

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43

“Lost to the NHS” – Why GPs leave practice early: a mixed methods study

- Dr Natasha Doran, Honorary Research Fellow, Department for Health, University of Bath, UK
- Dr Fiona Fox, Research Associate, NIHR Collaborations for Leadership in Applied Health Research and Care (CLAHRC) West, University of Bristol, UK
- Prof Karen Rodham, Professor of Health Psychology, Staffordshire University, UK
- Dr Gordon Taylor, Reader in Medical Statistics, Department for Health, University of Bath, UK
- Dr Michael Harris, Visiting Senior Research Fellow, Department for Health, University of Bath, UK

Corresponding author

Natasha Doran BA MA Ph.D., Research Fellow, Department for Health, University of Bath, Claverton Down, Bath, BA2 7AY, United Kingdom
E-mail: N.Doran@bath.ac.uk

44 **Abstract**

45

46 **Background**

47 The early loss of GPs is contributing to the GP workforce crisis. Recruitment in the United
48 Kingdom remains below the numbers needed to support demand for GP care.

49 **Aim**

50 To explore the reasons why GPs leave practice early

51 **Design and Setting**

52 A mixed methods study using online survey data triangulated with qualitative interviews.

53 **Method**

54 Participants were GPs who had left the English Medical Performers List in the last five years
55 (2009 -2014), whilst under 50 years of age. 143 early GP leavers participated in an online
56 survey, of which 21 took part in a recorded telephone interview. Survey data were analysed
57 using descriptive statistics, and qualitative data using thematic analysis techniques.

58 **Results**

59 Reasons for leaving were cumulative and multifactorial. Organisational changes to the National
60 Health Service have led to an increase in administrative tasks and overall workload, which is
61 perceived by GP participants to have fundamentally changed the doctor-patient relationship.
62 Lack of time with patients has compromised the ability to practise more patient-centred care,
63 and with it, GPs' sense of professional autonomy and values, resulting in diminished job
64 satisfaction. Once their job satisfaction had become negatively impacted, the combined
65 pressures of increased patient demand and the negative media portrayal left many feeling
66 unsupported and vulnerable to burnout and ill health, and ultimately, the decision to leave
67 general practice.

68 **Conclusion**

69 To improve retention of young GPs, the pace of administrative change needs to be minimised
70 and the time spent by GPs on work that is not face-to-face patient care reduced.

71 **Keywords**

72 General practice; qualitative research; job satisfaction; professional autonomy

73

74 **How this fits in**

75 Almost half of GP leavers in England are younger than 50

76 Key drivers for leaving early relate to changes in the National Health Service, resulting in loss of
77 professional autonomy, and in overwork, stress and burnout.

78 UK general practice has undergone a series of organisational changes resulting in an increase in
79 day-to-day administrative tasks which have come to negatively impact the doctor-patient
80 relationship. To improve retention of young GPs in practice, time spent on work that is not face-
81 to-face patient care needs to be minimised.

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98 **Introduction**

99 It has been the policy of successive United Kingdom (UK) governments to address the challenge
100 of the growing healthcare needs of the ageing population by transferring care into primary and
101 community settings (1). In the ten years prior to 2011, the General Practitioner (GP) workforce
102 in the UK had an annual average increase of 2.3% (2). However, this was only half the rate of
103 other medical specialties (3). Patient demand for GP services in England continues to grow, with
104 an estimated 340 million patient consultations per year, an increase of 40 million since 2008
105 (3). The UK Department of Health (DH) has set a target that half of all medical graduates
106 entering postgraduate specialty training should go into General Practitioner training (4).
107 However, despite the longstanding DH policy to increase GP training numbers in England to
108 3,250 per annum, GP recruitment has remained below this target, at around 2,700 per annum
109 (5). The cost of five years Foundation and GP training programmes is £249,261 per GP (6). It is
110 therefore imperative that these highly trained professionals are retained within the UK primary
111 care workforce.

112 Between 2009 and 2014, 45.5% of GP leavers were younger than 50, while 30.6% were aged
113 between 50 and 59, and less than a quarter were aged 60 or over (7). This early loss of GPs is
114 contributing to the GP workforce crisis (8). In 2013, the NHS Executive and NHS England
115 commissioned this mixed-methods study to investigate why so many GPs leave the National
116 Health Service (NHS) below the age of 50 (9, 10). This article is a summary of the main reasons
117 for leaving.

118 **Method**

119 **Study design**

120 A mixed method study comprising an online survey, triangulated with qualitative interviews,
121 was conducted. To design the survey, the views of 34 GPs were sought. From these, FF used
122 qualitative content analysis to identify major categories, which then formed the survey items
123 (9).

124 **Survey recruitment**

125 GPs who had left the English Medical Performer's List (MPL) between 2009 and 2014 whilst
126 under 50 years of age were recruited through articles in BMA News as well as direct mailing.
127 Twelve NHS Area Teams (ATs), between them covering 40% of the population of England sent
128 invitations to some or all of their early GP leavers. In total, ATs mailed 413 early leavers, and
129 143 participated in the online survey.

130 **Qualitative interviews recruitment**

131 At the end of the online survey, participants were invited to take part in an interview and 38
132 survey participants volunteered. Of these, 21 returned signed consent forms. Semi-structured
133 interviews were carried out by telephone, guided by an interview schedule that was developed
134 to complement and extend the survey questions. (10) Interviews lasting between 40 and 60
135 minutes, were audio recorded, transcribed verbatim and all identifying information was
136 removed.

137 **Analysis**

138 **Quantitative:** Survey data were analysed using descriptive statistics (MH). Common themes
139 were identified and summarized from the free response survey items (FF) using thematic
140 analysis techniques (11).

141 **Qualitative:** Fieldwork notes contextualised the interview data and detailed summaries of each
142 interview were produced. Thematic analysis was used to generate themes, both within and
143 across the dataset (11). The phases of analysis included coding, followed by the identification
144 and clustering of themes and sub themes and the production of a descriptive thematic
145 summary (ND). Team members (ND, FF, KR) each coded three transcripts, before comparing
146 their analyses for inconsistencies and agreement. Finally the themes and sub themes were
147 grouped to construct a more interpretative narrative across the dataset and depicted
148 diagrammatically (ND) Figure 1.

149 **Results**

150 Of the 143 survey participants, 72 (50.3%) were female and 70 (49.0%) male (one unknown).
151 Their median age range was 40-44 years. Of the 21 interviewees, 14 participants were female
152 and seven were male, with an age range of 32 to 54 years at time of interview. They had been
153 practising GPs in the UK for between 2.5 and 20 years; their ages when they left general
154 practice in England ranged from 29 to 50 years. Participants represented a maximum variation
155 sample in terms of age, number of years as practising GPs, and geographical location.

156 While many of the categories in the survey were also identified in the analysis of the qualitative
157 interviews, the inductive and interpretative nature of the qualitative analysis generated a
158 thematic summary which illustrates the complex and overlapping issues causing GPs to leave
159 practice early (see Figure 1). The qualitative findings are therefore given primacy here and are
160 supported by relevant statistical evidence from the survey.

161 All survey respondents indicated that they had left English general practice for multiple reasons
162 (9):

163 *"I think it's so multi-factorial, I don't think there's any one thing. I think it's that combination of*
164 *increased work with decreasing income with high patient expectation with continuous media*
165 *negativity and no support from the government, just all of those things."* (GP5)

166 This complex interplay of factors explaining why GPs leave practice early was encapsulated by
167 the overarching theme 'changing role of general practice and its impact'. This is discussed in
168 relation to the sub-themes: organisational changes; clash of values; increased workload;
169 negative media portrayal; workplace issues and lack of support.

170 **1. Organisational changes**

171 Participants described a radically altered working environment caused by an unprecedented
172 increase in organisational changes, many of which were felt to be made without "long-term
173 vision" (GP19) and for "little health gain." (GP15) Unhappiness with day to day life as a GP was
174 indicated by 79% of survey respondents, in particular changes to the role of the GP 44%:

175 *"Cases were getting more complicated, more was being transferred from the responsibility of*
176 *the hospital to the responsibility of GPs and I found that even in the short time I had, I was*
177 *spending more and more time doing administrative things and less and less time being able to*
178 *devote my mental attention to the patients in front of me. I just felt more and more stretched."*
179 (GP3)

180 As referral systems became more complex and hospitals more specialised, interviewees
181 experienced a more fragmented and depersonalised healthcare system that was increasingly
182 challenging for them to navigate:

183 *"One of the problems with hospital medicine is it's very fragmented and everyone is so super*
184 *specialist that they aren't the generalists that they used to be, so if you sent somebody in with*
185 *one thing, they have that sorted, but they don't look at the bigger picture, so they'd come back*
186 *out and there'd be another thing that was developing so you'd have to refer them to*
187 *somewhere else, so the fragmented nature of hospital medicine makes general practice quite*
188 *difficult."* (GP4)

189 **2. Clash of values**

190 According to participants, continual organisational changes fundamentally altered their
191 professional role to a "government clerk" or a "data clerk for public health and for
192 management." (GP15) The increasing influx of administrative tasks left many feeling
193 professionally compromised as they came to face conflicting priorities in the consulting room.
194 55.6% of survey respondents stated that the goalposts were being moved too often and 52.1%
195 disliked the "target-driven" approach to patient care:

196 *“Some of it was helpful, but some of it was just administrative for administrative sake. You*
197 *spent more time ticking boxes than you did talking to the patients sometimes [...] that put more*
198 *stress on me and I felt it affected my rapport with the patients.” (GP2)*

199 For most participants, the introduction of the Quality Outline Framework (QOF) marked a
200 defining point where “modern medicine” became a “more target driven culture” (GP12), or a
201 ‘tick box exercise’”. (GP1)

202 For the majority of participants, attempts to juggle what they saw as “impossible targets” with
203 “unrealistic appointment times” (GP12) detracted from delivering good patient care:

204 *“The partner would come in before I started surgery and say, ‘Oh don’t forget to do all the QOFs*
205 *[...] we’ve got QOFs on target [...] And that was more important than actually focusing on the*
206 *patient [...] With busier and busier surgeries with more and more extras, something has to go*
207 *and I think what ends up going when you’re under pressure to get all the QOFs and the money*
208 *in, is the actual patient relationship.” (GP11)*

209 **3. Increased workload**

210 Participants perceived that management targets, regulations and guidelines impinged on their
211 day-to-day work in general practice, increasing their workload. 50.0% of survey respondents
212 thought that the non-clinical workload was too high, while 83.8% said that aspects relating to
213 pressure of work featured in their decision to leave practice early.

214 *“The consultation’s length didn’t change, but what you were expected to do in a consultation*
215 *changed” (GP11)*

216 *“I felt I was cutting corners, I felt I wasn't offering a good service unfortunately.” (GP6)*

217 The higher administrative workload reduced the time available to spend with their patients,
218 leading to a fundamental change in the doctor-patient relationship:

219 *“You see it does change the doctor-patient relationship because it changes how you react to*
220 *people and how you interact with people. I mean it’s obvious stuff, but when you’re really*
221 *stressed and you’ve still got fifteen people to see, you don’t have the time for people, you don’t*
222 *have the interest”. (GP11)*

223 The conditions within which doctors were expected to function affected their ability to practise
224 holistic, patient centred care:

225 *“Patients are dissatisfied [...] because they’re not being given sufficient time to give their history*
226 *properly and be investigated at the primary care level [...] there isn’t that reflective quality that*

227 *allows differential diagnosis, use of time, the use of your personal knowledge of the individual*
228 *and their social circumstances to be applied.” (GP9)*

229 With more work shifting from hospital to primary care combined with changes in patient
230 population and demand, participants felt increasingly time stretched. Strategies to cope
231 included staying late at work, taking work home, or changing their appointment times:

232 *“I changed my work patterns because I kept getting migraine headaches, because I was getting*
233 *stressed because of time pressures [...] I found it very stressful, having patients just waiting,*
234 *because I was running late on a regular basis” (GP2)*

235 **4. Negative media portrayal**

236 Factors relating to patients and the media were cited by 63% of survey respondents. Concerns
237 about media attacks on the medical profession were indicated more frequently (57%) than fear
238 of litigation (25%) or complaints (18%).

239 Rather than feeling supported in their efforts to meet patient demands, or to cope with the
240 pressures inherent in a high-risk working environment, participants instead felt worn down by
241 negative media representations:

242 *“I was very conscious of the negative image of general practice in the media and I found it quite*
243 *stressful” (GP3)*

244 Not only did participants feel misrepresented by “political spin”, but they felt frustrated that
245 the more positive aspects of their hard work and professionalism went largely unreported:

246 *“there was never anything positive, never any positive health stories related to the improvement*
247 *in cardiac mortality, reductions in cancer deaths, earlier diagnosis – any of the positives that*
248 *we’d achieved were just ignored.” (GP9)*

249 *“One of the frustrations is that I think there was definitely a political spin against general*
250 *practice [...] It doesn’t help when you’ve had a bad day at work and you come home and watch*
251 *the ten o’clock news and you see somebody on the telly saying ‘Oh these GPs aren’t working*
252 *very hard and patients can never get appointments’ [...] Just constant criticism in the press*
253 *about the fact that GPs were getting paid an awful lot of money and they weren’t having to do*
254 *the out-of-hours and they weren’t working nights and weekends.” (GP6)*

255 For many participants, being portrayed as "overpaid and under delivering" was tantamount to
256 "media battering". Being the subject of an on-going and negative media campaign left many
257 feeling undermined and demoralised:

258 *"We were targeted in a completely unsympathetic light [...] without any recognition of what as*
259 *a profession we gave to the public really and it did, over time, become very wearing" (GP9)*

260 **5. Workplace issues and lack of support**

261 Participants described conflicts within their practices over funding, career progression, flexible
262 hours and workload distribution. These issues within practices were exacerbated by the lack of
263 time for more informal interactions and support among colleagues. While all participants felt
264 supported during their training and registrar year, once fully qualified they became increasingly
265 isolated in practice:

266 *"I did sometimes feel quite isolated at the practice [...] I think the thing that possibly my training*
267 *hadn't prepared me for was sort of feeling like a lone worker in many ways, particularly in*
268 *comparison to working in a hospital where you were always part of a team." (GP3)*

269 Participants expressed the view that more was being expected of them by government, without
270 the necessary support in place:

271 *"I lost my confidence. I lost my faith in the system. I lost my faith in my profession [...] I think*
272 *once you've lost your confidence, then I don't think there's any structure within the profession*
273 *that helps that come back." (GP4)*

274 Participants described a "bullying culture", which they felt had come to permeate the NHS from
275 the top down:

276 *"There is a really aggressive, vicious, bullying culture that permeates management in the*
277 *National Health Service. That then flows all the way down to whoever your locality middle*
278 *managers are. It's a dreadful, awful, bullying culture and to shift from that to a non-overseeing,*
279 *facilitative, hands-off, trusting culture is, ... I don't know if people are capable of that cultural*
280 *shift." (GP15)*

281 Unhappiness with their professional culture was important for 61% of survey respondents, in
282 particular the feeling of a loss of autonomy and professional control 44%.

283 Several participants expressed the need for more support, particularly in the form of a more
284 "robust" occupational health service for doctors.

285 **6. Impact on job satisfaction and well-being**

286 Time pressure and conflicting priorities meant that participants felt that the care they were
287 giving was sub-standard. These pressures, intensified by a perceived "blame culture", led to
288 disillusionment and a raised anxiety about the risk of making a mistake.

289 *"I found that I was increasingly anxious about the patients that I was seeing. I think because I*
290 *was so often quite time-strapped with all the things that I was trying to fit in during the day. But*
291 *I felt conscious that I was worried that I ran the risk of missing things and that made me really*
292 *worried and anxious."* (GP3)

293 Participants described a series of conditions which they felt contributed to an increasingly
294 pressurised working environment. These included organisational changes resulting in a clash of
295 values and diminishing professional autonomy as health-care became more centralised,
296 standardised and depersonalised; an unprecedented increase in administrative workload; and a
297 lack of support not only from government, but across services and the wider community due to
298 an ongoing negative media campaign:

299 **FIGURE 1 [Insert diagram here]**

300 This combination of factors led to reduced job satisfaction and ultimately affected well-being.
301 In some cases participants came to hate their job:

302 *"I think I got to the point where I hated it and, that's a really strong word. But I absolutely hated*
303 *it and I used to wake up on a Friday morning feeling sick at the thought of going in."* (GP11)

304 In other cases, it was not so much the job, but "everything around the job" which they came to
305 "hate" as another participant described:

306 *"Passionately adoring my work and my patients, I mean, really I can't tell you how much I miss*
307 *them. Absolutely loved the actual job, but everything around the job I hated."* (GP7)

308 One participant, who had worked in general practice for 18 years and was also an appraiser,
309 described the impact this was having on a number of GPs:

310 *"There was this kind of malaise growing within the profession that I could see as an appraiser.*
311 *As GP's got more and more exhausted and burnt out, there was this 'I don't want to know,'*
312 *there was this disassociation, there was this lack of will to fight to get what patients needed"*
313 *(GP13)*

314 A third of the survey sample experienced ill health, including stress and anxiety disorder.
315 Burnout was cited by 38% of the survey respondents, although some participants self-
316 diagnosed the early symptoms of burnout:

317 *"I don't think I was medically ill, but I was certainly quite grumpy and I was quite fed up and I*
318 *just wasn't enjoying work and I got to the stage when I was driving to work and I used to have*
319 *this sort of sense of dread the nearer I got to the practice and I thought 'Oh no, another day is*
320 *coming'. I thought this isn't right, I shouldn't be feeling like this!"*(GP6)

321 Others decided to act upon these early warning signs and leave:

322 *“Before getting to the point where I really thought I was going to burnout and really hit a very*
323 *low point mentally and psychologically, I thought actually, I think I recognised those warning*
324 *signs and I thought it better to go do something different at this point whilst I still have the*
325 *wherewithal to go and do it.” (GP12)*

326 Personal factors were cited by 91% of respondents, in particular feeling overworked (54%), a
327 wish to improve their work/life balance (49%), the work being too stressful (43%) and lack of
328 enjoyment of the work (42%).

329 Overall participants felt that their job was not meeting expectations - particularly among GPs
330 who had been in practice for 10 years or more, it was felt that their current job was
331 unrecognisable from the professional role they had initially taken on.

332 Discussion

333 Summary

334 Participants had been attracted to GP work in the expectation that it would offer continuity of
335 patient care, professional autonomy and flexibility in working hours, along with the intellectual
336 challenge inherent in problem solving. However, participants described factors that were both
337 cumulative and multifactorial, leading to their decision to leave practice early in their careers
338 (see Figure 1).

339 The extent and rapidity of organisational changes to the NHS, which had led to an increase in
340 day-to-day administrative tasks and overall workload, was perceived by participants to have
341 fundamentally changed the doctor-patient relationship – the very hallmark of general practice.

342 Lack of time with patients meant the ability to practice patient-centred continuity of care was
343 perceived to be compromised and, with it, the GPs’ professional autonomy and values,
344 resulting in diminished job satisfaction. Once their job satisfaction had become negatively
345 impacted, the combined pressures of increased patient demand and the negative media
346 portrayal left many feeling unsupported and vulnerable to burnout and ill health, and
347 ultimately, the decision to leave general practice.

348 Strengths and limitations

349 UK GP training, recruitment and retention is fast approaching crisis as more GPs leave the
350 profession at younger ages. This study triangulates interview findings with survey results to
351 provide an in-depth exploration of the reasons why this is happening. We acknowledge that
352 participants were self-selecting and therefore might have had particularly strong views.

353 However, interviewees represented a maximum variation sample in terms of age, number of
354 years as practising GPs, and geographical location.

355 **Comparison with existing literature**

356 Although current evidence points to an impending crisis in the recruitment and retention of
357 general practitioners in the UK (12-14), this is by no means a new phenomenon (15-17), nor one
358 which is unique to the UK workforce (18-20). In 2001, a survey carried out by the BMA revealed
359 that a quarter of GPs wanted to quit (21), while a number of surveys, carried out before and
360 since, have continued to monitor GP training, retention and recruitment, particularly in relation
361 to contractual reforms, job satisfaction and burnout (15, 22-26). Much research has been
362 carried out on factors associated with stress, anxiety, depression and burnout among doctors in
363 the UK and abroad (27-30). There has also been a renewed focus in the research literature upon
364 educational initiatives, preventative measures and therapeutic interventions which could be
365 taken to help combat what is perceived to be a growing malaise within the health care
366 profession (31-35).

367 In a recent BMA survey, 80% of 1000 respondents rated work pressure as “high or very high”,
368 with their main workplace stresses being “meeting patients’ demands, lack of time and
369 excessive bureaucracy” (36). In a study looking at motives for early retirement among GPs in
370 the Netherlands, policies related to workload reduction were considered the most useful
371 instruments to control retention and retirement (37). Our mixed methods study complements
372 and extends this literature, by showing the cumulative, inter-related and multi-factorial reasons
373 as to why GPs are leaving practice early in their careers.

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

375 The early loss of GPs causes a considerable drain on NHS resources. To improve retention of
376 GPs in practice, NHS leaders need both to minimise the pace of administrative change and to
377 reduce the amount of time spent by GPs on work that is not face-to-face patient care.

378 For those leaving practice early, exit interviews would help identify specific local as well as
379 more general reasons for loss to the GP workforce.

380 Many GPs reported that they had enjoyed direct patient care. Research is needed on how the
381 skills and experience of GPs can most usefully be harnessed, rather than being lost to the NHS.

382 **Figure 1**

383 Boiling Frogs - The Changing Role of General Practice and its Impact'

384 **Additional information**

385 **Funding**

386 The study was jointly funded by NHS England and the Health Education Authority

387 **Ethical approval**

388 Ethical approval was granted by the Research Ethics Approval Committee for Health (REACH) at
389 the University of Bath. (REACH reference number: EP 13/1451).

390 **Competing interests**

391 The funding sources had no involvement in, or influence on, the study. The authors have
392 declared no competing interests.

393 **Acknowledgements**

394 The authors would like to thank all volunteer participants who kindly gave their time to share
395 their experiences of working in UK general practice. We also wish to thank Justin Devine for his
396 graphic design work.

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411 References

- 412 1. Department of Health. The new NHS: Modern, dependable. The Stationery Office; 1997.
- 413 2. The Health and Social Care Information Centre Workforce Directorate. General and Personal
414 Medical Services England 2001 - 2011 The Health and Social Care Information Centre; 2012.
- 415 3. NHS England Analytical Service. Improving General Practice – a call to action. Evidence pack.
416 NHS England; 2014. Available from [http://www.england.nhs.uk/wp-](http://www.england.nhs.uk/wp-content/uploads/2013/09/igp-cta-evid.pdf)
417 [content/uploads/2013/09/igp-cta-evid.pdf](http://www.england.nhs.uk/wp-content/uploads/2013/09/igp-cta-evid.pdf).
- 418 4. NHS Careers. Careers in medicine: General practice: National Health Service; 2015 [23 March
419 2015]. Available from: [http://www.nhscareers.nhs.uk/explore-by-career/doctors/careers-in-](http://www.nhscareers.nhs.uk/explore-by-career/doctors/careers-in-medicine/general-practice/)
420 [medicine/general-practice/](http://www.nhscareers.nhs.uk/explore-by-career/doctors/careers-in-medicine/general-practice/).
- 421 5. GP Taskforce. Securing the Future GP Workforce Delivering the Mandate on GP Expansion: GP
422 Taskforce Final Report. National Health Service; 2014.
- 423 6. Curtis L. Unit Costs of Health and Social Care 2014. Canterbury: 2014.
- 424 7. Health and Social Care Information Centre. General Practice Bulletin Tables 2004 - 2014 Medical
425 Services, England; 2015. Available from <http://www.hscic.gov.uk/catalogue/PUB16934>.
- 426 8. BMA. Survey reveals extent of GP workforce crisis 2014 [30 March 2015]. Available from:
427 [http://bma.org.uk/news-views-analysis/news/2014/may/survey-reveals-extent-of-gp-](http://bma.org.uk/news-views-analysis/news/2014/may/survey-reveals-extent-of-gp-workforce-crWoSs)
428 [workforce-crWoSs](http://bma.org.uk/news-views-analysis/news/2014/may/survey-reveals-extent-of-gp-workforce-crWoSs).
- 429 9. Doran N, Fox F, Rodham K, et al. Early GP Leavers Interim Report. University of Bath, 2014.
- 430 10. Doran N, Fox F, Rodham K, et al. A qualitative study exploring the reasons why GP's leave
431 practice early in their careers and the barriers to their return. Final Report. University of Bath,
432 2014.
- 433 11. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*.
434 2006;3(2):77-101.
- 435 12. Adams S. NHS facing GP workforce crisis. *Telegraph*. 2013 27th February.
- 436 13. BMA. General practice faces 'serious threat' to recruitment. BMA. 2014.
- 437 14. BMA. Survey reveals extent of GP workforce crisis. BMA. 2014.
- 438 15. Young R, Leese B. Recruitment and retention of general practitioners in the UK: what are the
439 problems and solutions? *Br J Gen Pract: JR Coll Gen Pract*. 1999;49(447):829-33.
- 440 16. Lambert TW, Evans J, Goldacre MJ. Recruitment of UK-trained doctors into general practice:
441 findings from national cohort studies. *Br J Gen Pract: JR Coll Gen Pract*. 2002;52(478):364-7, 9-
442 72.
- 443 17. Evans J, Lambert T, Goldacre M. GP recruitment and retention: a qualitative analysis of doctors'
444 comments about training for and working in general practice. *Occas Pap R Coll Gen Pract*.
445 2002(83):iii-vi, 1-33.
- 446 18. Sumanen M, Aine T, Halila H, et al. Where have all the GPs gone--where will they go? Study of
447 Finnish GPs. *BMC Fam Pract*. 2012;13:121.
- 448 19. Heponiemi T, Manderbacka K, Vanska J, Elovainio M. Can organizational justice help the
449 retention of general practitioners? *Health Policy (Amsterdam, Netherlands)*. 2013;110(1):22-8.

- 450 20. Van Greuningen M, Heiligers PJ, Van der Velden LF. Motives for early retirement of self-
451 employed GPs in the Netherlands: a comparison of two time periods. BMC health services
452 research. 2012;12:467.
- 453 21. Kmietowicz Z. Quarter of GPs want to quit, BMA survey shows. BMJ. 2001;323(7318):887.
- 454 22. Sibbald B, Enzer I, Cooper C, et al. GP job satisfaction in 1987, 1990 and 1998: lessons for the
455 future? Fam Pract. 2000;17(5):364-71.
- 456 23. Van Ham I, Verhoeven AA, Groenier KH, et al. Job satisfaction among general practitioners: a
457 systematic literature review. Eur J Gen Pract. 2006;12(4):174-80.
- 458 24. Watson J, Humphrey A, Peters-Klimm F, Hamilton W. Motivation and satisfaction in GP training:
459 a UK cross-sectional survey. Br J Gen Pract: JR Coll Gen Pract. 2011;61(591):e645-9.
- 460 25. Whalley D, Bojke C, Gravelle H, Sibbald B. GP job satisfaction in view of contract reform: a
461 national survey. Br J Gen Pract: JR Coll Gen Pract. 2006;56(523):87-92.
- 462 26. Sibbald B, Bojke C, Gravelle H. National survey of job satisfaction and retirement intentions
463 among general practitioners in England. BMJ. 2003;326(7379):22.
- 464 27. McManus IC, Winder BC, Gordon D. The causal links between stress and burnout in a
465 longitudinal study of UK doctors. Lancet. 2002;359(9323):2089-90.
- 466 28. Vedsted P, Sokolowski I, Olesen F. Open Access to General Practice Was Associated with
467 Burnout among General Practitioners. Int J Family Med. 2013;2013:383602.
- 468 29. Firth-Cozens J. Individual and organizational predictors of depression in general practitioners. Br
469 J Gen Pract. 1998;48(435):1647-51.
- 470 30. Harvey SB, Laird B, Henderson M, Hotopf M. The mental health of health care professionals: A
471 review for the Department of Health. In: Health Do, editor. London 2009.
- 472 31. Kjeldmand D, Holmstrom I. Balint groups as a means to increase job satisfaction and prevent
473 burnout among general practitioners. Ann Fam Med. 2008;6(2):138-45.
- 474 32. Lown BA, Manning CF. The Schwartz Center Rounds: evaluation of an interdisciplinary approach
475 to enhancing patient-centered communication, teamwork, and provider support. Acad Med.
476 2010;85(6):1073-81.
- 477 33. Krasner MS, Epstein RM, Beckman H, et al. Association of an educational program in mindful
478 communication with burnout, empathy, and attitudes among primary care physicians. JAMA.
479 2009;302(12):1284-93.
- 480 34. Beckman HB, Wendland M, Mooney C, et al. The impact of a program in mindful communication
481 on primary care physicians. Acad Med. 2012;87(6):815-9.
- 482 35. Bullock A, Fox F, Barnes R, et al. Transitions in medicine: trainee doctor stress and support
483 mechanisms. Journal of Workplace Learning. 2013;25(6):368-82.
- 484 36. Jaques H. BMA must "act now" on stress and burnout, say doctors. BMJ Careers. 2013.
- 485 37. Van Greuningen M, Heiligers PJ, Van der Velden LF. Motives for early retirement of self-
486 employed GPs in the Netherlands: a comparison of two time periods. BMC Health Serv Res.
487 2012;12:467.(doi):10.1186/472-6963-12-467.
488
489

“Boiling Frogs”

The changing role of general practice and its impact

“If you take a frog and you stick it in some very hot water it will jump out, it won’t like it. If you take the same frog and you stick it in a pan full of water and you just very, very slowly warm it up, it will adapt to the change, to the point that [...] you can actually boil the water and [...] because it’s so well used to adapting, it won’t realise that it’s actually dying!” (GP6)

“A lot of GP meetings that I used to go to they used to go on about “boiling frogs” and they said they keep on increasing the workload on GPs who are adapting to the point where they all crack and then say “That’s it, I’ve had enough!” (GP6)

