci.v2i2.2078>
- Burton, M. (2018). Justice on the line? A comparison of telephone and face-to-face advice in social welfare legal aid. *Journal of Social Welfare and Family Law*, 40(2), 195-215. <https://doi.org/10.1080/09649069.2018.1444444>
- Calvo, F., Carbonell, X., & Johnsen, S. (2019). Information and communication technologies, e-Health and homelessness: A bibliometric review. *Cogent Psychology*, 6(1), 1631583. <https://doi.org/10.1080/23311908.2019.1631583>
- Calvo, F., Carbonell, X., & Mundet, C. (2020). Developing and testing the Populi needle exchange point finder: An app to reduce harm associated with intravenous drug consumption among homeless and non-homeless drug users. *Frontiers in Public Health*, 8. <https://doi.org/10.3389/fpubh.2020.493321>
- COSLA. (2020). *Scottish Government framework produced by COSLA to help local authorities support theory with no recourse to public funds*. <https://www.cosla.gov.uk/news/2020/may-2020/framework-produced-by-cosla-to-help-local-authorities-support-those-with-no-resource-to-public-funds>
- Crisis. (2020). *Tesco mobile partners with crisis to support home for al*. <https://www.crisis.org.uk/get-involved/corporate-partnerships/corporate->

- [bulletins/tesco-mobile-partners-with-crisis-to-support-home-for-all/](#)
- Eyrich-Garg, K. M. (2010). Mobile phone technology: A new paradigm for the prevention, treatment, and research of the non-sheltered "street" homeless? *Journal of Urban Health*, 87(3), 365-380. <https://doi.org/10.1007/s11524-010-9456-2>
- Fazel, S., Geddes, J. R., & Kushel, M. (2014). The health of homeless people in high-income countries: Descriptive epidemiology, health consequences, and clinical and policy recommendations. *Lancet*, 384(9953), 1529-1540. [https://doi.org/10.1016/s0140-6736\(14\)61132-6](https://doi.org/10.1016/s0140-6736(14)61132-6)
- Fischer, L. C., Kölligan, V., Wieland, N., & Klein, M. (2021-March-31). Development and evaluation of a digital health intervention for substance use reduction in young refugees with problematic use of alcohol and/or cannabis – Study protocol for a single-armed feasibility trial. *Frontiers in Public Health*, 9. <https://doi.org/10.3389/fpubh.2021.557431>
- Fitzpatrick, S., Bramley, G., & Johnsen, S. (2012). Pathways into multiple exclusion homelessness in seven UK cities. *Urban Studies*, 50(1), 148-168. <https://doi.org/10.1177/0042098012452329>
- Greeson, J. K. P., Treglia, D., Morones, S., Hopkins, M., & Mikell, D. (2020). Youth Matters: Philly (YMP): Development, usability, usefulness, and accessibility of a mobile web-based app for homeless and unstably housed youth. *Children and Youth Services Review*, 108, 104586. <https://doi.org/10.1016/j.childyouth.2019.104586>
- Harris, J. (2020). The digitization of advice and welfare benefits services: Re-imagining the homeless user. *Housing Studies*, 35(1), 143-162. <https://doi.org/10.1080/02673037.2019.1594709>
- Heaslip, V., Green, S., Simkhada, B., Dogan, H., & Richer, S. (2021). How do people who are homeless find out about local health and social care services: A mixed method study. *International Journal of Environmental Research and Public Health*, 19(1), 46. <https://doi.org/10.3390/ijerph19010046>
- Homeless Link. (2015). *The unhealthy state of homelessness: Health Audit Results*. London: Homeless Link. <https://www.homeless.org.uk/facts/our-research/all-research-reports/homelessness-and-health-research>
- House of Commons. (2021). *House of commons library: The furlough scheme one year on* <https://commonslibrary.parliament.uk/the-furlough-scheme-one-year-on/>
- Lemos, G., & Frankenburg, S. (2015). *Trends and friends: Access, use and benefits of digital technology for homeless and ex-homeless people*. <https://lankellychase.org.uk/publication/trend-s-and-friends/>
- Luchenski, S., Maguire, N., Aldridge, R. W., Hayward, A., Story, A., Perri, P., Withers, J., Clint, S., Fitzpatrick, S., & Hewett, N. (2018). What works in inclusion health: Overview of effective interventions for marginalised and excluded populations. *Lancet*, 391(10117), 266-280. [https://doi.org/10.1016/s0140-6736\(17\)31959-1](https://doi.org/10.1016/s0140-6736(17)31959-1)
- Park, I. Y., Barman-Adhikari, A., Hsu, H.-T., Narendorf, S. C., Maria, D. S., Shelton, J., Ferguson, K. M., Bender, K., & Petering, R. (2021). The relationship between discrimination and perceived stress: Buffering effect of online health information seeking among young adults experiencing homelessness. *Journal of Technology in Human Services*, 1-25. <https://doi.org/10.1080/15228835.2021.1931636>
- Post, L. A., Vaca, F. E., Doran, K. M., Luco, C., Naftilan, M., Dziura, J., Brandt, C., Bernstein, S., Jagminas, L., & D'Onofrio, G. (2013). New media use by patients who are homeless: The potential of mHealth to build connectivity. *Journal of Medical Internet Research*, 15(9), e195. <https://doi.org/10.2196/jmir.2724>
- Rice, E., Lee, A., & Taitt, S. (2011). Cell phone use among homeless youth: Potential for new health interventions and research. *Journal of urban health: Bulletin of the New York Academy of Medicine*, 88(6), 1175-1182. <https://doi.org/10.1007/s11524-011-9624-z>
- Ritchie, J., Lewis, J., Ormston, R., & Nicholls, C. M. (2013). *Qualitative research practice: A guide for social science students and researchers*. Sage Publications.
- Scottish Government. (2018). *Health and Homelessness in Scotland*. <https://www.gov.scot/publications/health-homelessness-scotland/documents/>
- Scottish Government. (2021a). *Coronavirus Bill Introduced*. <https://www.gov.scot/news/coronavirus-bill-introduced/>
- Scottish Government. (2021b). *Homelessness in Scotland: 2020 to 2021. The Extent of Homelessness in Scotland*. <https://www.gov.scot/publications/homelessness-scotland-2020-2021/pages/3/>

- Statistica. (2019). *Percentage of households with mobile phones in the United Kingdom (UK) from 1996 to 2018*. <https://www.statista.com/statistics/289167/mobile-phone-penetration-in-the-uk/>
- Stoyanov, S. R., Hides, L., Kavanagh, D. J., Zelenko, O., Tjondronegoro, D., & Mani, M. (2015). Mobile app rating scale: A new tool for assessing the quality of health mobile apps. *JMIR Mhealth Uhealth*, 3(1), e27. <https://doi.org/10.2196/mhealth.3422>
- Torgan, C. (2009). *The mHealth summit: Local and global converge*. <http://www.caroltorgan.com/mhealth-summit/>
- Tsai, J., & Wilson, M. (2020). COVID-19: A potential public health problem for homeless populations. *The Lancet Public Health*, 5(4), e186-e187. [https://doi.org/10.1016/S2468-2667\(20\)30053-0](https://doi.org/10.1016/S2468-2667(20)30053-0)
- Woelfer, J. P., & Hendry, D. G. (2009). Stabilizing homeless young people with information and place. *Journal of American Society for Information Science and Technology*, 60(11), 2300–2312. <https://doi.org/10.1002/asi.21146>

## Appendix 1

### *Street Support Edinburgh Qualitative Evaluation – Interview Topic Guide*

#### **About the individual:**

- General background information: Summarise their current role within the organisation?
- Why they got involved in SSE/role within organisation?
- What is your experience of using Street Support Edinburgh?

#### **Section 1 – Perceptions of initial launch/ implementation of Street Support Edinburgh – becomes key section with change in focus of evaluation.**

##### *General questions about SSE*

1. What do you know about Street Support Edinburgh? (only if they are new to the app)
2. What do you understand as the aims of SSE to be? Prompt: any work we need to do on messaging?
3. To what extent do you think there is a need for a resource like Street Support Edinburgh?
4. SSE is currently funded jointly by Edinburgh University and Simon Community Scotland for the first year. What would your suggestions be for a future funding model? [prompt: businesses, all of the sector pay a small contribution etc?]
5. It would be really useful to know if you have identified any services missing in Street Support Edinburgh?
  - Any services missing? Particular domains of services?

##### *Questions about the communication and launch of SSE*

6. How did you first find out about Street Support Edinburgh, and its going live?
7. What were your views on the Zoom launch event that we held in early December?
  - Why? Any activities you think that we were missing?
8. What were your views on the social media launch of Street Support Edinburgh in late January?
  - Any activities missed that would be useful?
9. How do you feel with regard to the ownership you perceive to have over the resource?
  - Probe: To what extent do you feel we marketed as Edinburgh resource?
10. How do you think Street Support Edinburgh has been received so far?
  - Yourself? Within your team? Generally? Impact of Covid?
11. How would you like to see the resource marketed/promoted further?
  - Thoughts on the marketing/promotion we have done so far?

12. What would you like to see happen with Street Support Edinburgh in the coming months?

## **Section 2 – Perceptions of longer-term engagement with SSE and impact**

13. What do you think is working well with Street Support Edinburgh?
14. What isn't working so well with Street Support Edinburgh?
15. Have you experienced any barriers to working with Street Support Edinburgh?
  - Can you think of anything that has stopped you engaging with this resource?
16. What have the factors, if any, been that have helped you to engage with the Street Support Edinburgh app?
17. How have you utilised/do you intend to/think you will utilise Street Support Edinburgh? If at all?

*(Probe participants to be completely honest here – absolutely fine for them to say they have not engaged with it yet).*

18. Are you aware if those who are homeless, or at risk of, are using utilising Street Support Edinburgh? How are they engaging with it?
19. To what extent do you think this resource will help people who are homeless/those who may be at risk of homelessness?
20. How do you think Street Support Edinburgh could help members of the public who have an interest in reducing homelessness involved in doing so?
21. How do you think Street Support Edinburgh could encourage communication and partnership working between those who work to reduce homelessness?
22. How do you think Street Support Edinburgh will influence homelessness service provision?
23. To what extent do you think there is scope to roll out Street Support at a Scotland-wide level?