

Relocating patients from a specialist homeless healthcare centre to general practices:

Paudyal, Vibhu

DOI:

[10.3399/bjgp18X694577](https://doi.org/10.3399/bjgp18X694577)

License:

None: All rights reserved

Document Version

Peer reviewed version

Citation for published version (Harvard):

Paudyal, V 2018, 'Relocating patients from a specialist homeless healthcare centre to general practices: a multi-perspective study', *British Journal of General Practice*, vol. 68, no. 667, pp. e105-e113.
<https://doi.org/10.3399/bjgp18X694577>

[Link to publication on Research at Birmingham portal](#)

Publisher Rights Statement:

Final Version of Record available at: <https://doi.org/10.3399/bjgp18X694577>

Checked for eligibility: 18/12/2017

General rights

Unless a licence is specified above, all rights (including copyright and moral rights) in this document are retained by the authors and/or the copyright holders. The express permission of the copyright holder must be obtained for any use of this material other than for purposes permitted by law.

- Users may freely distribute the URL that is used to identify this publication.
- Users may download and/or print one copy of the publication from the University of Birmingham research portal for the purpose of private study or non-commercial research.
- User may use extracts from the document in line with the concept of 'fair dealing' under the Copyright, Designs and Patents Act 1988 (?)
- Users may not further distribute the material nor use it for the purposes of commercial gain.

Where a licence is displayed above, please note the terms and conditions of the licence govern your use of this document.

When citing, please reference the published version.

Take down policy

While the University of Birmingham exercises care and attention in making items available there are rare occasions when an item has been uploaded in error or has been deemed to be commercially or otherwise sensitive.

If you believe that this is the case for this document, please contact UBIRA@lists.bham.ac.uk providing details and we will remove access to the work immediately and investigate.

1 **Relocating patients from a specialist homeless healthcare centre to general practices: a**
2 **multi-perspective study**

3

4 **Background:** The relocation of formerly homeless patients eligible to transfer from a specialist
5 homeless healthcare centre (SHHC) to mainstream general practices is key to patient
6 integration within the local community. Failure to transition patients conferring eligibility for
7 relocation may also negatively impact on SHHC service delivery.

8 **Aim:** To explore barriers and facilitators of relocation from the perspectives of formerly
9 homeless patients and healthcare staff involved in their care.

10 **Design and setting:** Qualitative semi-structured face-to-face and telephone interviews
11 conducted in north east Scotland.

12 **Methods:** Participants were patients and healthcare staff including general practitioners,
13 nurses, substance misuse workers, administrative and local community pharmacy staff recruited
14 from one SHHC, two mainstream general practices and four community pharmacies. Interview
15 schedules based on the 14 domains of the Theoretical Domains Framework (TDF) were drafted
16 and reviewed by an expert panel, and piloted with each participant group. Interviews were audio
17 recorded, transcribed verbatim and analysed by two independent researchers using a
18 Framework Approach informed by the TDF.

19 **Results:** Seventeen patients and 19 staff participated. Key barriers and facilitators, aligned to
20 TDF domains, included: beliefs about consequences regarding relocation; patient intention to
21 relocate; environmental context/resources in relation to the care of the patients and assessing
22 patient eligibility; patient skills in relation to integration; social/professional role and identity of
23 staff and patients; emotional attachment to the SHHC.

24 **Conclusions:** Implementation of services, which promote relocation and integration, may
25 optimise patient relocation from SHHCs to mainstream general practices. These include peer
26 support network for patients, better information provision on the relocation process and
27 supporting patients in the journey of identifying and adjusting to mainstream practices.

28 **Keywords:** homeless persons; general practice; delivery of health care; primary health care;
29 Theoretical Domains Framework

30

31

32

33

34

35

36

37 **How this fits in**

38 The value of SHHCs has been highlighted in terms of overcoming the barriers associated with
39 registration at a mainstream general practice and in the provision of specialised services that
40 meet the distinct needs of the homeless population. Relocation to a local mainstream general
41 practice is encouraged once patients are clinically stabilised and permanently housed, however
42 there may be numerous barriers that are difficult to overcome. This research sought to identify
43 the key barriers and facilitators of relocation from a SHHC to a mainstream general practice.
44 The findings highlight how relocation may be supported further within the patient group and
45 culminate in a series of recommendations.

46

47 **Introduction**

48 Homelessness embodies many forms, including rough sleeping, living in derelict buildings,
49 temporary shelters, squats or sofa surfing (1). Homelessness is a widespread issue in the
50 United Kingdom (UK) (2). An estimated 250,000 people are known to be currently homeless in
51 England alone (3). Over 115,000 and 34,000 households submitted a homeless application in
52 2015/16 in England (4) and Scotland (5) respectively.

53

54 Evidence suggests that homeless individuals are significantly disadvantaged in terms of
55 attaining health services and maintaining healthy lifestyles (6-9). For example, individuals facing
56 homelessness often experience difficulty in registering at mainstream general practices due to
57 issues such as being unable to provide evidence of permanent address (10,11) or photographic
58 identification (12). Consequences include homeless patients attending accident and emergency
59 departments to access healthcare, or failure to access any healthcare services (11,13).

60

61 There has been an emergence across the UK of specialist homeless general practices and
62 general practices with particular expertise in homelessness (10-11). To our knowledge there is
63 at least one such SHHC in every major city in the UK, including several in Greater London area,
64 which mainly offer primary general practice services. Some of these centres constitute a
65 registration list size of over 1,000 homeless population (personal correspondence with Health
66 Xchange Birmingham). The establishment of these SHHCs have been led mainly by the
67 specialist healthcare need of this population as well as the preference of homeless population to
68 have a dedicated drop-in centres instead of facilitated access to mainstream general practices
69 (14).

70

71 The value of such specialist services has been highlighted in terms of overcoming barriers
72 associated with registration at a mainstream practice (15, 16) and providing specialist care, such
73 as substance misuse services, to the specific needs of homeless populations (17).

74 Nevertheless, it has been suggested that transferring registration to a mainstream practice, once
75 the patient has been stabilised, is an important aspect of improving recovery (18). This would
76 facilitate appropriate utilisation of finite specialist resources, reduce health inequalities and
77 support patient integration within the local community. There is a cognisance that relocation is
78 not straightforward and there are barriers which may be difficult for the formerly homeless to
79 overcome (19,20).

80

81 This study aimed to explore the barriers and facilitators of relocating patients from SHHC to
82 mainstream general practice from the perspectives of formerly homeless patients and staff
83 involved in their care. The Theoretical Domains Framework (TDF), which may be adopted as a
84 framework in both implementation and behaviour change research, was utilised to elucidate the
85 barriers and facilitators of patient's relocation. The TDF outlines 14 domains of behavioural
86 determinants (see Table 1), each embodying individual constructs, and which represents a
87 synthesis of 33 behaviour change theories. The framework may be used as a means to inform
88 the development of behaviour change interventions (21). Within this study, the framework
89 enabled theoretical characterisation of likely factors which may impact on patients' relocation
90 behaviour from the perspective of formerly homeless patients and staff involved in their care.

91

92 **Methods**

93 The study utilised a qualitative methodology to collect rich data on the barriers and facilitators of
94 relocation. The study was conducted within the north east of Scotland from February to October
95 2016 in a SHHC which has been operating since 2006 (22). The practice has a patient
96 population of approximately 400, the majority of whom are homeless, aged 25-44 years old, with
97 approximately 50% being prescribed methadone.

98

99 Qualitative in-depth interviews were conducted with patients at the SHHC (who were eligible to
100 relocate based on health and accommodation) and those who had relocated recently from the
101 specialist centre to a general practice in the locality of their permanent address. Patients
102 deemed eligible for relocation were provided with details of the study when they presented for
103 appointments at the SHHC. Those expressing interest were directed to the researcher, who
104 was present on site, and was able to provide further information and answer any questions
105 before inviting consent. All patients who consented to participate were interviewed. General
106 practitioners (GPs), nurses and administrative staff from the SHHC and mainstream general
107 practices in addition to staff from community pharmacies, involved in the care of homeless
108 patients, were also invited to take part and those who consented were interviewed. Mainstream
109 general practices that were invited to take part in the research were selected based on the
110 knowledge that a significant proportion of patients from the SHCC had been relocated to these

111 practices. Pharmacies were identified and selected by the community health partnership
112 pharmacist (JM) based on the extent of service provision to the currently and formerly homeless
113 population.

114

115 The interview schedules were informed by the TDF and drafted by the research team. Separate
116 interview schedules (available on request from the authors), for each stages of the research,
117 were reviewed by researchers with expertise in health services research and health psychology
118 for credibility. This was followed by piloting with two staff members and two patients and, as
119 piloting resulted in minimal changes to the interview schedules, their responses were included in
120 the study dataset.

121

122 Informed written consent and demographic data were obtained prior to conducting interviews.
123 Semi-structured interviews were conducted by experienced qualitative researchers, either face-
124 to-face or via telephone, depending on each participant's preference. Interviews were audio
125 recorded, with permission, and transcribed verbatim. Each transcript was analysed
126 independently by two researchers (DS, KFM, KGS, KM and VP) using Framework Approach
127 (23). The analytical method involves multiple stages of: familiarisation with the interview;
128 coding; developing an analytical framework; applying the analytical framework; charting, and
129 interpreting data (24). The TDF was applied deductively to the data and used to inform the
130 analytical framework. Transcription and analysis was ongoing throughout data collection.
131 Saturation of data was assumed after no new themes emerged (25).

132

133 Table 1 to appear here

134

135 **Results**

136

137 ***Demographics***

138 Patients (n=17) were aged 30 to 48 years (Mean=40.3 (SD.5.4)) and the majority were male,
139 had experienced homelessness for more than one year and described their general health as
140 'fair' (see Table 2).

141

142 Table 2 to appear here

143

144 Nineteen staff participants (n=19) were recruited. They were aged 27-65 years old, with the
145 majority being female administrative members of staff (see Table 3).

146

147 Table 3 to appear here

148

149 Qualitative findings are presented in relation to themes within the ten TDF domains identified in
150 the analysis. Four TDF domains were not identified in the analysis and included: goals;
151 behavioural regulation; optimism; memory, attention and decision processes.

152

153 **Beliefs about consequences**

154 Staff and patients described several consequences of relocation, which they perceived as
155 barriers. Themes were identified relating to: patient concern over continuation of their ongoing
156 healthcare needs upon relocation; apprehension about meeting new staff at mainstream
157 practices; ability to integrate; and, perceptions of mainstream practice.

158

159 For example, one patient noted their concern regarding the establishment of new relationships
160 at mainstream practices and potential stigma,

161

162 *“Obviously, you've got a little concern that you're going to get on with your doctor and you're*
163 *going to like your doctor and they're going to like take to you and not look their nose down to you*
164 *because of your past and stuff” Patient 1 mainstream practice.*

165

166 This was further emphasised by a staff participant,

167

168 *“...a lot of them feel if they go to a mainstream surgery they're classed as a, they're treated as a*
169 *second class citizen” Staff 9 pharmacy*

170

171 **Intentions**

172 Patient intentions were described by staff and patients as key to relocation. Themes included
173 intentions to relocate, and reluctance to relocate. Whilst some patients initiated the relocation
174 process themselves, others expressed a reluctance to relocate. Factors affecting intentions
175 included ongoing treatment and the negative experiences of others who had previously moved.

176

177 As noted by one staff participant, some patients were reluctant to relocate,

178

179 *“...a number of people who I suppose I've worked with over a period of time would probably*
180 *rather just stay there because they know it and it's, you know, the people and it is probably a*
181 *hassle to have to go and find a GP practice and go along and fill in forms and do it all” Staff 7*
182 *mainstream practice.*

183

184 One patient highlighted that they felt that they would not move due to the experience of others,

185

186 *"In my personal opinion I wouldn't move after what I've seen over the last six months of*
187 *somebody moving from here to somewhere else. It's just an absolute joke and I just that*
188 *pathetic"* Patient 7 SHHC.

189

190 **Environmental context and resources**

191 Staff and patients discussed the impact of environmental context and resources on relocation
192 and integration. Key themes included: lack of effective means to establish a patients' housing
193 status (although patient eligibility for relocation was also considered in terms of clinical stability);
194 SHHC resources in communicating and assisting persons to relocate; communication between
195 SHHC and mainstream practice; diverse policies and operating rules in mainstream practices in
196 registering patients e.g. photographic ID requirements; patient's access to resources, for
197 example telephone, and lack of continuity of services such as podiatry and dentistry at
198 mainstream practices post relocation.

199

200 A staff participant at SHHC highlighted how continuity of services to mainstream practices could
201 prove problematic,

202

203 *"Other care, dental services here, no longer homeless they wouldn't be able to access that, they*
204 *would need to go and register elsewhere. Podiatry services that we've got here they wouldn't,*
205 *they just would be unlikely to access that 'cause the services are not available for straight*
206 *forward foot care"* Staff 5 SHHC.

207

208 Further, one patient, described how the SHHC offered a level of specialised care which was
209 unparalleled,

210

211 *"...just the underlying issues that I have at the moment that I don't feel they can facilitate the*
212 *best way as what this practice [SHHC] can, for me, at the moment"* Patient 12 SHHC.

213

214 **Knowledge**

215 Themes identified by staff and patients included: patients' knowledge of administrative
216 processes involved in relocation; awareness of eligibility for relocation; knowledge of
217 mainstream practices in their local area; lack of knowledge of rules and policies of mainstream
218 practices, as well as knowledge and experience of SHHC staff in managing homeless and
219 formerly homeless patients. One staff participant highlighted how it may be beneficial for
220 patients relocating to be made aware of the regulations and policies of mainstream practices,

221

222 *"I think they need to have a bit of learning before they leave SHC to say that, I mean, I've*
223 *worked at SHC so I understand that, I know what happens with them, they don't up for their*
224 *appointment in the morning but they get their script in the afternoon, there's not a GP there. It's,*
225 *appears quite easy to do that but they have to understand when they're at a practice like us*
226 *we're nae going to do that"* Staff 1 mainstream practice

227

228 **Skills**

229 The importance of patient skills was identified in relation to a theme regarding integrating and
230 adapting to the culture of mainstream practices. Whilst one patient experienced little difficulty in
231 integrating,

232

233 *"Yeah, I've just been twice since I moved and everything's been okay, transferred nae problem*
234 *at all"* Patient 3 mainstream practice,

235

236 it was suggested that some patients may experience issues integrating into mainstream
237 practices,

238

239 *"...we do find them [relocated patients] challenging people to, to try and integrate into our way of*
240 *working shall we say"* Staff 2 mainstream practice.

241

242 **Social/professional role and identity**

243 Both patients and staff identified the influence of social/professional role and identity in
244 relocation. Themes included: patient self-identifying as homeless and expectation of negative
245 perceptions; patients not perceiving the SHHC as a specialist practice for those experiencing
246 homelessness; changing healthcare/lifestyle needs of patients serving as a prompt to relocation;
247 the role of staff at the SHHC in facilitating relocation, and the ability of pharmacy staff to assist in
248 the relocation process. One pharmacist described their potential role in the relocation process,

249

250 *"...because we see these patients everyday we're obviously in a very good position to be able to*
251 *speak to them, we've got good relationships with them so we could use those relationships to be*
252 *able to support them and find out more information about their movement from one practice to*
253 *another"* Staff 1 pharmacy,

254

255 and from a patient perspective, the positive role of staff at the SHHC in facilitating relocation,

256

257 "...she [staff member at SHHC] would always be like 'have you found another practice? If you
258 need any help, if you go up and they're like, 'we're not taking anybody else', phone me and I'll
259 speak to them if you want" Patient 2 mainstream practice.

260

261 **Beliefs about capabilities**

262 Staff and patients described a key theme relating to self/patient's perceived ability to integrate
263 into mainstream practice. Self-esteem and confidence were regarded as critical concepts
264 impacting a person's ability to integrate. Whilst a staff participant discussed the ability of
265 patients to integrate particularly in terms of building confidence,

266

267 "...I think the self-esteem and the confidence and, you know, kind of that element of it takes so
268 much longer to build back up in the person" Staff 1 SHHC.

269

270

271 **Social influences**

272 Both staff and patients identified the impact of social influences on relocation. The principal
273 themes identified illustrated the influence of health and social care professionals, administrative
274 staff, family and friends in promoting relocation, and the experiences and influences of patients
275 who had relocated previously. For example, the experiences of others who had previously
276 relocated both positively and negatively influenced an individual's willingness to relocate and the
277 practice that was selected for relocation,

278

279 "[patient's] been cut off heaps of stuff [services post relocation] in the space of six month and
280 just completely a joke...so, in my point of view, moving practice, just with personal experience
281 with somebody that I ken I just, I wouldn't be happy about moving set up like" Patient 6 SHHC,

282

283 a theme which was further emphasised by a staff participant,

284

285 "...maybe they hae [have] friends that are here [mainstream practice] and thinking 'well, I'll just,
286 I'll just go' Staff 1 mainstream practice.

287

288 **Reinforcement**

289 Reinforcement was discussed by staff and one patient primarily in the context of healthcare
290 professionals, administrative staff, social care workers, family and friends who were perceived
291 as important in facilitating and reinforcing relocation. It was highlighted that staff often
292 discussed the benefits of relocation, such as greater availability of appointments at mainstream
293 practices, in an effort to incentivise and motivate eligible patients.

294

295 “...we always try to portray the positive, you know, 'this is you moving on, the range of services,
296 the timescales, you know GPs to choose from, you choose your own GP, you could get a late
297 appointment after your work or before you work” Staff 4 SHHC.

298

299 One patient highlighted how patients were unlikely to relocate unless SHHC staff at the SHHC
300 reinforced it,

301

302 “No, just, just, the only way people are going to move is if somebody sits down and does it for
303 them, and that's real, that's realistically the truth it is it?” Patient 1 mainstream practice.

304

305 **Emotion**

306

307 Emotion was identified by staff and patients as influential in the decision to relocate. Themes
308 identified were: patient expression of emotions in relation to relocation, and emotional
309 attachment to the SHHC. For example, an individual's emotional attachment to the SHHC often
310 presented as a barrier to relocation, this was highlighted by both staff

311

312 “I guess the fact that if you had been seeing one doctor for a long time and then all of a sudden
313 you need to go to somewhere different everyone would kind of feel that initial anxiety but I've
314 never had anybody saying continuing problems they've experienced at a new practice” Staff 8
315 pharmacy

316

317 and patient participants,

318

319 “I'd be very, very upset if I was asked to leave” Patient 10 SHHC.

320

321 **Summary of key issues**

322

323 The following facilitators and barriers to relocation and integration of patients from the SHHC to
324 mainstream practices were identified in this study (Table 4).

325

326 **Discussion**

327 **Summary**

328 This study has highlighted the key barriers and facilitators relating to the relocation process of
329 patients from a SHHC to mainstream general practices. Barriers and facilitators were identified

330 in relation to TDF domains and included: patients intentions to relocate (e.g. expression of
331 reluctance to relocate); environmental context and resources in relation to specialist and
332 mainstream practices (including assessment of housing and clinical stability, and the difficulties
333 encountered in establishing the former); beliefs about consequences regarding relocation to a
334 mainstream practice (e.g. patients' apprehension to establishing new relationships with staff at
335 mainstream practices); knowledge of relocation processes and mainstream practices (e.g.
336 patients' lack of knowledge of the relocation processes); skills in relation to integration (e.g.
337 skills around adapting to mainstream practices); social/professional role and identity of staff and
338 patients (e.g. the role of staff in facilitating relocation); beliefs about capabilities in relation to
339 ability to relocate and integrate (e.g. perceived ability to integrate at a mainstream practice);
340 reinforcement of relocation (e.g. the role of others in reinforcing and facilitating relocation);
341 social influences and the positive/negative effect on relocation (e.g. the positive relationships
342 established with staff at the SHHC serving as a barrier), and emotion attached to relocating (e.g.
343 emotional attachment to the SHHC and the resultant negative impact on desire to relocate).

344

345

346 **Strengths and limitations**

347 This is the first study exploring perspectives of formerly homeless patients in relocating from a
348 SHHC to a mainstream practice within the local area. The use of theory and steps taken to
349 promote rigour and trustworthiness of the findings, particularly with regard to the expert review
350 of study materials added to the strength of the study. A further strength of the research was in
351 terms of reflexivity; the research team was multidisciplinary and thus, ensured that the study
352 was conducted with a broad lens.

353

354 There are, however, limitations hence the findings should be interpreted with caution. Due to
355 the nature of recruitment and identification of potential eligible participants, it may be that those
356 recruited did not represent a broad demographic. Response bias may have also been a factor
357 in the research, in that participants may have responded with socially desirable answers.
358 Further, the number of patients who had moved from the SHHC to mainstream practices was
359 low due to challenges in identifying and recruiting the target population. Lastly, there are
360 potential limitations with regard to the transferability of findings since the key outcomes may be
361 specific to the particular context, population and environment in which they were studied and
362 thus, may not be easily transferred to other locations.

363

364 **Comparison with existing literature**

365 Participants in this study reported that formerly homeless patients often faced difficulty in
366 relocating to a mainstream practice if they were not in possession of photographic identification.

367 Previous studies have highlighted that homeless patients often experience issues with
368 registering at mainstream general practices due to a lack of fixed abode (11) and identification
369 documents (12). This study has identified that even once settled at a permanent address,
370 formerly homeless patients may still find it challenging to register at a mainstream general
371 practice.

372

373 A previous report suggested that patients in a homeless healthcare centre appreciate the
374 specialist nature of the services offered (26). This study has added to our knowledge that such
375 high level of satisfaction to the SHHC services, as well as perceived lack of tailored services at
376 the mainstream practices are associated with patient reluctance to relocate. With approximately
377 50% of the patients being prescribed repeat methadone through the SHHC involved in this
378 study, lack of such substance misuse service provision at mainstream practices may also have
379 posed a barrier to some patients' intentions to relocate.

380

381 This study also provides patient perspectives on the role of SHHC staff as well as the health and
382 social care worker who dedicated time specifically to facilitating relocation. The results reflect
383 the recommendation that specialist practices may benefit from having a 'GP liaison/resettlement
384 worker' (27). This study provides indications that substance use workers are ideally suited to
385 undertake such liaison role, not just for housing resettlement but also for enabling the relocation
386 from SHHC to mainstream general practices in their resettled localities.

387

388 A potential barrier to relocation may be fear of stigmatisation or discrimination within mainstream
389 practices. These findings corroborate with the extant literature, which suggests that poor prior
390 experiences with healthcare professionals and negative attitudes from staff may serve as
391 barriers to utilisation of a mainstream practice (10,28). This study has identified that in addition
392 to the personal experiences, the perspectives of those who have previously relocated also
393 strongly influence their peers waiting to relocate.

394

395 The findings from this study further highlighted the complexity of the relocation process in terms
396 of barriers and facilitators. Barriers and facilitators of relocation often varied between
397 individuals. These findings suggest that any approach to changing behaviour within the
398 population should be tailored in accordance with the individual. This reflects guidance issued by
399 National Institute for Health and Care Excellence on promoting behaviour change where it is
400 advised that behaviour change programmes and interventions are tailored to individual needs
401 (29).

402

403

404 **Implications for research and/or practice**

405 This study has identified the complexity of the processes involved in identifying and enabling
406 formerly homeless patients to relocate to mainstream practices. The relocation process is both
407 time and resource intensive with input required from patients, healthcare, administrative and
408 social care staff at both practices. Accordingly, exploration of the key barriers and facilitators in
409 accordance with TDF domains has resulted in identification of the following which may be
410 beneficial in supporting patients during relocation:

411

- 412 (i) Increasing patients knowledge of eligibility for relocation and mainstream practices'
413 policies and regulations
- 414 (ii) Peer support networks
- 415 (iii) Provision of reassurance with respect to continuation of healthcare and with regard to
416 integrating and developing relationships at mainstream practices
- 417 (iv) Provision of information sources, such as the 'My right to access healthcare' cards,
418 which outline guidance for patients on registering at mainstream practices (13)
- 419 (v) Greater involvement of community pharmacists in relocation processes
- 420 (vi) Development of individualised plans to promote behaviour change. This may involve
421 mapping of TDF domains to behaviour change techniques, which are typically
422 incorporated into intervention design for behaviour change programmes as a means
423 to facilitate change (30)

424

425 Further, staff at specialist and general practices supporting relocation may benefit from the
426 following:

427

- 428 (i) Provision of information regarding relocation processes
- 429 (ii) Support of newly relocated persons via proactive signposting to where additional
430 healthcare services may be accessed
- 431 (iii) Support of a professional who is dedicated to facilitating relocation
- 432 (iv) Sharing of specialist knowledge and skills, between staff at both practices, in
433 managing patients experiencing homelessness

434

435 Understanding the perspectives of those mainstream general practices which have been
436 reluctant to register formerly homeless patients from SHHCs would also enable further insight
437 into the barriers and facilitators to the relocation process.

438

439 **Additional information**

440 **Funding:** This study was funded by Health Improvement Fund, NHS Grampian

441 **Ethical approval:** NHS East Midlands approval (REC 2 15/EM/0535); NHS Grampian Research
442 and Development approval Ref 2015RG007.

443 **Acknowledgements:** NHS Grampian; the general practices and community pharmacies that
444 were involved in the research; study participants; Caroline McNiff for her part in data collection
445 and Jeanette Lowe for transcription of audio recordings.

446 **References**

447 (1) Crisis. What is homelessness?. Available at: <http://www.crisis.org.uk/pages/-about-homelessness-61900.html>. Accessed 01/24, 2017.

449 (2) Fitzpatrick S, Pawson H, Bramley G, Wilcox S, Watts B. The homelessness monitor: Great Britain
450 2016. 2016.

451 (3) Shelter (England). Press releases. Life on the margins: Over a quarter of a million without a home in
452 England. Available:
453 [https://england.shelter.org.uk/media/press_releases/articles/life_on_the_margins_over_a_quarter_of_a_m](https://england.shelter.org.uk/media/press_releases/articles/life_on_the_margins_over_a_quarter_of_a_million_without_a_home_in_england_today)
454 [illion_without_a_home_in_england_today](https://england.shelter.org.uk/media/press_releases/articles/life_on_the_margins_over_a_quarter_of_a_million_without_a_home_in_england_today). Accessed 09/06, 2017.

455 (4) GOV.UK. Homelessness statistics: Statutory homelessness in England.
456 <https://www.gov.uk/government/collections/homelessness-statistics>. Accessed 16/03, 2017

457 (5) Shelter Scotland. Housing and homelessness statistics. Available:
458 http://scotland.shelter.org.uk/housing_policy/key_statistics/homelessness_facts_and_research. Accessed:
459 15 November 2015.

460 (6) Gadermann AM, Hubble AM, Russell LB, Palepu A. Subjective health-related quality of life in
461 homeless and vulnerably housed individuals and its relationship with self-reported physical and mental
462 health status. Soc Indicators Res 2014;116(2):341-352.

463 (7) Wright NM, Tompkins CN. How can health services effectively meet the health needs of homeless
464 people? Br J Gen Pract 2006 Apr;56(525):286-293.

465 (8) Crisis. Health and dependencies. 2016; Available at: <http://www.crisis.org.uk/pages/health-and-dependencies.html>. Accessed 01/24, 2017.

467 (9) Hwang SW, Tolomiczenko G, Kouyoumdjian FG, Garner RE. Interventions to improve the health of the
468 homeless: a systematic review. Am J Prev Med 2005;29(4):311-311. e75.

469 (10) Crisis. Critical Condition: vulnerable single homeless people and access to GPs. Crisis: London,
470 2002.

471 (11) Taylor K, Naylor H, George R, Hammett S. Healthcare for the Homeless: Homelessness is bad for
472 your health. London: Deloitte Centre for Health Solutions, 2012.

473 (12) NHS Healthy London Partnership. Helping people who are homeless access GP practices. 2016.
474 London: NHS London.

475 (13) Gill P, MacLeod U, Lester H, Hegenbarth A. Improving access to health care for Gypsies and
476 Travellers, homeless people and sex workers. RCGP, Birmingham 2013.

477 (14) Woods MD, Kirk MD, Agarwal MS, Annandale E, Arthur T, Harvey J, et al. Vulnerable groups and
478 access to health care: a critical interpretive review. National Coordinating Centre NHS Service Delivery
479 Organ RD (NCCSDO) Retrieved May. 2005;27:2012.

- 480 (15) Department of Health Office of the Chief Analyst. Healthcare for Single Homeless People. London:
481 Department of Health; 2010.
- 482 (16) Royal College of General Practitioners. Guiding patients through complexity: modern medical
483 generalism. London: RCGP. 2011.
- 484 (17) Aspinall PJ. Inclusive Practice. London: Inclusive Health Programme. 2014.
- 485 (18) Mehet, D., Ollason, M. Health Services for Homeless People in London. London: NHS London; 2015.
- 486 (19) Lester H, Wright N, Heath I, RGCP Health Inequalities Standing Group. Developments in the
487 provision of primary health care for homeless people. Br J Gen Pract 2002 Feb;52(475):91-92.
- 488 (20) Wright NM, Tompkins CN, Oldham NS, Kay DJ. Homelessness and health: what can be done in
489 general practice? J R Soc Med 2004;97(4):170-173.
- 490 (21) Cane J, O'Connor D, Michie S. Validation of the theoretical domains framework for use in behaviour
491 change and implementation research. Implement Sci 2012 04/24;7:37-37.
- 492 (22) NHS Grampian. Annual report 2006/07: The annual review of the performance of NHS Grampian.
493 Grampian: NHS Grampian; 2007.
- 494 (23) Ritchie J, Lewis J, Nicholls CM, Ormston R. Qualitative research practice: A guide for social science
495 students and researchers. London:Sage; 2013.
- 496 (24) Gale NK, Heath G, Cameron E, Rashid S, Redwood S. Using the framework method for the analysis
497 of qualitative data in multi-disciplinary health research. BMC medical research methodology
498 2013;13(1):117.
- 499 (25) Bryman A. Social research methods. Oxford: Oxford University Press, 2012.
- 500 (26) Hewett NC. How to provide for the primary health care needs of homeless people: what do homeless
501 people in Leicester think? Br J Gen Pract 1999 Oct;49(447):819.
- 502 (27) Wright NM, Tompkins CN, Oldham NS, Kay DJ. Homelessness and health: what can be done in
503 general practice? J R Soc Med 2004 Apr;97(4):170-173.
- 504 (28) Love JG, Love AP, Vertigans S, Sutton PW. Health & homelessness in Aberdeen City: a report for
505 the Scottish Health Council. Scotland: Scottish Health Council; 2007.
- 506 (29) National Institute of Clinical Excellence. Behaviour Change: Individual Approaches. London: NICE;
507 2014.
- 508 (30) Michie S, Wood CE, Johnston M, Abraham C, Francis JJ, Hardeman W. Behaviour change
509 techniques: the development and evaluation of a taxonomic method for reporting and describing
510 behaviour change interventions (a suite of five studies involving consensus methods, randomised
511 controlled trials and analysis of qualitative data). Health Technol Assess 2015. 19.99.