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Synopsis

Peer advocacy for people experiencing homelessness in London: a comprehensive synopsis of a mixed-method study including economic and process evaluation

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Abstract

Background: Inequitable access to health care increases morbidity and mortality among people experiencing homelessness. Peer advocates ('peers') with lived experience may help others to access health care.
Objectives: To evaluate the impact and cost–consequence of Groundswell's Homeless Health Peer Advocacy programme on healthcare access, the processes through which it operates and the impact for peer advocates themselves.
Ethics and design: A participatory mixed-method design with three components: qualitative study (A), prospective cohort (B), and cost–consequence analysis (C) using cohort and programmatic data. Ethical approval: Dulwich Research Ethics Committee (Integrated Research Application System 271312).
Setting: London, United Kingdom (2019–23) coinciding with COVID-19 and disruptions to the National Health Service, Homeless Health Peer Advocacy and housing services.
Participants: Homeless Health Peer Advocacy clients and non-clients (A–C); Homeless Health Peer Advocacy staff, volunteers and homelessness-sector stakeholders (A).
Intervention: Peer advocates accompany clients to healthcare appointments and provide support to address barriers to access.
Main outcome measures: Primary: probability of 'did not attend' at a scheduled outpatient appointment within 12 months of cohort enrolment. Secondary: number of inpatient admissions and accident and emergency visits.
Data sources: (A) In-depth interviews and focus groups; (B) Structured questionnaires and National Health Service Hospital Episode Statistics; (C) Groundswell programme data and cohort findings.
Results: Qualitative (A): Peer advocacy empowered clients by building cultural health capitals (skills and communication that support healthcare interactions) and strengthening social and economic resources. Advocates themselves gained social, cultural, human and physical resources, though benefits were greatest for those with some pre-existing stability. Cohort (B): Compared with non-clients, Homeless Health Peer Advocacy clients showed no difference in did not attend rates (rate ratio 0.97, 95% confidence interval 0.67 to 1.42) or accident and emergency visits (mean difference 0.86, 95% confidence interval −0.06 to 1.79) for the other pre-specified outcomes. Clients had 1.14 more inpatient admissions (95% confidence interval 0.52 to 1.75). Sensitivity analyses with imputed data suggested

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higher numbers of outpatient attendances, outpatient 'did not attends', accident and emergency visits and admissions among clients. Secondary analyses suggested differences by levels of anxiety and depression. Cost–consequence (C): Median annual cost per client was £353 (£176 per scheduled engagement). Evidence of National Health Service cost saving was inconclusive.

Limitations: The COVID-19 disrupted both Homeless Health Peer Advocacy delivery and National Health Service services. Non-randomised design may have introduced bias.

Conclusions: Homeless Health Peer Advocacy enhances clients' cultural health capital and helps peer advocates achieve their goals. We cannot state whether peer advocacy reduces 'did not attends' or demonstrate cost savings, but it was associated with more inpatient admissions and, in sensitivity analyses, more outpatient appointments.

Future work: Research should explore how peer advocacy addresses stigma in health care and hostel settings and develop outcome measures that capture wider systemic change.

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Introduction

Rationale for research

Homelessness is a growing challenge across England, most acutely experienced in London where around 12,000 people slept on the street in 2023–4, increasing from around 8000 in 2016–7.[1,2] Homelessness is often linked to other severe forms of exclusion, including alcohol or other drug use, poor mental health, prison and sex work.[3] People who are homeless frequently face substantial health challenges, resulting in an average age at death of 47 years for men and 43 years for women.[4] Standardised mortality rates among socially excluded populations, including people with experience of homelessness, are 8–12 times higher than that of the general population.[3] These outcomes are mediated by heightened vulnerability to infectious disease, injury and chronic physical and mental health conditions.[5,6]

These inequalities in health outcomes reflect multiple experiences of exclusion as well as limited access to health care.[1,7] Just 66% of people sleeping on the street are registered with a general practitioner (GP).[8] Primary care access is further limited by structural challenges, including stigma and difficulties in reconciling with the daily demands of being homeless with prioritising care.[9] As a result, 35% of people experiencing homelessness used accident and emergency (A&E) services in the past year, and 26% were admitted to hospital.[6] Such figures represent potentially avoidable ill health and distress for the individual and also health system costs that are estimated to be eight times higher than for people in the general population, per capita.[10]

Peer advocacy offers a unique response for the multiple healthcare challenges linked to homelessness. Peer support[11] focuses on a peer providing empathy, understanding and acceptance, and through this relationship, empowering clients to manage their health and care. Linked processes include peers role-modelling health-seeking behaviours and providing social support.[12] In particular, peer advocacy responds to the widespread experience among people who are homeless of stigma and alienation from healthcare services[9] as well as structural, social and bureaucratic barriers that excluded groups face. In a range of contexts and for different populations – including people with mental health needs and people who use drugs – peer-supported approaches have been demonstrated to have impact.[13,14] Building on this global evidence, an effective peer advocacy service in support of people who are homeless in the UK could support access to a range of health services. While multiple adaptations and innovations have been made in UK inclusion health services and policy,[15] there is still a need to theorise and develop interventions that can translate and make accessible clinical, biomedical and technological advances. As evidence indicates, a principal public health challenge is in addressing barriers to initial access and in fostering norms and relationships for continued attendance.

Intervention

The Homeless Health Peer Advocacy (HHPA) intervention developed by Groundswell – a third-sector organisation working across London – seeks to empower people currently homeless to overcome barriers to accessing health care through the provision of peer advocates, all of whom have experience of homelessness themselves. Peer advocates accompany individuals to health services, providing support, assisting with communication and encouraging people to attend to their health through facilitating engagement with health services. As of 2019 – when this evaluation started – Groundswell provided HHPA services across nine London boroughs, working with approximately 600 clients through the year.

Although Groundswell's peer advocacy programme has been expanding across and beyond London's boroughs,

there is limited evidence to support more comprehensive roll-out. An emerging evidence base[12,15–17] indicates the potential for peer advocacy in contexts of homelessness and exclusion. Yet, a recurring conclusion across reviews of peer support[11,13] is of a limited evidence base, linked to a shortage of rigorous study design and undertheorised interventions. In order to mitigate the vast health inequalities experienced by socially vulnerable populations, there is a need to better characterise how the peer advocacy model works and for whom and to measure its impact.

Aims and objectives

This evaluation aimed to inform the development of a non-NHS intervention to improve access to services and health of adults who are homeless. Our findings contribute to an emerging evidence base and theoretical development for peer advocacy as a response to homelessness in the UK and support the ongoing development of Groundswell's HHPA intervention and other interventions for marginalised groups involving peer advocates. The objectives of the evaluation were:

1. to explore the mechanisms, contexts and outcomes for HHPA and how they interplay with broader social and structural factors that shape health and social welfare and affect access to services
2. to explore the range of social and health outcomes the peer support programme brings to the peers themselves and the mechanisms and contexts for this
3. to estimate the effect of engagement with HHPA on hospital use
4. to estimate how hospital use changes before and following engagement with peer advocates
5. to describe associations between (non)engagement with peer advocacy on health and social outcomes and access to health services, including the mediating effect of other macro-structural, community and individual factors (based on our theory of change)
6. to estimate the impact of HHPA on attendance at health and social services for people who sleep rough
7. to assess the fidelity, acceptability and reach of HHPA.

Conceptual framework

We designed the overall evaluation in line with the guidance for evaluation of complex interventions,[18] driven by theory and drawing on a realist logic to gain insight into context–mechanism–outcome configurations.[19]

The qualitative study was premised on a realist approach in terms of understanding what works for whom and where, and from this, we worked with concepts of outcome, mechanism and context. Yet, we did not follow a realist approach in detail and were more inductive and developed in-depth qualitative analyses by building on Bourdieu's theory of capitals.[20]

Evaluation components

Co-applicants with expertise in epidemiology, sociology, health economics, participatory action research, evaluation, statistics and data science developed this evaluation in collaboration with Groundswell staff and peer advocates, other homelessness-service organisations, specialist GP practices and stakeholders in the advisory group.

The evaluation was comprised of four linked components:

Component A: A qualitative study principally using in-depth interviews with people experiencing homelessness, peer advocates and stakeholders (Objectives 1, 2 and 7).
Component B: A prospective cohort study of HHPA clients and non-clients, with outcome data extracted from the NHS Hospital Episode Statistics (HES) database (Objectives 3–5 and 7).
Component C: An economic study which costed HPPA through staff interviews and review of documents (Objective 6).
Component D: Description of Groundswell's HHPA programmatic data (Objectives 3, 5, 6, 7).

We used qualitative research (Component A) with people who are currently homeless, peer advocates and stakeholders to explore the context and process of peer advocacy and refine our theory of change. Data collection was concurrent with analyses in order to inform and contextualise survey implementation and findings. Preliminary findings from Component A about peer advocacy client characteristics informed the cohort study (Component B), and specifically, for recruitment of the comparison arm, and the baseline measures to account for confounders. Drawing on impact estimates from Component B, we assessed the cost–consequence of the intervention compared to no intervention (Component C). Consistent with an approach of 'expansion' or 'grounding' epidemiology in Component A, we refined measures of intervention exposure, mediators and confounders and prioritised outcomes to be measured in Components B and C. Component A also informed our use of Groundswell's programmatic data (Component D) by which we were able to define client subgroups, which contributed to secondary analyses of impact in Component B. Subgroup impact findings from Component B were also interpreted with consideration of Component A's question about 'for whom' peer advocacy works.

Methods

Participatory approach

The research drew on participatory research methods[21] – an approach increasingly used within social science and epidemiological research with marginalised populations – in which members of the study population are involved and engaged in the research process in order to drive social change. Participatory research methods pose various benefits and challenges: involvement of marginalised populations in research has the potential to reduce power differential between 'researchers' and 'researched' and so improve the relevance and appropriateness of research and interview questions to the community; enhance data quality by accessing 'insider' accounts; improve reach and dissemination to less visible members of the community; and orient research towards policy impact and service innovation.[21] However, this approach is also vulnerable to reinforcing hierarchies within the community, reluctance to criticise a shared world, a tendency to discount experiences which differ from one's own and burdening peer researchers with traumatic accounts potentially reminiscent of their own. We addressed these risks through careful recruitment and detailed training in the research protocol and methods. The research team has extensive experience of participatory research, including with people who sell sex, people who use drugs and people experiencing homelessness.[15,17,22,23]

As co-researchers, we hired people with lived experience of homelessness or of working closely with people who are homeless or in health and support services. Co-researchers were involved in developing study instruments, collecting, analysing, interpreting and disseminating data in Components A and B.

Two co-researchers were trained as qualitative interviewers and conducted interviews alongside the King's College London- and London School of Hygiene and Tropical Medicine-based social scientists. They debriefed with a member of the study team after each interview and were offered referrals in the same way as participants. They participated in regular meetings to discuss emerging findings and future data collection, to further develop their interviewing skills and to contribute to analysis, write up and dissemination, under AG's guidance.

A team of five co-researchers were trained in the cohort study protocol to recruit participants to the comparison group and conduct interviews (supervised by LP and SDR). In addition, we trained nine peer advocates to recruit, consent and interview HHPA clients. Trainings covered all survey protocol methods (e.g. interview techniques, gaining informed consent, safeguarding, ethics and use of tablets for data collection). Co-researchers and peers participated in meetings where initial findings were presented for their feedback and advice.

The project was steered by an independent study steering committee that included people with experience of homelessness, key workers in the homeless sector, public health representatives and researchers. The committee met four times during the course of the project. They provided guidance on the development of research instruments, analysis and interpretation of findings. They also advised on the development of contingency research plans in response to coronavirus and associated lockdowns in 2020–1.

Component A (qualitative study) methods

The qualitative component primarily addressed Objectives 1, 2 and 7, organised around the developing theory of peer advocacy in terms of the outcomes achieved and the mechanisms and contexts for these. The qualitative data collection and analyses were sequential and then concurrent to Components B and C. Qualitative data collection and analysis were led by AG, working with PJA as research associate, with support from PH, SDR and LP and two co-researchers.

Our principal methods were in-depth interviews with: (1) people currently homeless, focused on those who are, or have recently been, engaged with HHPA, including a subsample of those who have never engaged, as well as (2) peer advocates and Groundswell staff and (3) homelessness and health system stakeholders. The approach and focus of the interviews were initially guided by the research team, principally PJA, embedding themselves within Groundswell – joining training sessions, team meetings and working from within their offices. Formal observational data were not collected, but instead, reflections and insights were gained and explored during interviews.

Initial interviews with peer advocates from Autumn 2019 onwards were exploratory, with the broad aims of trying to understand perspectives on how the service worked and what the impacts were for peers. From early 2020 onwards, we had planned to begin interviewing clients and stakeholders. How these interviews were implemented was shaped by the COVID-19 pandemic. We initially paused plans for data collection and then continued with remote interviews done over the phone; such interviews involved considerable logistical challenges, especially when interviewees did not have their own phones. We recruited people who were homeless, both clients and non-clients, through contacting hostels and housing providers, either through suggestions made by Groundswell

or from our own networks. We also developed at this point a semistructured interview guide that asked respondents about the experience of HHPA. In-depth interviews with peer advocates and with stakeholders – including GPs, nurses, other healthcare staff, hostel staff, commissioners – explored these same questions while probing for comparison across different experiences of the HHPA programme and for the influence of the health system context specifically.

Analysis followed an iterative and abductive strategy[24,25] to develop understanding of HHPA through testing existing theory while exploring for inductive insight. Coding was driven by seeking inductive insight while also working with the existing Groundswell theory of change and broader academic and social science insight on peer advocacy (especially, the systematic review by Barker *et al.*[11] that examined processes of change in peer advocacy). Supportive analytical strategies included: (1) memo-writing to explore concepts and theoretical links, (2) comparison between individuals and subgroups and (3) triangulation of data collected from different sources (i.e. interviews from different groups of respondents). The analytical process focused on a team approach to coding managed through NVivo software (QSR International, Warrington, UK). AG and PJA led the coding, with input from PH, SR and LP and two co-researchers; specific coding and memo-writing were linked to writing reports that were discussed with the wider research team and Groundswell. Analysis started as data collection continued, to allow for iteration.

Component B (cohort study) methods

Based on feedback from peer advocates during consultations to develop the study as well as our team's previous research experience working with peer advocates, people with experience of homelessness and other marginalised populations, it became apparent that an experimental design [i.e. cluster randomised controlled trial (RCT)] to evaluate the impact of peer advocacy was unacceptable and infeasible. Thus, we designed a cohort study to address Objectives 3, 4 and 5.

Our sample size calculation drew on a previous study of peer advocacy.[12] We assumed that for scheduled outpatient appointments, HHPA clients would be coded as 'did not attend' (DNA) for 15% of the time and non-clients for 34% of the time. With 90% power, two-sided alpha of 0.05 and equal group size, we needed an analysis sample of 232 (116 HHPA clients and 116 non-clients). Assuming that only 80% of participants would have outcome data available via the NHS HES databases, our recruitment target was 290.

As previously outlined[26,27] between July and December 2021, a research team administered a questionnaire to people experiencing homelessness, including both clients and non-clients. Eligible participants had to be over 18 years, currently homeless, living in a London borough, had difficulty in accessing health care and could speak English or Polish. To participate, participants had to give consent for the research team to access their NHS hospital records. Participants had the option to consent for the research team to access records from the Combined Homelessness and Information Network (CHAIN), which has data about people in London who were engaged by street outreach teams.

The HHPA clients were recruited by a peer advocate when they had any scheduled engagement with the service in the recruitment period, with the understanding that neither giving nor declining consent would affect their HHPA service. In the same recruitment period, non-clients were recruited from supported accommodation and specialist day centres in London where Groundswell was not active. These venues were selected to approximately match the characteristics of venues where HHPA clients have historically been enrolled when Groundswell was commissioned to do so. Co-researchers worked with key workers to recruit potentially eligible persons, or approached service users opportunistically, and initiated study procedures for those who affirmed interest in the research.

For those who were eligible and gave consent, peers and co-researchers administered a structured questionnaire on hand-held tablets to collect self-reported data around the following three domains: (1) sociodemographic and health-related characteristics (2) personally identifying information for NHS record linkage and (3) secondary measures such as self-efficacy, stigma, social capital and social exclusion.

The research team extracted and submitted personal identifiers (e.g. name, date of birth and NHS number) to NHS Digital. NHS Digital used these identifiers to locate records from the outpatient care, inpatient care and emergency department data sets, with separate data sets for the 12-month periods before and after the participants' interview date. We downloaded records from the six data sets onto a secure server, processed outcome measures, linked outcomes to the questionnaire data and then de-identified the linked data set.

For participants who linked to between 1 and 5 of the databases, we imputed '0' for outcomes for the other data sets and assumed that the lack of linkage reflected that they truly did not access the other hospital service

(such as under an alias) in that time period. In primary analysis, we excluded the participants who did not link to any HES data. Then, for a sensitivity analysis, we included these participants by imputing '0' counts for all missing outcomes. The sensitivity analysis assumed that anyone who was not linked to HES data truly did not access any hospital care for the 12 months before or after their cohort recruitment.

Outcome measures

We compared HHPA clients against non-clients in the 12 months after recruitment for the following outcomes: probability of a 'DNA' for a scheduled outpatient appointment, number of completed outpatient appointments, number of 'DNA' outpatient appointments, number of emergency department visits, number of inpatient admissions and number of planned inpatient admissions.

Descriptive analyses

In this report, we describe the sociodemographic, social vulnerability and health-related characteristics of the HHPA clients and non-clients at baseline, using medians and interquartile ranges (IQRs) for continuous measures and percentages for categorical measure. We report on the frequency and type of hospital episodes for linked participants, including departments where outpatient appointments are scheduled, top-level *International Statistical Classification of Diseases and Related Health Problems*, Tenth Revision (ICD-10) codes for primary diagnoses for inpatient admissions and Systematised Nomenclature of Medicine Clinical Terms (SNOMED CT) primary diagnoses from the emergency department.

Primary, secondary and sensitivity analyses

In primary analyses, we used univariable Poisson and linear regression models with inverse probability of treatment weights to adjust for confounders. And given persistent imbalance of confounders even after weighting, we included the imbalanced confounders as covariates in a weighted multivariable model.

Informed by preliminary qualitative findings, we conducted three secondary analyses of the same outcomes, all using univariable weighted regression models. In the first secondary analysis, we classified clients according to whether they were new or ongoing clients. 'New' clients had 0–1 HHPA engagements completed at the point of study recruitment, while 'ongoing' clients had ≥ 2 engagements completed. In the second secondary analysis, we examined differences between 'supported' HHPA clients (i.e. those who had ≥ 2 peer-supported contacts such as for a welfare visit, GP registration or accompaniment to a hospital, GP or dental appointment) compared to 'unsupported' HHPA clients who had 0 or 1 of these contacts. In the third secondary analysis, we considered whether the effect of HHPA on study outcomes was modified by their baseline Patient Health Questionnaire – 4 item (PHQ4) score,[28] a measure of symptoms of depression and anxiety. And in the sensitivity analyses, we repeated the primary analyses and included the unlinked participants by imputing their outcome measures. We will report brief results from these analyses here, as full results are reported in Platt *et al.*[27]

All Component B analyses were completed with Stata SE 18 (StataCorp, College Station, USA).

Component C (economic study) methods

The economic component was a cost–consequence analysis that aimed to assess the costs of delivering HHPA in light of Component B's impact estimates for outpatient and emergency care. All costs are presented at 2022–3 prices and estimated for 1 year of the programme, hence no discounting was required. We identified the costs of the intervention by interviewing staff about the resource involved, reviewed programme data and project documents to identify the range of activities to be costed. These include fixed costs, for example overheads, and variable costs such as salaries and expenses. Staff involved in delivering the HHPA include co-ordinators, clinical supervisors, trainers and salaried peer advocates. Expenses include food, coffee, winter clothing and travel. We collected costs from the budget for each cost category. NHS costs were valued using the National Schedule of NHS costs for 2022–3[29] at £170 per outpatient appointment and £263 per emergency department visit. The cost of an inpatient admission was not available. We assumed that a DNA outpatient appointment would cost the same as a completed outpatient visit as no further data were available.

A total annual cost per HHPA client was calculated by dividing Groundswell's annual programme costs for HHPA by the total number of clients in a year identified from Component D (programmatic data). Potential cost savings to the NHS were calculated by multiplying Component B's impact estimate by the associated unit costs. Findings were presented in a cost–consequence analysis framework in line with the National Institute of Health and Clinical Excellence guidance of public health interventions.[30] In this approach, results are presented as the costs and outcomes for the peer and comparison arms separately rather than aggregating them into a single statistic (i.e. incremental cost per quality-adjusted life-year). This approach is appropriate in this circumstance, where quality-adjusted life-years are unlikely to capture all the intervention benefits of interest.

Component D (programmatic study) methods

We extracted data from the HHPA programme database between 6 April 2022 and 5 April 2023 to coincide with the timing of Component C (economic study). We counted the number of unique clients with at least one scheduled HHPA engagement in this time. We calculated the median and IQR of the number of scheduled engagements per client and per peer advocate, tabulated the type of engagement (e.g. private transport, peer-accompanied hospital appointment and one-to-one meeting) and whether that engagement was completed.

Changes to the evaluation protocol

Due to adapting methods to COVID-19 lockdowns, qualitative data (Component A) collection was more time-consuming and had to be done over the phone, reducing rapport and increasing safeguarding risks.

We had initially planned to conduct repeat interviews with selected respondents over time, partly to further explore particular experiences and theoretical developments, and also to understand possible processes of change resulting from HHPA. Such repeat interviews were possible with some peer advocates and Groundswell staff, but we did not seek to do this with clients, non-clients and stakeholders, reflecting the logistical and resource implications of both organising such interviews and also of the overall demands on time from reorganising the study that led to a necessary narrowing of scope and aims. For example, we had planned to shadow peer advocates in their work with clients through observing care processes, including healthcare consultations. This method was also abandoned principally due to social distancing measures. We had also hoped to interview clients and non-clients of HHPA who did not have English as a first language, a significant minority of people who are homeless in London; again, the logistics of arranging interviews over the phone here undermined this. We were still able to conduct interviews with some stakeholders, including hostel staff, outreach workers, commissioners and some nurses, and we were not able to interview any doctors; the context of the health system during the pandemic here was paramount – healthcare providers were under immense pressure and reports of stress and burnout were high, and in this context, we tried to secure interviews but did not pursue this extensively.

There were several changes to the cohort study (Component B) that deviated from the published protocol.[26] First, we had originally defined HHPA clients to be new clients scheduled for their first-ever engagement with HHPA, following an introductory meeting with a peer advocate. The peer advocate responsible for the client would then recruit that client into the study and undertake the interview prior to their first engagement. In practice, due to the COVID-restricted service offered by HHPA, this was not possible as a reduced HHPA volunteer group had impacted on the numbers of new clients engaged in HHPA. For this reason, we extended the eligibility criteria to include anyone who had a HHPA engagement scheduled during the recruitment period. As a result, some of the client groups had already engaged with HHPA prior to study recruitment, which might have attenuated the effect sizes.

Second, we adapted our statistical analysis plan. We did not include barriers to healthcare services or comorbidities as confounders. While these factors are determinants of needing peer advocacy, they are also affected by prior engagement with peer advocacy, and, as mentioned above, we expanded recruitment criteria in the HHPA arm to include ongoing clients, making these measures both confounders and mediators. We analysed additional outcome measures, including the number of outpatient DNAs, the number of completed outpatient visits and the number of planned inpatient admissions. We ran additional multivariable weighted models in addition to weighted univariable model, as we noted persistent imbalance of some variables across comparison arms after weighting. In light of preliminary qualitative results and baseline descriptive analysis, we added three secondary analyses to examine impact by (1) type, (2) frequency of prior HHPA engagements and (3) symptoms of anxiety and depression. We added a sensitivity analysis by imputing '0' visit counts for all outcome measures for participants who did not link to any of the HES databases.

Third, we did not analyse outcomes from the CHAIN database. CHAIN has data on street outreach services for people who sleep rough in London. Though most (76%) of our participants gave us permission to extract their CHAIN data, the 'Everyone In' policy, which provided the housing in hotels to the rough sleeping population starting with the first UK wave of COVID-19, and which remained in effect during the follow-up period, meant that there would be almost no records to link to.

Fourth, we changed our eligibility criteria so that recruits were required to consent to data linkage to become a participant in the cohort study. Our initial sample size calculation (for 382 participants at baseline) assumed that consent to linkage would be optional and that 70% would give this consent. As a consequence of the change to eligibility, our target for recruitment was lowered to 290, with 145 HHPA clients and 145 non-clients.

Fifth, we had originally planned to use respondent-driven sampling to recruit our comparison group. However, as a result of the rapid spread of Groundswell's HHPA model across London's boroughs, and the high mobility of the homeless population, we realised that the use of respondent-driven sampling may result in a high level of contamination, whereby many comparison arm participants would be people who used to be, are or would become HHPA clients. We opted to use convenience sampling at hostels and day centres in London where Groundswell was not active.

Finally, we did not recruit participants from the five homeless-specialist GP clinics as planned, since consultations with Groundswell and interviews with stakeholder revealed that these clinics refer their patients to Groundswell, and so we recruited these individuals via their peer advocates.

Results

Component A (qualitative study)

We collected data through semistructured interviews and focus groups with people who were homeless (n = 39), peer advocates and staff running the service (n = 15) and stakeholders working in service delivery or policy across London (n = 15). Here, we highlight findings in response to three questions we posed: (1) who is a peer advocacy client? (2) How does peer advocacy work? and (3) What is the impact of peer advocacy on the peer advocates?

Defining clients and outcomes

An initial priority in the early phases of the study was to define who is using the service and with what potential outcomes to support the design of the cohort study, for Component B below. In this early analysis, we drew on our immersion within Groundswell's offices and then the available qualitative interviews.

The official Groundswell approach to defining a client is that they will work with anyone who self-defines as homeless. While accepting that premise, we sought to understand if certain experiences or health issues were a core focus of the work. Interviews and other informal conversations found that identifying such a core focus was challenging. Here, a senior member of Groundswell staff tries to answer our question of 'who is a client?':

> *It's a difficult one to describe, that one. I mean when you first asked me the question I was going to say they might describe themselves as fucked up, you know. We get varying levels of honesty about how people are kind of feeling about themselves and, you know, what type of support they will accept. And then some people will latch on to HHPA because it helps with their travel costs and they'd rather spend the money on something else. Some people know they need support and will just openly, open themselves up to it, doesn't mean they'll go every time but they know they need somebody on their case to encourage them to go.*

Our data here, developed more through the in-depth analysis of the service below, found that there is not a typical client or set of clients for the HHPA service nor predictable or recurring set of health or social outcomes. Instead, the service operates as described in Groundswell's official approach: being open to anyone who self-defines as homeless. In turn, this meant that a wide range of experiences, including a wide range of health issues, were the focus of HHPA. This observation informed the recruitment strategy for our cohort study's comparison group: to be of people aged older than 25 years, who are homeless, have ongoing health issues and had difficulty meeting their healthcare needs, and with all these criteria being self-defined.

Exploring the mechanisms, contexts and outcomes of Homeless Health Peer Advocacy: developing an in-depth analysis

The main focus of the qualitative study was in understanding how HHPA works, with respect to the potential combinations of mechanisms, contexts and outcomes. The findings are reported in depth in Guise *et al.*[31] and in brief here.

Existing literature points to various potential processes by which peer support works. Such understanding is defined by apparent 'complexity': multiple components, combining in myriad different ways, potentially unfolding over long time periods, and all depending on the position of the individual peer and client and overall social context. Across such complexity, there is little reflection on claims for how HHPA might achieve its stated goals of 'empowering' clients to increase confidence and enable people to 'independently' access health care. We sought to develop a detailed analysis of how HHPA works, including relating specific components of the service to overarching goals of empowering clients, fostering independence in health care and managing stigma.

We built on Bourdieu's conceptualisation of capitals[20] to frame exploration of how HHPA works. Specifically, we used the idea of cultural health capital – understood as the 'cultural skills, verbal and non-verbal competencies and interactional styles that can influence healthcare interactions at a given historical moment'.[20,32] That clients might develop their cultural health capital, we recognised as an important way to conceptualise empowerment. Alongside

cultural health capital, we also sought to understand how particular components and processes of HHPA might relate to ideas of social, economic and symbolic capital (the latter idea denoting being understood as, and understanding yourself as, socially important).

The results of our analysis of how HHPA works outline a three-part typology of different experiences of HHPA. HHPA works by either building or boosting capitals. By building capitals, we mean how those using the service experience an enduring, perhaps permanent, change, specifically in cultural health capital. Here, capitals are 'transmitted' by peers to clients.[20] By boosting capitals, we mean a temporary phenomenon, bound to the particular episode of care, where clients' capitals are increased in ways entirely contingent on the presence and work of the peer advocates. Boosting capitals could involve, as we describe, clients borrowing capitals, having peers exchange their capitals on clients' behalf or transferred to them in ways that do not endure. The three experiences of HHPA are then:

1. Building cultural health capital – Here, clients engage with peers, and through processes such as role modelling by peers or information support, might increase their own knowledge and skills to access health care. In consequence, they may then be able to access health care without a peer advocate.
2. Boosting cultural health capital (and potentially social and economic capital) – Here, clients work with peers, either for short or long term, and peers support clients through a temporary 'boost', either by providing cultural health capital on their behalf, or enabling clients to act. The analysis describes such a process as integral for some clients to access health care, especially given contexts of long-running exclusion and inequality, although they complicate the idea of 'empowerment' and 'independence'.
3. Boosting social and economic capital (and where cultural health capital is not needed or a priority) – In other situations, clients described their needs as specifically social or economic, be that assistance in physically accessing buildings or in having access to a taxi; clients were though already confident in handling health system administration and in working with healthcare providers (and so can be understood as having high cultural health capital).

Exploring the impact of peer advocacy on the peers themselves

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The analysis summarised here is described in full in Annand *et al.*[33] The principal finding was that the process of being recruited, trained and then working as a peer advocate offered social, cultural, human and physical resources that enabled peers to achieve particular goals. We used the idea of 'capitals' to explore these resources, and in turn, relate these to the potential to achieve particular goals. By social capital, the analysis considers how working as a peer gives access to an extensive network of social support from other peers and Groundswell staff. As one peer advocate said: 'I can talk to anybody in the office … they'll take the time to talk to you... from CEO right down to a fellow volunteer'. Cultural capital is enabled through the training process, which increases familiarity with key aspects of the health system, and also by Groundswell's work explicitly valuing the knowledge and experience peers have – for example of homelessness – as an important source of knowledge. Human capital refers to skills or traits than enable someone to prosper, including good health; the peer advocacy process has multiple forms of support, including clinical supervision, that support mental health and well-being. Finally, there are physical resources, especially access to a bursary, which allows peers to access courses or equipment that are useful for their goals.

The results relate these capitals to overarching processes of change. Commonly, impact in such contexts is framed in terms of 'recovery', that is understood to denote a clinical goal, or of returning to a prior favourable state; both understandings are problematic in limiting the definition of what can be achieved. Our analysis, here, instead uses the idea of 'progression' – a term used within Groundswell itself and understands that as a form of capital. If recovery capital is the resource needed to facilitate a change in condition that satisfies institutional/external criteria (for recovery), then progression capitals are those required for change according to self-determined criteria (for progression towards life goals). The various capitals that HHPA then offers to peers we understand as progression capitals, as while some peers did describe these capitals as supporting their journey towards recovery from using drugs, there were also many other goals that fit a broader goal of self-fulfilment, whether that relates to addressing particular career goals or resolving issues such as debt or legal challenges.

Homeless Health Peer Advocacy was described as most likely to be suitable for, and to benefit, those understood as having 'readiness'. We explored how those peers who were most likely to complete the HHPA training and to stay involved in the work, and so access progression capitals already had some level of access to other capitals. In particular, those with access to physical capital, like housing, were better placed to benefit from HHPA.

A final feature of the results was how accessing progression capitals was enabled by the particular organisational culture and atmosphere of Groundswell. We use the idea of interpersonal energy, understood as 'collective effervescence', to describe what being within the Groundswell community brings. Being part of a cohort of peers, being trained and then joining Groundswell meetings and events were described as an important environment. The importance of this environment underscored by how the COVID-19 pandemic removed the potential for such interactions, and a related consequence was limited volunteer involvement.

Component B (cohort study)

A total of 311 participants were recruited into the study: 153 HHPA clients (out of 434 clients who had an engagement scheduled during the recruitment period) and 158 non-clients. Their characteristics are tabulated in *Table 1*.

The majority (77.5%) of the sample were male and the median age was 48 years, with clients having higher median age (50 years, IQR 43–58) than non-clients (45 years, IQR 39–55). Clients had, on average, been homeless longer, having a median of 20 years since first becoming homeless compared to 9 years (IQR 3–17) for non-clients. Clients were less likely to have slept outside the previous night (1.3%) compared to non-clients (13.9%) but were more likely to have experienced aspects of multiple exclusion, including history of injecting drugs (40.5% vs. 17.7%), begging (51.0% vs. 31.6%) or incarceration (58.8% vs. 41.1%), than non-clients. Proportionally, more clients used heroin daily (10.5%) compared to 1.9% for non-clients. Over 70% of both clients and non-clients affirmed ongoing problems with depression or anxiety.

Linkage to Hospital Episode Statistics

Of the 311 recruited participants, there were 229 (74%) who had linked to least one record in an NHS HES data set in the 12 months either before or after study recruitment, with the other 82 being unlinked. Among the peer advocacy clients, 84% were linked to a HES record compared to 63% of the non-clients. Characteristics of participants who were linked, and their hospital use in the 12 months before and after study recruitment by arm, are reported in Platt *et al.*[27] Differences between linked clients and linked non-clients were similar to the differences observed at baseline.

Description of hospital use

For the outpatient department, 200 participants had at least one visit in the 12 months before or after their study recruitment (median 26 visits, IQR 14–47), totalling 3079 visits. These visits were with specialists from the following departments: gastroenterology (12.3%), adult mental illness (9.9%), trauma and orthopaedics (8.2%), allied health professional (7.3%) and general internal medicine (6.5%). There were 47 other specialities listed, with < 5% of visits each.

For the emergency department, 196 participants had at least one visit in the 12 months before or after their study recruitment (median 12 visits, IQR 5–22), totalling 1295 visits. There were 813 visits with primary diagnoses recorded, most commonly alcohol intoxication disorder (SNOMED CT 25702006, 10.8%) and by 'No abnormality detected' (SNOMED CT 281900007, 8.7%). There were 210 other primary diagnoses made with < 5% each.

For inpatient care, 136 participants had at least one admission in the 12 months before or after their study recruitment (median 8 admissions, IQR 4–13), with a total of 658 admissions, of which 22% were planned admissions and 78% were emergency admissions. The most common primary diagnoses related to the digestive system (ICD10 K00-K93, 13.7%), injury or poisoning (ICD10 S00-T98, 13.7%), respiratory system (ICD10 J00-J99, 13.5%), and mental and behavioural disorders (ICD10 F00-F99, 12.8%). There were 15 other primary diagnoses made with < 10% each.

Effect of peer advocacy

As reported in Platt *et al.*,[27] in primary analysis (i.e. among the participants who did link to at least one HES data set for their outcomes), we show that there was no evidence of a difference in the probability of a DNA at a scheduled outpatient appointment in the 12 months after study recruitment between clients and non-clients [rate ratio 0.97, 95% confidence interval (CI) 0.67 to 1.42]. We did find evidence that, relative to non-clients, peer advocacy clients had around 1.14 more total inpatient admissions (95% CI 0.52 to 1.75) in the 12 months after study recruitment. We found no evidence of difference in the number of DNA for outpatient appointments, the number of completed outpatient appointments, the number of emergency department visits or the number of planned inpatient admissions between arms for the 12 months after study recruitment.

TABLE 1 Sociodemographic, social exclusion and health-related characteristics of peer advocacy clients and non-clients, London, UK, 2020–1

	Peer advocacy clients, *n* = 153, (%) or median (IQR)	Non-clients, *n* = 158, (%), or median (IQR)	Total, *n* = 311, (%) or median (IQR)
Sociodemographic characteristics			
Gender			
Male	118 (77.1)	126 (79.7)	244 (78.5)
Female	35 (22.8)	32 (20.2)	67 (21.5)
Age category, years			
25–34	11 (7.2)	29 (18.3)	40 (12.9)
35–44	32 (20.9)	46 (29.1)	78 (25.1)
45–54	55 (36.0)	43 (27.2)	98 (31.5)
55–64	42 (27.5)	36 (22.8)	78 (25.1)
≥ 65	13 (8.5)	4 (2.5)	17 (5.4)
Age, years	50 (43–58)	45 (39–55)	48 (40–57)
Sexual orientation			
Heterosexual	138 (92.0)	132 (83.5)	270 (86.8)
Gay, lesbian	4 (2.6)	7 (4.4)	11 (3.5)
Bisexual	6 (3.9)	5 (3.2)	11 (3.5)
Other, do not know	5 (2.7)	14 (8.9)	19 (6.1)
Ethnicity			
White only	106 (69.3)	97 (61.4)	203 (65.3)
Asian/British Asian only	14 (9.1)	27 (17.1)	41 (13.2)
Black/Black British only	12 (7.8)	15 (9.5)	27 (8.7)
Other, multiple, refuse	21 (13.7)	19 (12.0)	40 (12.9)
Citizenship			
Other	26 (17.0)	42 (26.5)	68 (21.9)
British	127 (83.0)	116 (73.4)	243 (78.1)
Education completed			
Less than secondary	18 (11.8)	22 (14.2)	40 (13.0)
Secondary	88 (57.9)	73 (47.1)	161 (52.4)
More than secondary	46 (30.3)	60 (38.7)	106 (34.5)
English reading and writing skill			
Better than average	111 (72.5)	113 (71.5)	224 (72.0)
Below average	42 (27.5)	45 (28.5)	87 (28.0)
Social vulnerability characteristics			
Years since first became homeless	20 (7, 33)	9 (3, 17)	11 (5, 28)
Years since first became homeless category			
0–1	8 (5.2)	21 (13.3)	29 (9.3)

continued

TABLE 1 Sociodemographic, social exclusion and health-related characteristics of peer advocacy clients and non-clients, London, UK, 2020–1 (*continued*)

	Peer advocacy clients, *n* = 153, (%) or median (IQR)	Non-clients, *n* = 158, (%), or median (IQR)	Total, *n* = 311, (%) or median (IQR)
2–9	37 (24.2)	65 (41.4)	102 (32.8)
10–24	43 (28.1)	49 (31.0)	92 (29.6)
≥ 25	65 (42.4)	23 (14.5)	88 (28.3)
Sleeping location, last night			
Slept rough/public location	2 (1.3)	22 (13.9)	24 (7.7)
Hostel	104 (68.0)	114 (72.1)	218 (70.1)
Own tenancy	27 (17.6)	5 (3.2)	32 (10.3)
Other	20 (13.1)	17 (10.8)	37 (11.9)
Sleeping location, ever[a]			
Sofa surfed	117 (76.5)	121 (76.6)	238 (76.5)
Hostel or refuge	141 (92.2)	134 (84.8)	275 (88.4)
Slept on the street/public location	123 (80.4)	141 (89.2)	264 (84.9)
Multiple exclusion homelessness characteristics, ever[a]			
Applied to council as homeless	113 (73.9)	106 (67.1)	219 (70.4)
Local authority care as a child	45 (29.4)	30 (19.0)	75 (24.1)
Begged	78 (51.0)	50 (31.6)	128 (41.2)
Shoplifted	80 (52.3)	59 (37.3)	139 (44.7)
Daily binge drinking	89 (58.2)	101 (63.9)	190 (61.1)
Street drinking	77 (50.3)	86 (54.4)	163 (52.4)
Sold sex	15 (9.8)	15 (9.5)	30 (9.6)
Incarcerated	90 (58.8)	65 (41.1)	155 (49.8)
Injected drugs	62 (40.5)	28 (17.7)	90 (28.4)
Police contact, 6 months[a]			
Arrested, detained or charged	21 (13.7)	28 (17.7)	49 (15.8)
Imprisoned	12 (7.8)	3 (1.9)	15 (4.8)
Told to move from public space	44 (28.8)	42 (26.6)	86 (27.6)
Food insecure, 12 months			
No	55 (36.0)	66 (41.8)	121 (38.9)
Yes	97 (63.4)	90 (57.0)	187 (60.1)
Verbal abuse			
Never	43 (28.2)	34 (22.1)	77 (25.2)
Last ≥ 6 months ago	34 (22.5)	42 (27.2)	76 (24.9)
Within past 6 months	74 (49.0)	78 (50.6)	152 (49.8)
Physical abuse			
Never	57 (38.0)	50 (32.3)	107 (35.1)
Last ≥ 6 months ago	59 (39.3)	51 (32.9)	110 (36.1)

TABLE 1 Sociodemographic, social exclusion and health-related characteristics of peer advocacy clients and non-clients, London, UK, 2020–1 (*continued*)

	Peer advocacy clients, *n* = 153, (%) or median (IQR)	Non-clients, *n* = 158, (%), or median (IQR)	Total, *n* = 311, (%) or median (IQR)
Within past 6 months	34 (22.7)	54 (34.8)	88 (28.8)
Sexual abuse, ever			
No	113 (73.9)	113 (71.5)	226 (72.7)
Yes	40 (26.1)	45 (28.5)	85 (27.3)
Health-related characteristics			
Health problems, current[a]			
Depression or anxiety	118 (77.2)	116 (73.4)	234 (75.2)
Dental	87 (56.9)	92 (58.2)	179 (57.6)
Joint, bone or muscle	73 (47.7)	70 (44.3)	143 (46.0)
Addiction	72 (47.1)	63 (39.9)	135 (43.4)
Respiratory (e.g. obstructive airway disease, bronchitis, emphysema and asthma)	84 (54.9)	46 (29.1)	130 (41.8)
Healthcare barriers, current[a]			
Problems with transportation	105 (68.6)	83 (52.5)	188 (60.5)
Uncertainty about place and provider	96 (62.7)	89 (56.3)	185 (59.5)
Could not get appointment	87 (56.9)	74 (46.8)	161 (51.8)
Had help to attend medical appointment, 12 months			
No	28 (18.3)	88 (55.7)	116 (37.3)
Yes	124 (81.1)	68 (43.0)	192 (61.7)
Crack/cocaine used, 12 months			
No	80 (52.3)	106 (67.1)	186 (59.8)
Yes, less than daily	53 (34.6)	44 (27.8)	97 (31.2)
Yes, daily	20 (13.1)	8 (5.1)	28 (9.0)
Heroin used, 12 months			
No	92 (60.1)	128 (81.0)	220 (70.7)
Yes, less than daily	45 (29.4)	27 (17.1)	72 (23.1)
Yes, daily	16 (10.5)	3 (1.9)	19 (6.1)
Marijuana used, 12 months			
No	91 (59.5)	99 (62.6)	190 (61.1)
Yes, less than daily	47 (30.7)	34 (21.5)	81 (26.0)
Yes, daily	15 (9.8)	25 (15.8)	40 (12.9)
No	117 (76.5)	128 (81.0)	245 (78.8)
Yes	36 (23.5)	30 (19.0)	66 (21.2)
Alcohol consumption, 12 months			
Never	41 (27.9)	32 (20.4)	73 (24.0)

continued

TABLE 1 Sociodemographic, social exclusion and health-related characteristics of peer advocacy clients and non-clients, London, UK, 2020–1 (*continued*)

	Peer advocacy clients, *n* = 153, (%) or median (IQR)	Non-clients, *n* = 158, (%), or median (IQR)	Total, *n* = 311, (%) or median (IQR)
Up to a few days a year	34 (23.1)	41 (26.1)	75 (24.7)
Up to a few days a month	32 (21.8)	43 (27.4)	75 (24.7)
Daily	40 (27.2)	41 (26.1)	81 (26.6)
Depression or anxiety symptoms daily (PHQ4), 2 weeks			
Little interest in doing things	52 (34.4)	51 (32.5)	103 (33.4)
Feeling down or depressed	57 (37.8)	62 (39.5)	119 (38.6)
Feeling anxious	58 (38.4)	54 (34.4)	112 (36.4)
Can not stop worrying	66 (43.7)	69 (43.9)	135 (43.8)
PHQ4 score	7 (4–10)	7 (4–10)	7 (4–10)
PHQ4 score category			
0–5	55 (36.9)	57 (36.8)	112 (36.8)
6–8 ('Yellow flag')	37 (24.8)	39 (25.2)	76 (25.0)
9–12 ('Red flag')	57 (38.3)	59 (38.1)	116 (38.2)
Probable dual diagnosis ('red flag' and daily substance use)			
No	129 (82.7)	129 (82.2)	253 (82.4)
Yes	26 (17.3)	28 (17.8)	54 (17.6)

a Participants could select more than one option for each of these measures. Only the stratum with the affirmative response is presented here.

Secondary and sensitivity analyses

In sensitivity analyses (i.e. for which we imputed '0' visit counts for participants who did not link to any of the HES data sets), we observed that HHPA clients had 1.77 more completed outpatient appointments (95% CI 0.13 to 3.40), 0.68 more DNA outpatient appointments (95% CI 0.13 to 1.23), 0.94 more inpatient admissions (95% CI 0.41 to 1.47), 0.25 more planned inpatient admissions (95% CI 0.00 to 0.50) and 0.82 more emergency department visits (95% CI 0.14 to 1.50) compared to non-clients.

In secondary analyses examining whether the nature and frequency of HHPA produced differential effects of peer advocacy on our outcomes, we show that the effect of peer advocacy appeared to be similar between HHPA clients who were 'new' or 'on-going' and also was similar between for HHPA clients who were supported directly by a peer or not. We found that the effect of HHPA was modified by self-reported symptoms of anxiety or depression: clients who had the highest PHQ4 scores (PHQ > 9) had 1.98 times greater probability of a DNA at an outpatient appointment than non-clients with the highest scores (95% CI 1.00 to 3.89). Clients with moderate symptoms scores (PHQ between 6 and 9) had 3.38 more completed outpatient appointments (95% CI 0.05 to 6.71) compared to non-clients with moderate symptoms. HHPA clients with moderate symptoms also had 0.81 (95% CI 0.10 to 1.52) more inpatient admissions and 0.46 (95% CI 0.03 to 0.89) more planned inpatient admissions than non-clients with moderate symptoms. Findings for the secondary and sensitivity analyses for all outcomes measured through a continuous variable are presented as mean differences between HHPA and non-HHPA groups using linear regression models. This contrasts to the published paper where following reviewer requests results are presented as predicted counts estimated through negative binomial regression models. The magnitude of effect between the two approaches are comparable.

TABLE 2 Annual programme costs for Homeless Health Peer Advocacy, London, UK 2022–3

Item	Cost
Salaries: includes delivery staff, management and admin, volunteer manager and training (includes national insurance/ pension)	£512,146
Project: includes client support cost, consultancy cost, volunteer expenses, staff expenses	£82,960
Overheads: includes staff welfare, staff training and development costs, audit and accountancy fees, governance expenses, rent, including venue hire, insurance, information technology subscriptions and consumables, memberships and subscriptions, other professional fees, outsourced staff function, outsourced information technology support, public relations costs, staff office and telephone costs, staff recruitment, stationary, post and office sundries, contribution to fundraising and core salaries	£78,588
Total cost	£673,694

Component C (economic study)

The annual costs of delivering HPPA are presented in *Table 2*.

The total costs incurred between 6 April 2022 and 5 April 2023 were £673,394. The largest component was salary costs, including delivery staff, management and administration, volunteer manager and training. Combining with the programmatic data (Component D), this results in an estimate of £1025 per client annually, an average cost of an appointment of £176 (95%CI £151 to £214) and a median cost per client annually of £353 (95% CI £151 to £1068).

Table 3 presents NHS resource costs for HPPA clients compared to non-clients controls over a 12-month period, first using effect estimates from Component B's primary analysis and then using estimates from the sensitivity analysis (whereby we imputed '0' visit counts for participants who did not link to any of the HES data sets).

After accounting for uncertainty from the cohort study's primary impact estimates, these findings indicate that it is unclear whether there are cost savings from HHPA for the NHS. Lower estimates indicate that there are cost savings, whereas upper estimates indicate that HHPA is more expensive to the NHS for clients than for non-clients.

Component D (programmatic study)

Between 6 April 2022 and 5 April 2023, 656 unique clients were active in the programme and had 3820 HHPA engagements scheduled. Clients had a median of 16 engagements (IQR 5–56) scheduled in this time span. Of the engagements scheduled, 2781 (72.8%) were completed and 1037 (27.1%) were not completed. The most common scheduled engagements were for a peer-supported medical appointment (43.3%), followed by booking independent travel (38.1%), and another 14.7% were for one-to-one meeting support meetings with a peer advocate. The other engagement types were rare (each < 3%): GP registration, remote support for medical appointments, welfare phone calls and welfare visits.

There were 53 peer advocates who were active in this span, who supported a median of 124 engagements (IQR 71–240).

Discussion and interpretation

Component A: qualitative study

The qualitative analysis contributes to current understanding of the mechanisms of HHPA. Previously, much emphasis has been placed on mapping the multiple processes involved in peer support.[34] While such analyses

TABLE 3 National Health Service resource costs for Homeless Health Peer Advocacy clients compared to non-clients, London, UK, 2022–3

	Mean (95% CI) with primary analysis of cohort data	Mean (95% CI) with sensitivity analysis of cohort data
Average cost per client for 'did not attend' (DNA) outpatient appointments, GBP	77 (−58 to 213)	116 (22 to 209)
Average cost per client for attended outpatient appointments, GBP	162 (−296 to 617)	301 (22 to 534)
Average cost per client for emergency department visits, GBP	226 (−16 to 955)	216 (37 to 395)

are essential, the potential complexity of peer support that these analyses elucidates creates challenges of how to relate to this in training, support and in communicating the processes and effects to multiple stakeholders. The typology presented here, anchored in the idea of cultural health capital, allows a detailed engagement with the often vaguely stated goals of empowerment, independence and stigma management. As noted, such goals can mean many different things and so be difficult to communicate, and, furthermore, they can reinforce problematic assumptions of individual action by people who are homeless as the primary or sole focus of responsibility for action in the face of severe poverty and multiple structural barriers. The capitals framework provides categories to organise the many activities Groundswell do in support of clients; crucially, this framework references client need, but does not solely focus on that, and also references potential outcomes.

The framework is potentially useful in training peer advocates and planning care in terms of relating specific needs to specific activities that peers might do and then how that might lead to particular processes, over the short and long term. From this, there could also follow the potential for greater targeting and strategising. However, we note here the tensions in suggesting targeting, as the absence of targeting is arguably a strength, given the difficulties in identifying need, which is itself a long-term process and not a one-off event, and so simplistic approaches to identifying need to then enable targeting could alienate some from the service and create unforeseen challenges.

We were not able to differentiate the groups to whom these processes may apply to in order to explore these theories quantitatively; the capitals' framework described does offer potential to engage with these past histories and social contexts for particular client groups. Given this potential for the importance of very long-term processes of change, different research designs would be appropriate to consider in future.

The principal implication from the qualitative study of the impact of peer advocacy on peers themselves[33] is the importance of meeting self-defined goals and how Groundswell supports this. Developing the idea of progression capitals, rather than relying on notions of recovery capital,[33] helps account for how clinical recovery from health conditions (and other definitions of recovery used by professionals and institutions) is not always the main end goal that people seek. Standard definitions of recovery, even those incorporating broader 'personal recovery' characteristics, imply a return to favourable circumstances, an implication which is not always relatable to those whose lives are characterised by persistent disadvantage. A move away from conceptions of recovery capital towards understandings that align with progression capital – so named to reflect the participants' and organisation's own terminology – facilitates the recognition of (and emphasises the validity of) individually determined self-fulfilment goals.[33]

Components B and C: cohort and economic studies

For Component B, while we did not find evidence of effect on attendance at scheduled outpatient appointments or use of A&E, HHPA clients had 1.14 more total inpatient admissions in the 12 months after study recruitment relative to non-clients. Sensitivity analyses also showed that HHPA clients had 2.0 more completed outpatient appointments, 0.25 more planned inpatient admissions and 0.82 more A&E visits. Assuming that lack of data linkage is evidence of non-engagement of health care, the sensitivity findings suggests that HHPA clients are receiving more health care.

The COVID-related disruptions to the delivery of HHPA and health service engagements complicate the generalisability of findings. Evidence from intervention studies[17,35] suggests conflicting results on the effect of peer advocates on engagement with specific services. A cluster RCT suggested that peer educators did not increase the uptake of tuberculosis (TB) screening, but an individual-level RCT found that peer advocate support was associated with increased engagement with hepatitis C services. In the TB trial, the authors conclude that peers who can explain the health condition and treatment may be more effective. The hepatitis C trial included training to peers on hepatitis C management, so it might be that better training to peers advocates on health conditions may be beneficial. In the context of HHPA, work-specific training on health conditions is complicated by the broad range of health needs that clients require health service support with.

Our finding of a greater number of total inpatient admissions associated with HHPA is positive to the extent that serious health needs are being addressed and any attendance is an opportunity to review health, conduct further investigations and engage people into services. We did not find a difference in unplanned admissions and cannot know whether inpatient admissions are a result of not addressing conditions earlier through outpatient appointments.

Finding from the analyses which were stratified by PHQ4, depression and anxiety screening scores are in line with review evidence, which suggests peer support interventions are not effective among people with severe mental health conditions across a range of outcomes.[13] In light of cuts to mental health services, our findings warrant further investigation to better inform the work of peers

in addressing mental health needs, given near 40% of participants had high symptom scores and to inform the growing use of psychologically informed approaches in homeless services.

The median cost per client was £353 annually and £176 per engagement. Cost–consequence analyses suggest that it is unclear whether there are cost savings from peer advocacy for the NHS, as lower estimates indicate there are cost savings, whereas upper estimates indicate that it is more expensive than controls.

The inconclusive nature of the cohort and economic studies in the context of the qualitative analysis has implications for how future evaluation of services, such as HHPA, could be considered. HHPA is funded through the local government councils within London, and the unpredictability of funding prevented us from conducting a cluster RCT to measure HHPA's impact on clients. Rather, we designed a cohort study. The past experiences of other studies[35] have revealed the further tensions in impact evaluation design, which we, in turn, sought to respond to. Other research designs could be considered for future evaluation efforts of HHPA or similar studies. A stepped wedge design would remove the challenges of withholding a service within a given locality, although it would also need predictable funding over the long term. It would also address concerns, raised by the peers in our proposal development, that a cluster-randomised trial necessitates non-provision of the service to people in need.

Strengths and limitations

Overall, a key strength of our study was the mixed-method design, led by a multidisciplinary team and informed by theory. Given the complexity of the changing context – driven by COVID-19 – we relied on the qualitative work to help interpret findings to understand how the intervention delivery adapted and changed. The use of an outcome measure derived from hospital data and not self-reported is a key strength of the cohort study, albeit one that was affected by COVID-related disruptions to the NHS with reduced face-to-face appointments and in-patient services during the study period. Our evaluation approach was participatory; individuals with lived experience of homelessness were involved with the study design, data collection, analysis and dissemination, which enhanced our ability to conduct the research more meaningfully. This evaluation is not without several limitations. For the qualitative study (Component A), we sampled purposively and not randomly and so have explored the diversity of views rather than the most common ones. We only interviewed participants in English and only once, and we did not shadow participants, limiting the depth of our understanding. For the cohort study (Component B), we estimated the impact of peer advocacy with a cohort study rather than a randomised trial. Though we adjusted for known potential confounders with propensity scores and doubly robust models, our estimated effects (i.e. ratios and differences) are still potentially biased by unmeasured confounders. Sample sizes were smaller than anticipated due to fewer scheduled outpatient appointments in the follow-up period as a result of COVID-19, as well as fewer non-clients linking to HES. Our power to detect differences was therefore limited. For the economic analysis (Component C), we could not provide more granularity to the data without compromising confidentiality. The limitations arising from the COVID pandemic and response specifically are detailed below.

Impact of COVID-19

The COVID-19 had a significant impact on the study. Data collection for the qualitative study (Component A) began in the summer of 2019, with staff embedding themselves within Groundswell to begin interviews. The cohort study (Component B) started recruitment in February 2020. All data collections stopped in March 2020 as did most routine activity in HHPA and the NHS. We began interviewing by telephone for the qualitative study and attempted to recruit remotely for the cohort study. This was of limited success, and as a consequence, data collection did not recommence until July 2021. COVID-19-related lockdowns severely affected cohort study recruitment. On a practical level, this that meant we developed study procedures, trained co-researchers, engaged recruitment sites during three separate times. When national lockdowns were over, hostels were still subject to local lockdowns, whereby the presence of a confirmed case in a resident led to multiweek postponement of our scheduled research activity. In addition, high staff turnover at hostels and day centres resulted in a loss of continuity and the need to re-establish relationships and rebuild trust with the gatekeepers to our potential participants.

The pandemic dramatically affected the context within which we conducted the research. For HHPA, peers shifted to providing support remotely through welfare calls, attending appointments with clients online and other clients being provided independent travel. Over half of peers discontinued volunteering due to their own clinical vulnerability, the loss of peer group dynamics or inability to support clients in a manner that they felt was adequate while adhering to social distancing rules. In NHS hospitals, more outpatient appointments were conducted online, with peers either joining alongside their clients or from a third location. NHS services experienced more delays, including for outpatient care and for planned inpatient

care, which as described above is likely to have affected our outcome measures. The context of homelessness itself was also affected: in London, essentially, the entire population of people sleeping outside was provided emergency housing in hotels, within which GP registration and other health and social care was facilitated. These affected the breadth and intensity of the HHPA intervention and the amount of hospital care to levels far below that anticipated when we proposed the evaluation, while access to primary care – an outcome not captured in this evaluation – likely improved for some.

Individual training and capacity-strengthening activities

Individual team members developed skills throughout the project. The principal investigator (LP) navigated the approval procedures for the Confidentiality Advisory Group and the Data Access Request Service in order to establish a contingency study for our cohort, using historic (pre-COVID) NHS hospital data. Researcher (SR) learned how to programme Open Data Kit questionnaire software, calculate propensity scores and manage NHS electronic health records. Two co-researchers were trained in all study protocols across qualitative and quantitative methods and became more involved in the qualitative analysis. Two team member were awarded Fellowships building on the HHPA evaluation, including a Leverhulme Fellowship (PJA) and a UK Research and Innovation Fellowship (coinvestigator AG). All peer advocates and the rest of the co-researcher team were trained in study procedures, including recruitment, informed consent, structured interviewing, tablet data collection, referral and documentation. Given the context of the COVID-19 pandemic, the team became proficient in methods for remote data collection, including in ways that supported the inclusion of people with experience of homelessness; these lessons and experiences were published in an open-access book.[36]

Public and patient involvement

In line with our participatory approach, findings were presented to our study advisory group to inform our dissemination strategy. Co-researchers presented preliminary qualitative findings at the Pathways from Homelessness Conference 2021. Baseline quantitative findings were also presented to staff and peers at Groundswell and to key workers and service users at one hostel and one day centre where we recruited our cohort's comparison arm, where we found engagement was particularly high in the recruitment period. Further information on how the community was involved in the research is described in the section below, where we reflect on equality, diversity and inclusion.

Equality, diversity and inclusion

Participant representation

For the qualitative study (Component A), we actively sought a diverse sample of participants, with reference to a purposive sampling strategy that considered experiences of homelessness, and so peer advocacy, as potentially subject to age, race and ethnicity, gender and sexuality. As summarised in the paper,[31] we largely achieved this diverse sample. However, there was limited diversity with respect to nationality, principally owing to language, and in a context of data collection for interviews being principally remote, the logistics of translation were too challenging.

For the cohort study's (Component B) client arm, every HHPA client who was fluent in English or Polish was recruited to the study. For the comparison arm, we recruited participants from all areas of London and particularly from the central boroughs with larger homeless populations. We built relationships with site managers of hostels and day centres to allow our team access to their clients. At the site level, our inclusion/exclusion criteria mirrored that of HHPA, though with the addition of fluency in English or Polish. Our interviewers were co-researchers and peer advocates, nearly all of whom had lived experience of homelessness, and their credibility likely enhanced participation rates. Though it is not possible to assess whether our sample is truly representative of the population of homeless adults who struggle to access health care, we can confirm wide representation by age, gender, ethnicity, nationality, sexuality and ability. We excluded people from the cohort study who were not fluent in English or Polish even though HHPA's service does not have this exclusion. This exclusion was necessary due to co-researcher availability and the need for similarity across the cohort's comparison arms. While these two languages cover a large majority of the homeless population in London, a notable minority are not fluent in English. This subpopulation will have particularly high barriers to accessing health care and are not represented in this study.

At many hostels, our recruitment was facilitated by key workers. An advantage of this facilitation is that it builds on an existing trusting relationship and so enables individuals who are otherwise hesitant to engage with research. A disadvantage is that some key workers may seek to protect vulnerable clients from research procedures (e.g. being asked distressing questions), excluding these clients from being represented in the data.

With peers, co-researchers and Groundswell staff, we did an extensive pilot testing of study procedures, including of the cohort questionnaire text. We received feedback and advice about the text and revised accordingly. Moreover, the peers and co-researchers who delivered the text were nearly all people with lived experience, which added credibility to the text and reassurance to people from under-represented groups.

Research team

Our study steering committee included two experienced peers from Groundswell, who contributed oversight and advice.

Our team had representation across age, gender, ethnicity and national origin. The research team was multidisciplinary, and our co-researchers were mostly people with lived experience of homelessness. Senior team members supported the junior team members with career development, leading one (PJA) to a successful post-doctoral fellowship, to be first author on a prominent paper (PJA) and book chapter (PJA) and another (PH) to be short-listed for a competitive PhD studentship; LP also mentored AG in being awarded a UK Research and Innovation fellowship, building on the methods and questions identified through this project. Two co-researchers with lived experience contributed to qualitative data analyses and interpretation and have been included as coauthors on conference presentations and publication.

Impact and learning

Lessons for future research

Through this evaluation, we learned many lessons which we can share with other researchers engaging with homeless health, access to care, programme evaluation and electronic health records.

For the cohort study (Component B), there was speculation from our research partners about potential participants' concerns about privacy and confidentiality and declining to consent. There were also concerns raised about the potential to retraumatise participants by having to answer close-ended questions about their past experience of abuse. In reality, after explaining the contents of the information sheet and informed consent document, participants rarely voiced concern before, during or after completing the questionnaire. For future researchers, we emphasise having early engagement with gatekeepers (e.g. key workers), having co-researchers with similar lived experience as the participants, giving co-researchers university affiliations and providing everyone clear explanation of the privacy and confidentiality protocols.

Given that our cohort study (Component B) was not a randomised study, we had to identify and recruit a naturally occurring group of non-clients to compare against HHPA clients. This identification required us to develop an understanding of the background, pathways and characteristics of HHPA clients and became a key area of work for the qualitative study. A feature and strength of Groundswell's approach to engaging potential HHPA clients is its inclusive nature and low barriers to entry, whereby eligibility criteria (aside age) are self-defined. Sustained engagement with Groundswell staff and peers was vital towards developing the understanding of the processes by which a person who is homeless and who has difficulties in accessing health care either does or does not become a peer advocacy client. This understanding informed our recruitment processes for the comparison group, and for the measures we needed to collect to control for confounding. For quasi-experimental designs such as this, we encourage future researchers to adequately resource qualitative researchers to embed themselves in the programme being evaluated, to speak to programme leadership, peers and clients, and to understand the nuances of service user backgrounds, pathways and characteristics, which may not be evident from programme documentation.

For assessing impact in the cohort study (Component B), we focus on three types of hospital use as our outcomes. These outcomes were felt to be relevant for service users – as a key determinant of their future health – and for the health sector and local government commissioners. These outcomes also had the strength of not requiring active follow-up and for being objective measures that are available via electronic health records. There are a range of other outcomes with these strengths which future researchers should consider, including linkable data from GP surgeries, specialist drug and mental health services, and civil records for the death registry. These data sets capture other important domains of health, which could also be affected by peer advocacy.

The programmatic data (for Component D) collected on clients and engagements with peers are limited, particularly on client-level characteristics. We budgeted 50% salary support for a data manager at Groundswell. However, given the scope and complexity of the research project, and the continued growth of HHPA (with COVID-related complications), full-time support was necessary. This support would also have allowed Groundswell to better develop and monitor their routine data systems to inform a process evaluation. We recommend researchers in programme evaluation to ensure that the programme itself is adequately resourced for the additional work that the evaluation brings to the service.

Finally, in the homelessness sector, turnover of staff in hostels and day centres is extremely high. A research team should resource itself to be able to continuously renew these relationships and maintain continuity.

Recommendation for future research

The analysis of capitals in our qualitative data provides a framework by which particular experiences of peer work were linked to impact for clients, in a way which manages the conceptual complexity in terms of mechanisms and outcomes. It also offers theoretical development by allowing the study to engage with the broader social determinants of health and historical experiences of homelessness, an area that the analysis here only engaged with to a limited extent. Future research could look to the development of quantitative indicators embedded in qualitative analyses to measure aspects of cultural health capital and the extent to which they mediate the effect of peer advocacy on hospital outcomes. We used questionnaire data to generate measures of cultural health capital which we explored in secondary analyses of the cohort data. However, our indicators were not grounded sufficiently in the qualitative data and we were not confident that they could accurately measure mechanisms through which HHPA worked in line with findings from the qualitative analyses. Further evaluations should build on this research.

Our findings point to particular challenges of an evaluation design that focused on understanding the impact of peer advocacy on outcomes relating to the health and welfare of an individual client, whether that be disease incidence or progression, or mediating outcomes of attending planned outpatient appointments. Through the course of implementing the study described here, and then also AG's UK Research & Innovation-funded fellowship to conceptualise systemic interventions to challenge stigma as it relates to homelessness, our reflections have increasingly focused on the potential value and feasibility of developing indicators for understanding institution-level change as a result of peer advocacy and similar interventions. Our qualitative data so far point to the complex influence of hostel contexts on HHPA, but in a wide range of ways, with multiple pressures on the triad of peer–client–keyworker, and also multiple pathways for influence, on healthcare interactions and also hostel-level interactions. Future research could more clearly delineate these pressures and potential pathways for influence. To explore, for example, how the ongoing presence of a particular peer advocate within the same care or hostel setting could lead to a change in clinic or hostel-level practice or institutional policy. Given the logistical complexity of evaluation in this area of health services and public health, we consider this as a priority.

In the cohort study, we found that nearly 40% of participants had high symptom scores for depression and anxiety. Some 75% self-identified as having problems with depression or anxiety. Given that impaired mental health inhibits progression in health and social welfare, it is not surprising that these participants – that is people who have difficulty in managing their health care – are also people who are affected by depression and anxiety. Future research should consider how to integrate low-intensity mental health support into other interventions to improve the welfare of socially vulnerable groups and how peers can provide this support. There are a number of examples of effective peer-delivered mental health interventions, though the evidence for peers drawn from socially vulnerable groups and as part of an integrated intervention is limited. Such support should complement and facilitate up-and-down referral with formal mental health care.

Analysis of qualitative data collected through the study has also identified priorities for future research on how interventions like peer advocacy can provide trauma-informed approaches to care. Given the high prevalence of clients with experience of violence, abuse and trauma, as reported above, we sought to theorise the acceptability of HHPA for trauma survivors. The qualitative data from clients with experience of violence, abuse and/or trauma – following Van Der Kolk's understanding of trauma[37] – generally reported positive experiences with the HHPA service, often expressing a preference for HHPA over other forms of support offered, such as keyworker support. Drawing on the literature around trauma-informed approaches and their effectiveness in contexts of homeless services, we sought to explore the degree to which HHPA could be considered as a trauma-informed intervention. We used Sweeney *et al.*'s nine principles of trauma-informed approaches[38] as a framework with which to perform a deductive analysis: (1) recognition; (2) resist retraumatisation; (3) cultural, historical and gender contexts; (4) trustworthiness and transparency; (5) collaboration and mutuality; (6) empowerment, choice and control; (7) safety; (8) survivor partnerships and (9) pathways to trauma-specific care. Overall, we found that HHPA adopted activities that supported each principle of trauma-informed practice, suggesting a possible explanation for HHPA's acceptability among clients with this group of clients. This research is currently being written up as a policy brief for use by Groundswell. Future research should further test this framework and seek to understand the outcomes for HHPA clients with experience of trauma.

Dissemination and impact

In this synopsis, we outlined the overarching evaluation strategy and provide details beyond those which were published/accepted for publication in the following articles:

1. Rathod SD, Guise A, Annand P, Hosseini P, Williamson E, Miners A, *et al*. Peer advocacy and access to healthcare for people who are homeless in London, UK: a mixed method impact, economic and process evaluation protocol. *BMJ Open* 2021 June;**11**:e050717.[26]
2. Annand PJ, Platt L, Rathod SD, Hosseini P, Guise A. 'Progression capitals': how homeless health peer advocacy impacts peer advocates. *Soc Sci Med* 2022;**298**:114770.[33]
3. Platt L, Guise A, Hosseini P, Bowgett K, Murphy M, Cudjoe M, *et al*. Peer advocacy and access to hospital care for people who are homeless in London, United Kingdom 2019-2023: a cohort study *BMJ Open* 2026; in press.[27]
4. Guise A, Annand PJ, Hosseini P, Hudson SM, Rathod SD, Esi Yankah M, Platt L. Building and boosting capitals for healthcare access: a qualitative study of Homeless Health Peer Advocacy in London, UK. *Social Health Illn* 2026;**1**:e70136.[31]

We report detailed findings from Component A (qualitative study) in Guise *et al.*[31] and Annand *et al.*[33] and from Component B (cohort study) in Platt *et al.*[27] And in this synopsis, we include findings from Components C (economic study) and D (programmatic data).

Further findings are also included in a book chapter describing methods for data collection that we developed under COVID-19 lockdown restrictions,[36] a forthcoming report for Groundswell on the degree to which HHPA can be considered as a trauma-informed intervention, including graphic illustrations, and a peer-reviewed publication reporting on an analysis of community-level perspectives on why COVID-19 infections were much lower than expected among people who are homeless.[39,40]

Implications for decision-makers

The principal implication of the qualitative study is to provide a framework by which the complexity and range of experiences of peer support can be explored within policy and evaluation debates. Current policy and evaluation approaches risk negating much of the work that peer support involves. The framework of cultural, social and economic capital could be a basis for developing novel indicators of programme outputs and success that more closely resemble the full range of experiences of peer support.

The typology we have described, and continuing work in this area, could be useful for Groundswell and other agencies in planning and training for the work of peer support. This analysis could also help with targeting support at particular clients and anticipating particular 'pathways' of care. We do, though, recognise that such a suggestion is in tension with the benefits of a purposefully flexible service and that understanding need is often in itself a long-term process that unfolds over time. The framework could, however, at least support training efforts for future peer advocates by giving new ways of communicating the complexity and variety of the work.

The findings should also prompt all stakeholders, especially those involved in funding and planning services to recognise that some goals that are currently defined for peer support – for example empowerment and independence in care – need to be understood more expansively and with more precision. Relatedly, stakeholders need to recognise that ongoing and open-ended use of peer support services is potentially integral to good health and realising specific healthcare goals. Such principles should be integrated within future planning and funding for services.

Further consideration and costing of monitoring and evaluation systems for programmes being commissioned are warranted to inform ongoing evaluation and provide quality data for commissioners to inform decision-making. This could include facilitating the collection of a common set of indicators of need from their new service users and providing advice on the procurement and management of data systems.

The short-term nature of contracts that fund the HHPA service meant that the location of service delivery is subject to rapid change contingent on commissioning priorities. This had implications for the evaluation, making it difficult to plan which boroughs to recruit participants for intervention and comparison arms. More importantly, it requires a lot of staff time to work on new proposals and contracts, hinders the establishment of collaborations with hostels and day centres and the long-term collection of monitoring data to measure changes over time. The research highlighted the need for longer-term funding of the service.

In qualitative and cohort findings, we found signs that clients' underlying mental health status influenced their engagement with peer support. More specifically, people with moderate levels of mental health distress are most likely to benefit from peer support and to be able to meet more of their co-occurring healthcare needs. All other factors being equal, people with low levels of mental distress may only require limited and targeted support (e.g. with transportation vouchers and appointment reminders), the kind that can be met by their key workers. People with high levels of mental distress require sustained and intensive support, the kind necessitating specialist care. Decision-makers and homeless service organisations should be mindful to ensure that peers are not being used to compensate for inadequately resourced social or health care. They should consider the client's situation and determine whether support from a peer with lived experience, specifically, adds value to the client's experience. We believe that peers are most likely to add value for people with moderate levels of mental health distress: these individuals need more than token support, they may be able to acknowledge their need for support and they have the self-efficacy to engage meaningfully with a peer.

Our findings show that HHPA supports people with a range of needs to access health care in both short- and long-term outcomes. Many of these outcomes are desirable when considered against the goal of health and welfare but do not clearly sit with the common framing that peer support should achieve goals, over the short term, of empowerment and independence. Other outcomes that are just as important for health and welfare are achieved through HHPA and need a more nuanced engagement with empowerment and independence: namely that empowerment can mean the continued presence of peer support and that independence – understood as going to healthcare appointments alone – may not be a realistic or productive goal, given some health needs.

How rapidly the knowledge base in the area is developing

One notable development in peer support research in the UK arises with the Supporting Harm Reduction through Peer Support (SHARPS) feasibility study,[41] within which peers provided practical and emotional support to people who are homeless and have substance use problems. This feasibility study has now progressed to a National Institute for Health and Care Research-funded cluster RCT in Scotland and northern England.

Encouragingly, the importance of 'lived experience' is increasingly recognised as key to supporting research, service design and delivery for marginalised populations in particular. However, the extent to which it is applied to bring about change in service delivery or genuinely support those with lived experience on their own personal development is less uncertain. Our paper examining the effect of peer advocacy on peers themselves[33] is some of the first evidence of its kind. While experience of peer advocacy in the UK and elsewhere is more prominent, there has been no significant change in the evidence base as it relates to the impact on health outcomes.

In 2022, the National Institute for Health and Care Excellence updated guidance about health and social care for people experiencing homelessness.[42] These guidelines draw on available quantitative and qualitative evidence and recommend involving peers to design and deliver programmes, including for peers to attend and advocate at healthcare engagements. In addition, coinvestigator AG, as part of a UK Research & Innovation fellowship in collaboration with Groundswell, has published a report[43] summarising findings from qualitative interviews that examine whether supporting the employment of people with lived experience can reduce stigma. It examines how people with lived experience feel about working under that label and the extent to which it reinforces stigma. The report produces recommendations for organisations that support staff and volunteers who have personal experience of homelessness.

Conclusions

Peer advocates enhance their clients' access to different kinds of resources (or 'capitals') – cultural, social, economic – and through that, they enable healthcare access. This process of increasing access to capitals has different ways of working, responding to the particular experiences and needs of the client. The process of becoming and working as a peer advocate enabled peers to achieve particular goals through the provision of social, cultural, human and physical (e.g. bursaries) resources. We cannot state whether peer advocacy reduces the probability that clients 'did not attend' their scheduled outpatient appointments or reduces healthcare costs. Peer advocacy was associated with a greater number of inpatient admissions overall, and sensitivity analyses show a greater number of completed outpatient appointments. However, these findings are not indicative of the effectiveness of peer advocacy outside the highly unusual circumstances of the pandemic and disruptions to health services.

Additional information

CRediT contribution statement

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Patient data statement

This work uses data provided by patients and collected by the NHS as part of their care and support. Using patient data is vital to improve health and care for everyone. There is huge potential to make better use of information from people's patient records, to understand more about disease, develop new treatments, monitor safety, and plan NHS services. Patient data should be kept safe and secure, to protect everyone's privacy, and it is important that there are safeguards to make sure that they are stored and used responsibly. Everyone should be able to find out about how patient data are used. #datasaveslives You can find out more about the background to this citation here: https://understandingpatientdata.org.uk/data-citation.

Data-sharing statement

All data requests should be submitted to the corresponding author for consideration. Access to all anonymised data may be granted following review by the data-sharing officer and completion of a data-sharing agreement.

Ethics statement

Evaluation-wide ethics approval has been granted by the Dulwich Research Ethics Committee (IRAS 271312) on 18 September 2019 and the London School of Hygiene and Tropical Medicine's Ethics Committee (Ref: 18021) on 28 November 2019, both in the UK.

Information governance statement

London School of Hygiene and Tropical Medicine is committed to handling all personal information in line with the UK Data Protection Act (2018) and the General Data Protection Regulation (EU GDPR) 2016/679. LSHTM is the Data Controller, and you can find out more about how we handle personal data, including how to exercise your individual rights and the contact details for our Data Protection officer here: www.lshtm.ac.uk/sites/default/files/data-protection-policy.pdf.

Disclosure of interests

Full disclosure of interests: Completed ICMJE forms for all authors, including all related interests, are available in the toolkit on the NIHR Journals Library report publication page at https://doi.org/10.3310/GJLP2929.

Primary conflicts of interest: Sujit D Rathod declares receipt of funding for this project through National Institute for Health and

Care Research, PHR 17/44/40, and being on the trial steering committee for the SHARPS study (PI Tessa Parkes, University of Stirling of peer-delivered harm reduction counselling for people who are homeless and use drugs.

Lucy Platt declares receipt of funding for this project through National Institute for Health and Care Research, PHR 17/44/40.

We endeavour to obtain ICMJE disclosure of interests forms for all named authors. In this case, we have been unable to obtain these forms for every author. Please contact the corresponding author if you have any queries.

Department of Health and Social Care disclaimer

This publication presents independent research commissioned by the National Institute for Health and Care Research (NIHR). The views and opinions expressed by the interviewees in this publication are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, MRC, NIHR Coordinating Centre, the Public Health Research programme or the Department of Health and Social Care.

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Award publications

This synopsis provided an overview of the research award *A mixed-method impact, economic and process evaluation of how a peer advocacy intervention for people experiencing homelessness in London facilitates access to health care and enables well-being*.

Other articles published as part of this thread are:

Annand PJ, Platt L, Rathod SD, Hosseini P, Guise A. 'Progression capitals': how homeless health peer advocacy impacts peer advocates. *Soc Sci Med* 2022;**298**:114770. https://doi.org/10.1016/j.socscimed.2022.114770

Guise A, Annand PJ, Hosseini P, Hudson S, Rathod SD, Platt L. Building and boosting capitals for health care access: a qualitative study of homeless health peer advocacy in London, UK. *Sociol Health Illn* 2026;**1**:e70136. https://doi.org/10.1111/1467-9566.70136

Rathod SD, Guise A, Annand P, Hosseini P, Williamson E, Miners A, *et al*. Peer advocacy and access to healthcare for people who are homeless in London, UK: a mixed method impact, economic and process evaluation protocol. *BMJ Open* 2021 June;**11**:e050717. https://doi.org/10.1136/bmjopen-2021-050717

The following was still under review when this synopsis was published. The following preprint version is available for the reader, please be aware this may not have been peer reviewed:

Platt L, Guise A, Hosseini P, Bowgett K, Cudjoe M, Annand PJ, *et al*. Peer advocacy and access to hospital care for people who are homeless in London, United Kingdom 2019–2023: a cohort study. *medRxiv* 2025.09.11.25335486. https://doi.org/10.1101/2025.09.11.25335486

For more information about this research, please view the award page (www.fundingawards.nihr.ac.uk/award/17/44/40).

Additional outputs

Platt L, Guise A, Hosseini P, Bowgett K, Murphy M, Cudjoe M, *et al*. Peer advocacy and access to hospital care for people who are homeless in London, United Kingdom 2019-2023: a cohort study *BMJ Open* 2026; in press.

Annand PJ, Hudson MS, Yankah MED, Burrows M, Burridge S, Cornes M, *et al*. Going Remote Using Technology to Coproduce Homeless Health Research. In Williams O, Tembo D, Ocloo J, Kaur M, Hickey G, Farr M, *et al*., editors. *COVID-19 and Coproduction in Health and Social Care Research, Policy, and Practice. Volume 2: Coproduction Methods and Working Together at a Distance*. 1 edn. Bristol, UK: Bristol University Press; 2021. pp. 113–22.

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Guise A, Burridge S, Annand PJ, Burrows M, Platt L, Rathod SD, *et al*. Why were COVID-19 infections lower than expected amongst people who are homeless in London, UK in 2020? Exploring community perspectives and the multiple pathways of health inequalities in pandemics. *SSM Qual Res Health* 2022;**2**:100038.

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Conference presentations

Annand PJ, MacDonald L, Marshall A, Guise A, Burrows M, Bowgett K, *et al. Peer Progression: Impact of Homelessness Health Peer Advocacy on Peer Advocates*. Pathways from Homelessness. 11 March, 2021.

Guise A, Annand PJ, Hosseini P, Rathod SD, Platt L. Building cultural health capital to manage stigma and health care access: an evaluation of a homeless health peer support service in London, UK. British Sociological Association Medical Sociology Conference; 14 September 2022; Lancaster 2022.

Roundtable: 'Growing pains': what does 'peer' mean and what does the identity of 'peer' mean for researchers with experience of homelessness? Hosted by Groundswell with Tony McKenzie (Institute of Global Prosperity, University College London), Dan Bleksley (Groundswell), Andy Guise (King's College London), Derek Holliday (Homeless Network Scotland), and a peer researcher.

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List of abbreviations

A&E	accident and emergency
CHAIN	Combined Homelessness and Information Network
DNA	did not attend
GP	general practitioner
HES	Hospital Episode Statistics
HHPA	Homeless Health Peer Advocacy
ICD-10	*International Statistical Classification of Diseases and Related Health Problems*, Tenth Revision
PHQ4	Patient Health Questionnaire – 4 item
RCT	randomised controlled trial
SHARPS	Supporting Harm Reduction through Peer Support
SNOMED CT	Systematised Nomenclature of Medicine Clinical Terms
TB	tuberculosis

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