Feasibility Study of navigator-based intervention for people who have self-harmed or presented to the Emergency Department in acute distress in the context of economic, employment or benefit-related difficulties ("HOPE").

Summary

Background

Findings from our preliminary research indicated that vulnerable individuals commonly experience difficulties navigating the benefits system and in accessing the available sources of welfare and debt advice and this contributes to their distress. Based on discussions with service users, advice agencies, policy makers, clinicians and researchers and a systematic review, we concluded that the most promising interventions was one aimed facilitating access to welfare and debt advice

Objectives

To determine the feasibility and acceptability of a brief psychosocial intervention (the "HOPE" service - (Help fOr People with money, Employment, benefit or housing problems)) for people in acute distress because of financial, employment or welfare (benefit) difficulties.

Methods

Pilot RCT (Trial Registration: ISRCTN 58531248) of up to 6 sessions with a mental health worker providing practical help with financial and other problems using motivational interviewing techniques. The pilot assessed the acceptability and practicality of recruitment, randomization, outcome measures (PHQ-9, GAD-7, repeat self-harm, EQ5D-5L and socioeconomic questions) and the intervention itself as well as loss to follow-up at 3 months.

Results

Nineteen participants (13 intervention, 6 control) – 1-2% of all people presenting with self-harm at UHB - were recruited and randomised between May 2016-March 2017: two per month. Thirteen participants (68%) were followed up at 3 months. The mean number of sessions received was: 2.9 (median 2; range 1-6). Recruitment, randomisation and assessment measures were well received. There was evidence of benefit from people receiving the one-off (control) intervention. The average intervention delivery costs in the intervention group was £262 per person

Conclusions

The intervention was well received. A full trial would need to recruit from multiple centres and consider aspects of generalizability to the wider group of people who self-harm; the intervention may be better deployed amongst people in the community who are at high risk of self-harm or depression resulting from economic and employment difficulties.

Background

Findings from work our preliminary studies were used to guide a workshop involving a range of stakeholders, including: service user research advisors, statutory and voluntary sector service providers, clinicians and academics. It was recommended that we develop a practical intervention that would be generalisable across England, to help people experiencing psychological distress in the context of financial, employment, housing or welfare benefit problems.

We contacted several voluntary and statutory sector service provider organisations in Bristol [including Bristol CCG, Bristol City Council; Avon and Wiltshire Partnership NHS Trust; SecondStep] to better understand existing service provision and held discussions with our service user advisers. Based on these discussions, a navigator-style intervention was developed. Drawing on the issues highlighted in our qualitative studies, the aim of the intervention was to guide service users to support organisations. The target population would initially be patients who attend hospital with either self-harm or in acute distress where financial, employment, housing and benefit-related difficulties are contributory. Based on feasibility work we planned to later extend this to high-risk individuals in community settings who had not yet presented to mental health services.

The service (intervention) was called HOPE ("HOPE (Help fOr People with money, Employment, benefit or housing problems"). The service aimed to provide practical help guiding participants through the complex system of voluntary and statutory service support organisations, building their confidence to eventually manage their own affairs again. The team was managed based in a local community mental health service provider (www.second-step.co.uk) who were commissioned to provide the service following a tendering exercise by Bristol Clinical Commissioning Group (CCG).

Following approval from our Steering Group and NIHR and with ethics approval, we undertook a feasibility study for a randomised controlled trial (RCT). The objectives of the feasibility study were to: i) Explore the acceptability of randomisation and agreement to allocation to intervention or control arm; ii) Explore the acceptability of the content of the intervention and control arms to participants and staff; iii) Estimate likely recruitment rates to a full trial and identify opportunities to increase recruitment; iv) Identify recruitment pathways and optimise these; v) Estimate likely loss to follow-up; vi) Identify additional training needs of the service providers; vii) Explore the acceptability of outcome measures (health and economic).

Ethics and Consent

The study received ethical approval from South West Central Bristol Research Ethics Committee (REC: 16/SW/0005). Individual consent was obtained from each particpant, including consent to report anonymised data.

Trial Registration, Protocol and Sponsorship

The trial is registered on ISRCTN – registry number 58531248. The trial is described in Protocol v3 dated 19 April 2016. The trial is sponsored by the University of Bristol, Research & Enterprise Development (RED) Senate House, Level 3, Tyndall Avenue, Bristol, BS8 1TH, United Kingdom.

Methods of data collection and analysis

A feasibility study including randomisation was used to determine whether it would be possible to undertake a full-scale trial. People presenting to the Emergency Department (ED) who had self-harmed, had suicidal thoughts, depression and/or were in crisis and where financial, employment, social security benefit or housing problems were cited as contributory factors were identified by Liaison Psychiatry (LP) team members at an acute hospital serving a large inner-city area of England. Eligibility criteria are given in Table 1. LP staff described the trial and asked for patients' consent to being contacted by the research team and SecondStep after their discharge from hospital. The SecondStep team arranged an appointment with the patient within 2 weeks of discharge. At this appointment, the trial was described again, consent was sought, baseline measures were taken and consenting participants were randomised on a 2:1 basis (intervention: control).

Table 1 Eligibility Criteria

Inclusion criteria	18+ years; Men and women; People who have self-harmed and/or are in psychological distress but do not meet the criteria for secondary mental health care referral of continuing help by support agencies; People whose psychosocial assessment indicates that job loss, difficulties finding a job, benefit changes and/or sanctions (actual or fear of changes and sanctions), housing problems or debt and economic hardship as a result of financial problems were a contributory factor to their distress/self-harm.
Exclusion criteria	People referred for secondary care specialist psychiatric community or inpatient services – such services already have access to support workers to help patients with finances/benefit related issues; People with a support worker delivering similar or same support as HOPE workers; People experiencing a psychotic episode, have thought-disorder or who are unable to give consent; People with addiction as their primary problem; People not fluent in English (due to insufficient funding for translation services); People living outside of the catchment area for the HOPE service

The intervention was delivered by a team of 6 individuals with a minimum of 2 years experience working with people with mental health needs ("HOPE workers"), trained to use a range of motivational interviewing (MI) methods (21). HOPE worker training was carried out by two Health Psychologists with extensive MI expertise and took place over two days.

Intervention arm patients received up to 6 one-hour one-to-one sessions with a HOPE worker who used MI techniques in the interaction. Motivational interviewing (MI) is a directive, client-centred communication style for helping people explore and resolve ambivalence, in order to move towards change (21). The underlying principle of MI connects to self-determination theory; working with the service user to increase their independence, decision-making and confidence when approaching and dealing with their problems. Sessions took place over a three-month period in the service user's home, the service providers' (SecondStep) office or a place of the service user's choosing. Some sessions included travel to other organisations e.g. debt advice agencies. Tasks for the HOPE worker included: i) assessment of need and creating a support plan; ii) helping with correspondence/interpretation of DWP letters; iii) welfare benefits advice; iv) support in accessing key agencies (such as benefits or free debt advice); v) supporting and connecting with other community resources, including mental health care.

Control participants received one session signposting them to relevant support organisations. Participants were followed up 3 months after randomisation. Participants and HOPE workers were invited to take part in audio-recorded interviews to determine their views about the research processes and intervention, to enable refinement to be made (see topic guides, appendix 1.2). Questionnaires (see appendix 1.3 and 1.4) were completed by participants prior to randomisation and at the 3 month follow-up. Questionnaire measures included the PHQ-9, GAD-7, repeat self-harm, EQ5D-5L, financial efficacy and questions about debt, employment and welfare benefits (22-28). The patient health questionnaire (PHQ-9) is designed to measure depression severity; values range from zero to 27; high scores (20-27) represent severe depression. The general anxiety disorder (GAD-7) questionnaire is designed to measure anxiety severity; values range from zero to 21; with higher scores representing higher levels of anxiety. The acceptability of the questionnaire measures was explored with participants. Questionnaire data were analysed using Stata 14.2.

Interview transcripts were coded using NViVo software. Data were analysed by individual case studies to include the context and various data sources for each participant, with specific reference to the HOPE worker notes written after each session with a participant. There was particular emphasis on the similarities and differences within and between cases according to the number of sessions attended.

An economic analysis was undertaken from the perspective of the NHS. The total cost of the intervention was based on development and delivery (intervention and control group) costs. Data on the time taken to develop the HOPE manuals and training materials were collected retrospectively. The amount of time that HOPE workers spent attending training and refreshers sessions was prospectively recorded on time sheets. Similar timesheets were used to record the time trainers spent delivering the training sessions. HOPE workers were required to prospectively record their time in contact sessions and any related expenses on purpose-designed forms.

Based on data from Bristol's Self-Harm Surveillance Register we estimated that at least 7 patients per month would present with financial, employment, social security benefit or housing problems following self-harm to the Bristol Royal Infirmary. An estimated 3-4 more per month would present in distress but without having self-harmed. Of these 10-11 people we estimated that around half (5-6) would not be in receipt of secondary care support and so be eligible for the feasibility study.

A sample size of 20 patients was deemed sufficient to enable research methods to be piloted, the feasibility of the intervention tested and rates of recruitment and follow-up estimated. Assuming 50% of the 5-6 potentially eligible people per month agreed to take part in the trial we could recruit these 20 patients over approximately 7 months.

Key quantitative findings

Between 17th May 2016 and 28 February 2017, at least 197 patients were formally screened for HOPE feasibility study eligibility [actual numbers screened were higher, but screening sheets were often not completed by the Liaison Psychiatry Team]. 161 patients were excluded, with the majority having no financial issues or already receiving support; 36 agreed to be contacted after hospital discharge [Figure 1].

Nineteen patients [representing approx. 2% of all patients assessed by the liaison psychiatry team over this period] went on to be randomised and become trial participants. Thus, on average, 1-2 patients were randomised per month. The median time between hospital discharge and the first visit / randomisation was 15 days (range 2 to 50 days).

Patients were randomised in a 2:1 ratio; 13 were randomised to the intervention group and 6 to the control group. All 19 randomised patients completed the baseline questionnaire (Figure 1.4.1). Figure 2 shows the number of HOPE worker sessions attended by participants; less than a third (4/13) received 5 or 6 sessions (median 2, mean 2.8 sessions).

Two intervention arm patients were found to be in receipt of similar services to those offered by HOPE at the first or second intervention session and so did not receive further input from the team. According to intention-to-treat principles these two participants were included in the full analysis.

At the 3-month follow-up, interviews were conducted with 3/6 (50%) control arm and 11/13 (85%) intervention arm participants. All three control participants and 10 of the intervention participants also completed follow-up questionnaires. Other patients could not be contacted despite several attempts.

The mean age of participants was 44 years (SD 9), 11/19 (58%) were male and 18/19 (95%) were white. Most participants were living in rental accommodation (16/19; 84%) and only one participant owned their house outright. Thirty seven percent of participants (7/19) were employed; by chance these were all randomised to the intervention group (Table 2).

At baseline, 15 participants presented at hospital due to self-harm, three presented in crisis, and one with physical pain but who was found to have other difficulties –during their assessment (Table 3). Of the 12 participants who answered the self-harm questions at follow up, three had self-harmed in the three months following randomisation; all three were in the intervention arm and all stated that they had seriously wanted to kill themselves.

Figure 1: Flow of participants

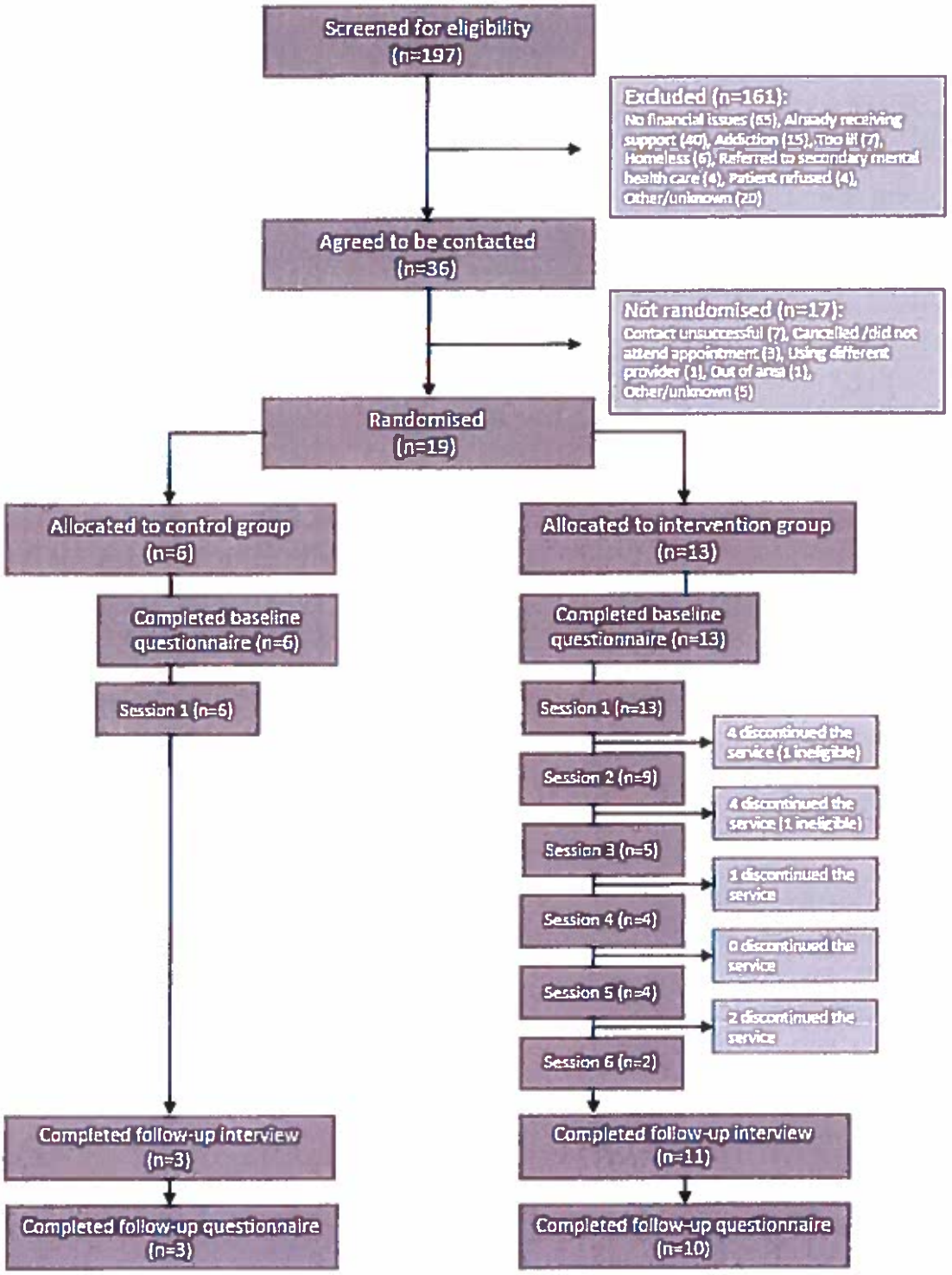


Figure 2 No. of sessions completed by the 13 intervention arm participants

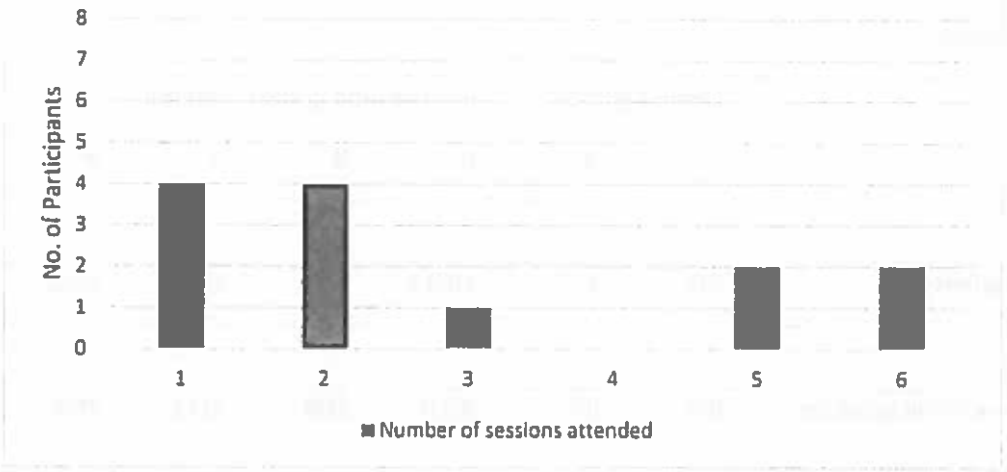


Table 2: Baseline characteristics

	Control (n=6)		Intervention (n=13)		Overall (n=19)	
	n	%	n	%	n	%
Male gender	4/6	67%	7/13	54%	11/19	58%
Age						
20-29 years	1/5	20%	1/13	8%	2/18	11%
30-39 year	0/5	0%	3/13	23%	3/18	17%
40-49 years	1/5	20%	5/13	38%	6/18	33%
50-59 years	3/5	60%	4/13	31%	7/18	39%
Ethnicity						
White	5/6	83%	13/13	100%	18/19	95%
Asian	1/6	17%	0/13	0%	1/19	5%
Employed	0/6	0%	7/13	54%	7/19	37%
Housing type						
Outright	0/6	0%	1/13	8%	1/19	5%
Mortgage	0/6	0%	0/13	0%	0/19	0%
Renting	5/6	83%	11/13	85%	16/19	84%
Other	1/6*	17%	1/13**	8%	2/19	11%
Other household members						
Partner	0/6	0%	2/13	15%	2/19	11%
Child(ren) under 16	0/6	0%	4/13	31%	4/19	21%
Child(ren) 16 or over	0/6	0%	2/13	15%	2/19	11%
Parents	0/6	0%	2/13	15%	2/19	11%

* Salvation army shelter, ** Staying on daughter's sofa

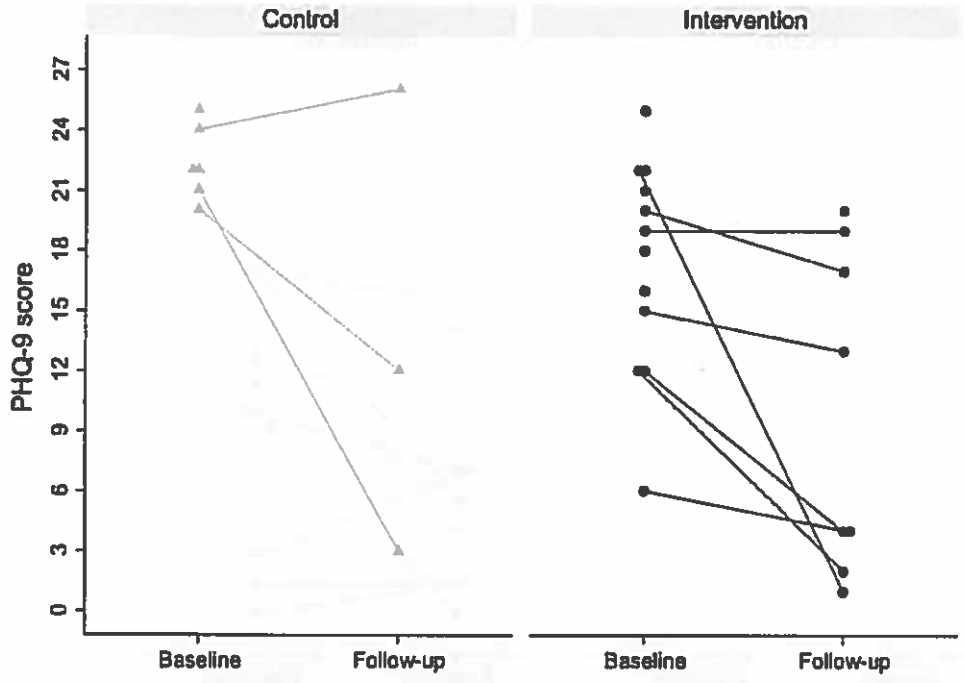
Table 3: Self-harm

	Control group		Intervention group		Overall	
	n	%	n	%	n	%
BASELINE						
Self-harm at admission	5/6	83%	10/13	77%	15/19	79%
FOLLOW-UP						
Self-harm since initial admission	0/2	0%	3/10	30%	3/12	25%
If yes, did you seriously want to kill yourself	-	-	3	100%	3	100%

The mean PHQ-9 score at baseline was 19.0 (SD 5.1); 11/18 (61%) participants were categorised as severely depressed (scores 20-27). On average, participants randomised to the control group were more severely depressed at baseline than those randomised to the intervention group (see Figure 3).

The mean PHQ-9 score at follow-up was 11.0 (SD 8.7); only 2/11 (18%) participants were categorised as severely depressed. Of the 10 participants who provided scores at both time points, 8 improved over the three months, one remained unchanged and one deteriorated.

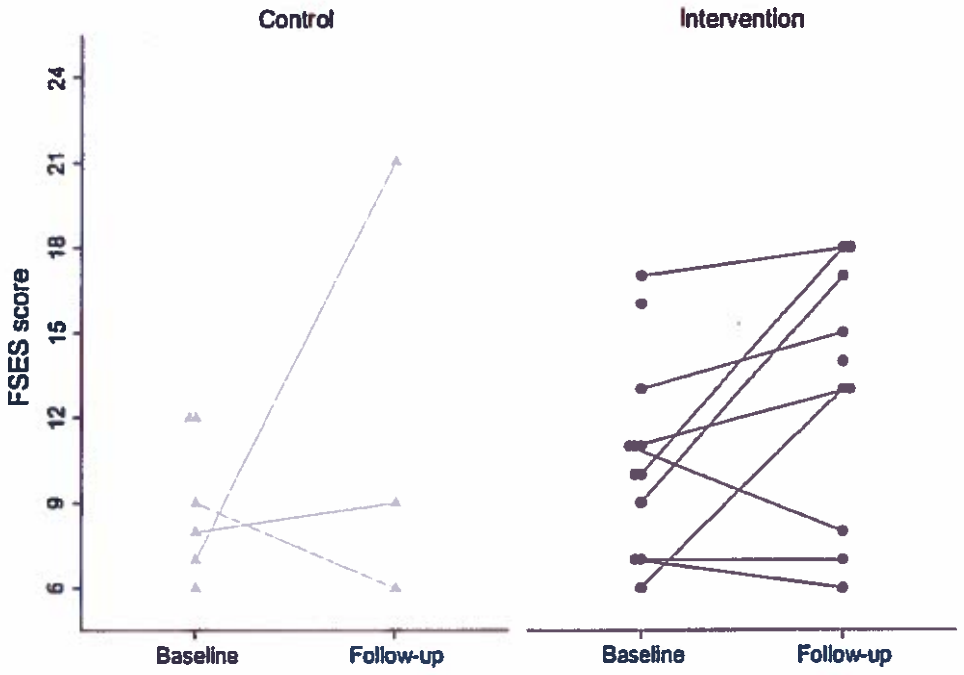
Figure 3: PHQ-9 scores



The mean GAD-7 score at baseline was 15.0 (SD 4.4) and at follow-up was 6.9 (SD 5.9). Of the 13 participants who provided scores at both time points, 11 improved over the three months and two deteriorated.

Financial self-efficacy scale (FSES) scores can range from 6 (low perceived self-efficacy) to 24 (high perceived self-efficacy). The mean baseline FSES score was 10.1 (SD 3.2) (Figure 4). Participants in the control group had slightly lower perceived self-efficacy at baseline, on average, than the intervention group. By follow-up, the mean FSES has increased slightly to 12.7 (SD 5.1). The main improvements occurred in domains 4 and 5; which assessed participants' confidence and perceived ability to solve financial problems.

Figure 4: FSES scores



Health Economics findings

Costs associated with the development and delivery of the intervention are presented in Table 4. The largest cost associated with the development of the intervention was for the development of the training materials, and the HOPE manuals (£1170.31). The time required for the two trainers to deliver training to the HOPE workers was another key cost in the development stage of the intervention (£604.66 + £210.00 = £814.66).

The average total delivery cost per person in the intervention group was £262 (£3404.57/ 13 intervention participants) ad in the control group it was £65 (£388.59/6 control participants). The delivery costs were largely driven by the face-to-face contact sessions between HOPE workers and the study participants. Altogether, HOPE workers spent 64 hours in face-to-face contact with clients (£2872.16 + £297.12 = £3169.28). Additional travel to contact sessions, administrative work and travel to work expenses accounted for comparatively little of the delivery cost (£623.88). The majority of the contact sessions were held at the SecondStep office, therefore HOPE workers incurred little or no additional travel costs.

Table 4 HOPE development and delivery costs

Development costs	Delivery costs	
	Intervention group n=13	Control group n=6
Developing training content and manuals Hours: 30[a] Cost per hour: £39[a] Subtotal cost = £1170.31	Contact sessions Hours in total: 58 Cost per hour: £49.52[c] Subtotal cost = £2872.16	Contact sessions Hours in total: 6 Cost per hour: £49.52 Subtotal cost = £297.12
Delivering training and refresher sessions Hours: 15.5[a] and 10.5[b] Cost per hour: £39[a] and £20[b] Subtotal cost = £604.66[a] and £210.00[b]	Travel to contact sessions Hours: 5 Cost per hour: £49.52 Subtotal cost = £247.60	Travel to contact sessions Hours: 1 Cost per hour: £49.52 Subtotal cost = £49.52
HOPE workers attending training[c] sessions Hours: 33.25 Cost per hour: £12.65 Subtotal cost = £420.61	Administrative work Hours: 21.25 Cost per hour: £12.65 Subtotal cost = £268.81	Administrative work Hours: 3 Cost per hour: £12.65 Subtotal cost = £37.95
HOPE workers attending refresher sessions Hours: 9 Cost per hour: £12.65 Subtotal cost = £113.85	Travel expenses Frequency of journeys: 4[d] Subtotal cost = £16.00	Travel expenses Frequency of journeys: 1 Subtotal cost = £4.00
Total development cost = £2519.43	Total intervention group cost = £3404.57	Total control group cost = £388.59

Notes: a = The course materials were primarily developed and delivered by a health psychologist, b = A research associate provided additional support in the delivery of the course; c. Differences in staff costs for training vs. contact sessions (£12.65 vs. £49.52) reflect differences in SecondStep payment schedules; d. Most of the contact sessions took place at the SecondStep office, therefore there were very few instances where travel expenses were required, but likely to be some missing data too.

Qualitative findings

Fourteen participants (11 intervention; 3 control) and three HOPE workers took part in follow-up interviews. Two of the three HOPE workers had provided the intervention to most of the 19 participants. Of the original 6 workers, 3 had left their role early in the study (moving area, unexpected caring duties, change of job) and one was not able to take up many initial appointments due to college course commitments.

All participants appreciated the personal and professional abilities of the HOPE Workers. Sensitivity, eliciting thoughts and feelings, empathy, caring and completing the tasks they had set out to do were all mentioned.

Recruitment and randomisation: Participants reported that they found it acceptable to be approached by the liaison team about potential participation in the trial (consent to contact) whilst they were still in-hospital. Participants indicated that understanding the process was not a priority amongst their many concerns at the time; they viewed it as a service offered. Similarly, most

participants found the post-discharge contact by the HOPE service and randomization during the first meeting with the HOPE worker and researcher was acceptable. However, the randomization process and explanation given were not always fully understood.

One participant was uncertain about allocation to the full 6 sessions, but was reassured when told she could stop whenever she wanted. Two participants allocated to the control group had hoped they would be allocated 6 sessions, but were fine with one, as reported in the HOPE worker notes. There was no evidence of this in the other control case notes. One participant from the control group felt that being randomized to one session meant that his situation was not considered 'bad' enough, despite assurances.

How was I told about it? I'm not sure actually. I think [HOPE Worker] might have just phoned me up possibly. I can't really recall. I think some (pause) I don't know. (Chris 50; Control)

It's probably the best time really (in hospital), *you know. It makes sense, 'cos I was a little bit concerned when I was there, I was thinking 'oh ok, they've said that I'm ok, I'm not going to die' and I'm like so what's next and that sort of put the cap on it for me, it was kind of like ok there's this opportunity and I thought well that makes perfect sense.* (Gerry 43; Intervention)

Acceptability of the HOPE intervention: Most participants in the intervention arm were extremely positive about the HOPE service. They described benefitting from a) the practical content of the intervention i.e. help with accessing other support organisations and services, communicating with creditors, and b) the supportive, enabling and reassuring nature of their relationship with the HOPE Worker who had given them extra support at a time when they most needed it and, in some cases, had given them the extra benefit of insight into their coping behaviours.

She's great, yeah. I have found it quite easy to talk to her, yeah...It wasn't like sitting down and brainstorming and making mind maps or anything like that (laughs)- it was, yeah, it was just gentle, you know,' what do you think you should do?' (Gary 37 I)

Basically I buried my head in the sand with it for years and problem's dealt with now so haven't got to worry about it. (Colin 52 I)

Feeling that their HOPE Worker was on their side, helping them to make their own decisions in a non-judgemental manner could be a powerful experience for some:

What really helped me was the fact that she knew what she was talking about and how people feel in these situations and nudging me... that's sort of what it's like, it's kind of allowing me to sort myself out, almost giving you permission to just- 'cos she knew that I knew what I needed to do, if you know what I'm saying, but she didn't say that I was lazy for not doing it or anything like that... I'm getting up in the morning and thinking ok, what can I do now?', so I think there's (pause) there's ways we can bring in extra money and there's also ways that we've been spending less, so, that part of it has kind of happened by default, if you know what I mean, like as though there's a part of me feeling more like a man in myself, these little things have been taking care of themselves in a way
(Gerry 43 I)

The approach (Motivational Interviewing) used by the service did not suit everyone. The small steps, self-determination aspects of the service were not what some participants wanted. Two participants wanted a more directive approach when they were at their most vulnerable and only had 1 or 2

sessions. One of these participants felt the timing of the service would have been better 2 months after her ED attendance, giving her a chance to recover psychologically.

Well I wasn't mentally strong which I mean if she came round today I'd be like 'right what I want you to help me with' (Becky 39 I)

However, benefits could be gained from just one or two sessions. Participants could appreciate, for example, being able to talk through a situation such as being on the brink of losing a job or having help to open a bank account.

HOPE workers felt that there were clear benefits for participants ranging from debt relief and management plans and contact with Wellbeing therapies, through to less tangible assistance, such as feeling properly listened to in a respectful manner.

[this service user], yeah I feel like he's moved forward. In terms of the financial situation because he's taken ownership and has a plan and he's working towards that – he just needed time to heal himself and other things before he could get to that (HOPE worker)

<u>Acceptability of allocation to control group:</u> Follow-up interviews were only possible with half (n=3) of the control group. One described a positive experience, indicating that the control intervention and sign-posting had been helpful, one was negative about the content in terms of the signposting letter and one remembered little of the session.

I think I was a bit scared and I was a bit scared of opening letters and I thought oh how bad will they be, um, so yeah, she sort of writ it down and said how much do you think you owe on this and I'll say well I haven't paid that for so many months and this is what it was a month so she writ it down and she put it on paper... I thought actually it doesn't look that bad written down so if I get the courage up to ring them and she said 'if you do explain I think you'll find they're not as bad as you're imagining' and I do- ' (Sue 49 C)

She [HOPE Worker] was a decent type. She did give me some letter but I lost it with information on it but I'm not very good at picking up on like, you know, organisations and sort of hanging on phone lines and trying to get to the front of the queue, mainly because my survival mechanism is I will stay alive and I know there's lots of people who are in a worse state than me so I'm not good at like persistent pursuing, you know, and hanging onto phone lines and dealing with one person after another. I just give up because, you know, kind of (pause) it's just too much emotional stress. (Chris 50 C)

After initial nervousness about how a one-off control session would be achieved, the HOPE workers became comfortable with the control sessions through positive experiences with participants and the 'contained' nature of the one-off session.

I think after the first one or two then I was absolutely fine because I thought 'OK, this is do-able and it can be very contained and it felt really handy to just have either... the sheets, the signposting, we have to physically give them something which felt like a nice thing to do

<u>HOPE workers views of training and intervention delivery:</u> Accounts highlighted a learning curve in providing the service, with the experiences of the first few allocations feeding into further training and manual development. The training was considered good to excellent, with MI skills and top-up training sessions being particularly appreciated.

The main challenges identified by the workers in providing the service were to do with delays in starting to provide the service after training and concern about sessions with clients where they had taken a more interventionist and less self-determination approach due to the service user's situation, for example:

she [service user] *was in a really, really bad way, had no money to buy food, no money to pay bills, and was very much like 'what are you going to do?' That was really challenging...this is not what I'm meant to be doing...it did feel a little clunky to say 'have you got any thoughts about what we could do?...so we then and there applied for a crisis loan online* (HOPE worker)

Other challenges mentioned were delays in responses from statutory agencies e.g. from the DWP once a benefit appeal letter had been sent and the delays and avoidance of sessions on occasions by participants. All workers thought that for a full trial, a distinct team of core workers would be required to make it work well.

Factors that helped facilitate delivery of the service included being flexible in the provision of and spacing of sessions; and working with and alongside the service user, giving them autonomy:

The service user feels he's hit rock bottom ...I said 'you've obviously been managing really well and you're capable, it's just whether you feel that you're able and want to [work with me]', and he did a sort of double take and said 'I've not been called capable for a while' (HOPE worker)

Similarly, participants appeared to benefit from the emotional support and reassurance given to them when they were vulnerable. HOPE workers liked the structure and rationale of the MI techniques and thought they worked; they were '*particularly useful with the service user who was perhaps the most reluctant*'. (HOPE worker)

Acceptability of outcome measures (health and economic): No participants found questionnaire completion onerous. If participants had literacy difficulties, the researcher talked them through the measures.

Contrasts between participants who attended 1-3 sessions vs. those who completed 5-6 sessions: Most (9/13) participants attended 3 or fewer sessions. Two participants who received few sessions had discontinued the service without a proper negotiated ending. In another case it was not possible to identity suitable appointment times due to long working hours, and in two cases the intervention was discontinued because it became clear that the participants were already receiving similar support from other agencies (although the level of help was often unclear). Two participants simply found that 1 or 2 sessions was sufficient to sort out the practical aspect of their problem. Two discontinued because they did not feel the HOPE worker was prescriptive enough - they wanted to be told what to do and for the HOPE worker to take control. Many of this group of participants appeared to have received multiple episodes of care and support prior to HOPE.

In contrast, the four participants who attended 5-6 sessions showed a greater commitment to the service and a greater motivation to change. They noticed and were appreciative of the self-determination aspects of the service. The two men categorised the support given as a 'nudge' to carry out tasks they had previously avoided. The service gave them permission to feel better about themselves and their efforts and started to reverse their feelings of failure.

More often than not, 'cos I knew that text was coming I'd text her first to say I'd done it, it was a nice thing to do... just having that support really of someone who would listen to what I was saying and then kind of say 'well what do you think you should do?' and I'd go 'well I know what I should be

doing 'cos its common sense really' but it's just having that kind of- like a little gentle nudge- (Gary 37 l)

Health Psychology findings – Motivational interviewing / manual development

A range of techniques were covered in the HOPE worker training e.g. OARS (Open Questions, Affirmations, Reflections, Summaries). Training covered use of techniques to talk about change, evoke ideas that resolve ambivalence and allow patients to plan action.

HOPE workers were good with engaging participants but found that moving people on to what they could achieve was more difficult and required further techniques in the top up training.

HOPE workers found that using "bubble sheets" to map problems and then identify those most important to address proved helpful as were A5 laminated cards/cheat sheets with tips and reminders given to the HOPE workers. They found nudging a useful technique if questions asked in an autonomous supportive way.

Implications from the feasibility study

1. Interviews with participants and HOPE workers clearly indicated that the participants needed help and in many cases some of their needs were met by the service. A clear theme from accounts was the value given by service users to the 'nudge' from HOPE workers to support them in achieving the small goals they had set together. Often, this was done by texting a reminder to the service user in between face-to-face sessions. Other benefits most reported were that a particular financial problem had been addressed and dealt with; and/or that the process had given them extra support at a time when they most needed it and, in some cases, had given them the extra benefit of insight into their coping behaviours. Working with, or alongside the HOPE worker to achieve their goals was also a positive experience for most participants.

2. Recruitment was slow (1-2 per month) despite intensive efforts (frequent visits to the Liaison Psychiatry Team and reminders). The numbers identified as eligible (5-6 per month) were not appreciably below our expectations from analysis of Bristol's Self-harm surveillance register. A future trial would need to involve multiple centres, each of which would need local care providers such as SecondStep and a CCG or equivalent willing to fund intervention costs. Recruitment could be improved somewhat by embedding a researcher or HOPE worker within the Liaison Psychiatry team for several days.

3. Other approaches to improving recruitment are:

    a. To include people in receipt of support similar to that which may be provided by HOPE. Receipt of such services was usually identified at the time of psychosocial assessment (and was an exclusion criterion), but in two cases it was not apparent until the first or second intervention session. As control arm participants do not have further contacts with the team their eligibility cannot be reassessed. This is relatively unimportant from the design/analysis perspective as all patients are included in an intent-to-treat analysis, although it may 'dilute' treatment effects as support was discontinued for a proportion of intervention patients. Furthermore, it was apparent that the help some people received from other agencies was not

meeting their needs (possibly reflecting large-scale cuts in services due to budget cuts). In a future trial, if we should consider relaxing the eligibility criteria to include people who already have access to help, this would probably improve recruitment somewhat. Alternatively, or in addition, the service could be extended to all patients regardless of whether or not they are referred by for specialist mental health aftercare.

b. To initiate the intervention in a community setting, before self-harm / distress leading to hospital attendance has occurred e.g. housing associations (identifying people with rent arrears); job centres; primary care; improving access to psychological therapies (IAPT) services; council tax defaulters; or people identified by their bank / building society as experiencing debt / mortgage repayment difficulties.

4. Slow recruitment meant there was a delay between HOPE worker training in MI / the intervention manual and use of their MI skills. Top-up sessions and debriefs with AH (MI Specialist) helped offset these effects. "Buzz sessions" - low frequency engagement forums for workers to talk informally about concerns – is another approach to maintain (and share) skills.

5. Suggested alterations to training include a) making more explicit links between the manual and the appendices / support material; b) incorporating more concrete examples in the training; c) the second day of training should be more practical in focus.

6. The slow rate of recruitment and small number of interventions delivered meant there was a limited sense of team "identity" and cohesion within the team. Due to the "niche" nature of the trial inclusion criteria this was inevitable and could only realistically be tackled by extending eligibility / rolling out in a different client group

7. Eligibility screening sheets were often not completed by Liaison Psychiatry Team members despite frequent reminders and training sessions. It may be more straightforward in a full trial to include eligibility forms in the team's standard assessment proforma.

8. Recruitment in hospital was acceptable to participants.

9. Randomisation processes were acceptable to the majority of participants, but not always fully understood; patients' vulnerability and potential confusion should be taken into account in a full trial, with the researcher being prepared and sensitive to clarify, explain and reassure about the process. Control participants could be disappointed despite explanations, but the disappointment was managed by the HOPE worker in a contained one-off session (but note concerns below that this might dilute assessment of effectiveness)

10. Qualitative interviews revealed that at least one participant derived benefit from the one-off 'control' intervention session. This may dilute the assessment of intervention benefits in a full trial. To overcome this, the control arm intervention might simply consist of the provision of information / help sheets.

11. Most patients randomised to the intervention only received 1-2 sessions (median 2; mean 2.8) with the HOPE worker, some because this was sufficient, others because they did not find the approach helpful. In a full trial consideration should be given to delivering the intervention in a stepped approach, with review after 1-2 sessions and possibly postponing

sessions until participants felt mentally well enough to benefit from them (this could be discussed at the first session).

12. The self-determination aspects of the MI techniques were not embraced by all participants. Some service users wanted a more direct and directive approach to their problems when they were at their most vulnerable.
13. There were relatively high levels of loss to follow-up – only 13 participants (68%) completed follow-up questionnaires, although routine self-harm register data may be used to identify episodes of repeat self-harm. This should be taken into account when estimating sample size for a full trial.
14. Participants identified using text, email and letters, as well as phone calls, when contacting for follow-up (not answering the phone is a common coping mechanism for people in debt).
15. While the questionnaires were generally well completed, we identified several minor areas for improvement. Participants with literacy problems were talked through the forms – this introduces problems as the researcher helping them is unblinded.
16. In a full trial it would be important to quantify how many people were helped in non-finance/benefits related ways.
17. The PHQ-9 and GAD-7 appeared sensitive to change, with scores falling by around 40-50% over the follow-up period.
18. Using PHQ-9 as the primary outcome measure, the sample size for a full trial to detect a reduction in PHQ-9 score of 0.4 SDs would be approximately 266 (133 in each group). To detect a 0.6 SD difference a sample size of 120 patients (60 in each group) would be needed. As the SD for GAD-7 is smaller, sample sizes for a trial using GAD-7 as the primary outcome would be smaller.