



## **Recruiting General Practitioners in England to Participate in Qualitative Research: Challenges, Strategies, and Solutions**

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## Abstract

In 2012, I conducted my first PhD study exploring general practitioners' attitudes toward online patient feedback. After designing the research questions and topic guide to conduct the interviews, I reviewed existing literature where authors described recruiting general practitioners to take part in research. I found there was some focus in the literature on the challenges associated with low general practitioner participation in survey-based and intervention studies, but little that described the process, experience, and challenges associated with recruiting general practitioners to take part in qualitative research.

Although general practitioners are known to be a difficult group to recruit to take part in research, the recruitment process I experienced was much more challenging than I had anticipated. This case study sheds light on my experience of recruiting 20 general practitioners in England to an interview-based study, and outlines a critical reflection on the eight strategies used for recruitment. I started by using traditional methods such as postal invitations and faxes to recruit general practitioners. Due to the very low success rate, I resorted to using more inexpensive and creative methods, such as sending an invitation letter through email, advertising in general practitioner Email Newsletters, seeking help from existing research networks, recruiting through friends and acquaintances, and using social media. In this case study, I also describe the participants' (general practitioners') motivations for taking part in the study, and I conclude with offering suggestions on how to maximize response rates to general practitioner-based qualitative studies in England.

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## Learning Outcomes

By the end of the case, students should be able to

- Have a better understanding of the potential challenges faced when recruiting general practitioners (GPs) to take part in research
- Understand that sometimes probability sampling cannot be used due to difficulties with recruiting
- Learn to be creative and flexible when recruiting participants to research
- Understand the strategies and approaches that could be used to increase GP participation in research

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## Project Overview and Context

In 2012, I embarked on conducting a qualitative interview study with general practitioners (GPs), exploring their attitudes toward online patient feedback. GPs are the first point of call for patients in the United Kingdom. They treat all common medical conditions and refer patients to hospitals or other medical services for specialist or urgent care.

Once my research questions and interview topic guide was designed, I focused my energies on exploring what strategies I should use for recruiting GPs to the study and what type of response rate I should expect.

I found that there was considerable focus in the literature on the challenges associated with low GP participation in survey-based studies, with studies such as the one conducted by Jepson, Asch, Hershey, and Ubel (2005) describing strategies used to improve response rates to surveys, and studies such as the one conducted by Stocks, Braunack-Mayer, Somerset, and Gunell (2004) which describe characteristics of GPs who do not respond to postal surveys. Other studies such as the one conducted by Williamson et al. (2007) mentioned challenges associated with recruiting and retaining GPs to intervention studies. Some of the findings from these existing studies could be applied to qualitative research too, such as providing monetary incentives to increase participation or reducing the length of the survey. However, there was very little I could find in literature that described the process, experience, and challenges associated with recruiting GPs to take part in qualitative research, and the strategies that could be used to maximize participation.

I therefore decided to systematically search the OvidSP database, Google Scholar, the Family Practice Journal, and Google to find attitude-based interview studies conducted with GPs in the United Kingdom, published after the year 2000. I found seven studies, all of which mentioned how many GPs were interviewed in the study. However, only one study by Gott, Hinchliff, and Galena (2004) described the basic key factors involved with recruitment of GPs: (1) the recruitment strategy (postal letters), (2) the length of the interview (1 hr), (3) re-imbursement of time (at locum rate), and (4) the response rate (34%).

The length of the interview, recruitment strategies, and response rates varied in other studies. For example, in a study conducted by Curnock, Bowie, Pope, and McKay (2012), a postal invitation was sent to GPs inviting them to a 1-hr interview, and this received an initial response rate of 7% (financial remuneration was not mentioned). Butler, Rollnick, Pill, Maggs-Rapport, and Stott (1998) had a much more successful response rate at 68%. They contacted GPs by telephone but interviewed them for only 10-35 min (again financial remuneration was not mentioned). There was a similar response rate in another study by Prosser (2003) where GPs were invited to participate by letter and it was followed up with a telephone call (107 GPs agreed to participate with a participation rate of 73%). However, again there was no mention of the length of interview or whether they were offered remuneration for their time. Corbett, Foster, and Ong (2009) recruited 10 GPs to participate in their study, from which two were interviewed face-to-face and eight by telephone for 15 and 30 min, but they do not mention how many were approached. Rogers (2002) recruited 21 GPs to his interview-based study but also does not mention how many GPs were approached, nor the recruitment strategy used or the length of the interview.

Due to the importance of evidence-based research in healthcare, and the pivotal role that GPs can play in enhancing healthcare research, the validity of such research depends on a sufficient participation rate. The omission of key factors related to recruitment of GPs in the aforementioned attitude-based studies makes it difficult for researchers like me to use these published studies to determine the best strategy or methods to use to recruit GPs to research, estimate a response rate, and determine how

much of the budget to allocate to recruitment. This is why I decided to report in this case study the multi-faceted recruitment strategies that I used in my study to recruit GPs, so that the academic community can benefit from it. I will also describe why 14 agreed to take part in the study, and I will conclude by offering suggestions on how to maximize the response rate for GP-based qualitative studies.

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### Research Practicalities

The recruitment for this interview-based study took place between the period of June 2012 and January 2013. The work was funded by Engineering and Physical Sciences Research Council (EPSRC), and I was based at the University of Warwick in the United Kingdom. This was my first study as part of my PhD research exploring online patient feedback. The research had ethical approval from the Biomedical Research Ethics Committee at the University of Warwick.

### Payment

GPs were offered £80 to take part in the research, and this was mentioned in all letters, notices, and emails. The amount of payment calculated was based on what GPs normally receive for participating in research, and was confirmed by the Clinical Research Network Research Management and Guidance Office in the United Kingdom, and the research support services manager at the National Health Service (NHS) Cambridgeshire Primary Care Trust (PCT). Payment was offered directly from the university to the GPs in the study, as advised by the NHS Cambridgeshire PCT.

### Sampling

The initial plan was to approach around 20-25 GPs based at practices in Cambridgeshire. A probability sampling approach was employed initially to ensure a wide range of characteristics of participants. However, due to the limited response rate, various other strategies were also used, including snowball sampling (further details are given in the next section). In total, 20 GPs were interviewed (although more did offer to participate) because at that point, thematic saturation had been reached.

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### Strategies Used to Recruit GPs

#### Overview

This section covers the eight strategies used to recruit GPs to the study. I initially planned to recruit around 20-25 GPs based at practices in Cambridgeshire through postal methods, with a follow-up phone call if needed. The postal method was my most preferred method because it could produce a random sample of GPs. However, due to the limited response rate, seven other strategies were used to recruit GPs (with differing success rates) both in Cambridgeshire and outside it. The strategies and methods used are described below.

#### Postal Invitation, With a Follow-Up Phone Call 6 Weeks Later

I requested a list of GPs based in Cambridgeshire from the local PCT (NHS Cambridgeshire). The

response was that they did not have a list they could share. I then acquired a list of GP names and postal addresses from the Anglia Support Partnership (a NHS Support Services provider in the East of England).

The list of GPs was then stratified manually using the first part of the postcode. Using an online random number generator, I selected 25 participants to be invited in the first instance (25 were only selected in the first instance due to the costs associated with sending out the letters; email addresses of the GPs or the practices were not available in the public domain, therefore they could not be used for recruitment). I hand-signed the invitation letters and included the names of all researchers on the project. The letters clearly mentioned that the study had ethical governance from both NHS Cambridgeshire and the Biomedical Research Ethics Committee at the University of Warwick. Participants were also sent a colored information sheet, consent sheet, and a pre-paid acceptance form. They were invited to return the pre-paid acceptance form indicating their interest to take part in the study. GPs were given 6 weeks to respond to the invitation letter.

With no response from any of the 25 GPs invited through the post, I contacted all of the 25 GPs by phone. Of the 25 GPs contacted, 10 asked for information to be sent again through email, which was sent immediately. Four were on annual leave, two had left the surgery, and the rest of the GPs promised to call back (the message was sent through the receptionist) but did not. In the end, I had three declined invitations through email (no reason given) and one accepted invitation (the accepted slip was sent back in the post).

#### **Phone Call to Practice Manager With a Follow-Up Email**

Having failed to receive enough responses from the initial approach, using the list of GPs provided by the Anglia Support Partnership, I created a list of GP practices in Cambridgeshire, stratified them manually using the first part of the postcode, and randomly selected 25 practices using an online random number generator. At the end of July 2012, I phoned the GP practices to talk to the practice manager, and I managed to speak to 23 out of 25 of the GP practice managers (some after several attempts of calling back). I explained the research to them briefly on the phone. Two practice managers declined immediately with the reason that they do not take part in research. The remainder gave me their email address and promised to forward the study invitation email on to the GPs at their respective practices. Despite emailing all the practice managers, I did not receive any responses from any of their GPs, and I am unaware whether the emails were forwarded onto the GPs or not.

#### **Notice in an Email-Based GP Newsletter**

I then contacted the Cambridgeshire-based PCT (NHS Cambridgeshire) for assistance in recruiting GPs. They offered to promote the study in a newsletter which is emailed weekly to GPs in Cambridgeshire. In August 2012, a notice was sent out in the newsletter to 109 GP practices and was potentially cascaded to 824 GPs in Cambridgeshire. One GP responded to that notice and agreed to participate in the interview.

### Phone Call to Practice Managers Followed by Fax

Despite the limited interest from GPs in Cambridgeshire, I was still keen to recruit in Cambridgeshire due to constraints on the travel budget. In September 2012, I therefore contacted all GP practices by telephone that were within a 30-mile radius of Cambridge and had not been contacted previously through the aforementioned methods, asking to speak to the practice manager.

A handful of practice managers refused to pass on details of the study to their GPs, with another handful requesting an email with study details. Interestingly, however, 13 GP practices requested a fax be sent to them with the details, which were then sent out. The faxes sent resulted in two GPs responding agreeing to participate.

### Invitation Sent to GPs From the South West Midlands Primary Care Research Network

Due to the limited numbers recruited up to this stage, I decided to recruit GPs in South Midlands too (near the University of Warwick). I sought help from the South Midlands Primary Care Research Network (PCRN), who sent an invitation to my research on my behalf on PCRN headed paper to practices that had previously taken part in research in the South West Midlands area. The letter was written by a Professor of Primary Care (the lead at the PCRN) who promoted the research and asked potential GP participants to contact the researcher through telephone or email. The letter mentioned that the study had ethical governance from the Biomedical Research Ethics Committee at the University of Warwick, and participants were also sent a colored information sheet.

The postal invitation from the PCRN resulted in three practice managers replying putting themselves forward for an interview, having misunderstood the letter. One practice manager declined through email on behalf of the GPs in her practice because they were in the midst of a surgery move. However, two GPs accepted the invitation to take part in the study.

### Notice in the Participate Magazine

Details of the study were also published in the *Participate* magazine (autumn 2012 edition; published by the South Midlands PCRN) with a call for GPs to take part in the study and my contact details (phone number and email address). A total of 330 copies of the magazine were emailed to GP practices and GPs, and distributed in print to 240 GP practices in the South Midlands. One GP responded with interest to participate after reading the online *Participate* magazine.

### Notice in Email Newsletters to GPs From London-Based PCTs

Due to the low participation rate so far, I decided to recruit GPs in London too. I contacted the various PCTs directly. Despite contacting one PCT through both telephone and email, it proved impossible to be put through to an appropriate person who could help. One PCT said they do not send out study details to GPs. However, NHS South East London (another PCT) agreed to promote the study in their Lewisham weekly email newsletter which was sent through email to 290 GPs and practice managers,

who were asked to cascade it to all the GPs at their respective practices. The study information was also sent out in the Lambeth PCT Newsletter to around 113 GPs in mid-September and was also included in the South NHS North West London email newsletter which was sent to GPs in Westminster, Kensington, Chelsea, Hammersmith, and Fulham. The Lambeth PCT Newsletter did not result in any responses; however, one GP agreed to take part after reading the Lewisham newsletter and another after reading the South NHS North West London newsletter.

### **Snowballing Through Personal GP Contacts**

After failing to recruit enough GPs using stratified random sampling and the more structured methods described above, I decided to resort to using snowball sampling, and contacted acquaintances (both personal and family based) who either were GPs or I suspected knew GPs with an invitation to take part in the study. I also put a call out on Twitter, and four GPs offered to take part. One of my GP acquaintances based in South London (who I was acquainted with through conversations on Twitter) sent out email invitations to his GP acquaintances based in London, and this resulted in four GPs agreeing to take part. A hospital doctor who was a close family acquaintance offered his help too, and called 12 of his GP friends in Lancashire, encouraging them to participate in this study. This resulted in eight GPs offering to take part in the research. Therefore, snowballing through personal contacts resulted in successfully recruiting 16 GPs, 13 of whom were interviewed as part of this study.

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### **GPs' Motivations to Participate in the Study**

I wanted to understand the reasons why GPs took part in my study. This I hoped may shed light on why the many GPs I had approached did not agree to take part in the study. Fourteen GPs were therefore asked the following question at the end of the interview:

I've had difficulty recruiting GPs to take part in this study, and I'm really grateful that you did.  
May I ask you, what motivated you to take part in this research?

The responses to this question were transcribed verbatim and analyzed manually in Microsoft Word using content analysis. Content analysis is a research analysis technique that is used to analyze text data acquired in verbal, print, or electronic form through open-ended survey questionnaires, interviews, observations, print media, and so on (Hsieh & Shannon, 2005). Its purpose is to concentrate on the language to classify the text into a number of categories that represent similar meaning. It does this by identifying themes or patterns within the data, either through a quantitative approach or a qualitative approach (Graneheim & Lundman, 2004). Responses were therefore coded based on themes and were double checked for accuracy. Four major themes emerged from the data.

#### **Theme 1: Interest in the Research Topic**

The topic of the research was mentioned most often as the motivator for the GPs to take part in the research. Five participants mentioned that they participated in the interview because they found the topic of the research interesting:

it just sounded interesting, it just made me think more about what my views were on this topic.  
(P9)

Three participants mentioned that they participated because the topic was important for the future:

I suppose, it's- I use the internet all the time for everything- so my assumption is that's the way everything is going to be going. The days of paper patient surveys and this, that and the other are probably fading and people are going to start leaving things. (P6)

And five participants mentioned that the topic was relevant to their current practice, and hence that is why they agreed to participate in the study:

And I think when it was mentioned to me that you know by Dr X it was interesting that it came round at this particular moment in time when I'm actively encouraging patients to feedback to me about a certain system that we are running at the moment, and I thought its strange how, it's coincidence that is happening at the same time, and so erm why not give my opinion on how I feel about it ... (P16)

#### **Theme 2: Contribute to Research**

Six participants mentioned that they agreed to be interviewed because they wanted to contribute to research. Three of them mentioned that their interest in participation was due to their interest in research in general, and their aim to contribute to research:

I'm interested in research and I wanted to contribute to it, it's how I can help. (P8)

The remaining three mentioned that their reason for participating was because they wanted to contribute to research specifically to help the profession:

If you are doing research and you come up with something that can help, in terms of communications and feedback, then it is good for the profession, so I think that's why I thought I will take part. (P8)

#### **Theme 3: Responding to a Request From a Friend**

Interestingly, four participants mentioned that they agreed to take part in the study because a friend requested their help:

It was more really that Dr X requested me for this thing. (P10)

#### **Theme 4: Monetary Benefit**

Only two participants mentioned the monetary benefit (payment of £80) of participating in the research:

he mentioned how much you pay as well for the hour, and I thought okay I could fit that in.  
(P18)

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### Learnings From This Experience

The most successful strategy for recruiting GPs in this study was snowballing through my personal contacts who knew GPs, which resulted in 67% of the interest. Another research team lead by Asch, Connor, Hamilton, and Fox (2000) also found that recruiting through existing GP networks was the most powerful tool to increase GP participation, and my experience appears to support this. However, snowball sampling does come with its downfalls, and as Wetzel et al. (2005) warned, it can introduce sampling effects. It was for this reason that I explored almost all other available options to recruit GPs before using snowball sampling.

The specific method that produced the most interest was the medical professional who vouched for the research and who phoned his GP friends to encourage them to participate. There was also a marked difference (quite understandably) between the GP who contacted acquaintances and the medical professional who contacted GP friends. This difference can also be seen in responses to the question about motivation behind participation. Half of the GPs who were recruited through the friend mentioned one of the reasons for participating was because their friend had asked them to. Although this may appear to be a downfall at first glance, in the case of this study which is on a subject matter (online patient feedback) that is rather polarized, this may actually be an advantage. This is because with studies like these, many participants' sole reason for participating is because they have a strong opinion either way, and recruiting this way reduces the chance of that happening.

Postal invitations and faxes were the most commonly used methods in literature to recruit GPs to research, and these methods were used by Curnock et al. (2012) and Prosser (2003) too. However, both of these methods produced extremely low response rates in this study, and I would therefore question its effectiveness. The cost of sending out postal invitations and faxes is also high, and time is lost waiting for a response. In contrast, sending notices about the study in email-based newsletters to GPs was not found in literature, but they were free and fairly easy to setup once an organization had agreed to place them in the newsletter (although it did take some effort to find the right contact within an organization). Having said that, the email invitations were sent to over 1,000 GPs in total, but the response rate was still very low (only four GPs agreed to participate). This may be explained by the fact that this type of GP newsletter goes out every week and routinely contains at least four other items of news on it too.

It is not easy or straightforward to explain low response rates, and despite not being prompted, two participants mentioned that most GPs probably do not agree to participate just because they do not have time to participate in research. This reasoning is reflected in studies such as the one by Barclay (2002) where the primary reasons for GPs not participating in research was reported as lack of time, high workloads, and low practical relevance of the research. The latter was also found in other studies which discovered that those GPs who thought the research was relevant to day-to-day practice were more likely to participate, and those who had higher scientific degrees, or had personal research or

teaching experience, were more likely to respond (see Hummers-Pradier et al., 2008). I was not able to investigate all of these factors when conducting this study. However, five GPs did mention that they took part in the interview because it was relevant to their day-to-day practice, and two GPs mentioned that other GPs are probably not taking part because the subject is not relevant to them and does not interest them. Therefore, the results appear to support existing findings that the research topic relevance to day-to-day practice does appear to be one of the key factors in motivating GPs to participate in research, and this suggests that those studies that are of low relevance to the day-to-day practice of GPs will require more effort to recruit GPs to.

Suggestions on ways to increase GP participation in research were also made to me informally by healthcare professionals and researchers on Twitter. Some of the suggestions that were relevant to qualitative studies were used to help recruit participants in this study, and this as well as other successful strategies based on my experience have been noted in the forthcoming section. For example, getting advice from the local PCRN despite the study not being adopted by them, and in this study, this helped recruit four GPs. A suggestion was also made that GPs are more likely to respond to other GPs, and this approach was also used by Lock et al. (2010), where communication was handled by a GP on the research team. Although I could not investigate this in detail, the majority of the participants (67%) in this study were recruited through a GP and a hospital doctor. I was also very flexible with both timings and location, which meant that more than half of the interviews were conducted outside of working hours and some interviews conducted at GPs' homes or at rented meeting rooms.

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### Key Messages

- The most successful strategy for recruiting GPs to research was snowballing through personal contacts who knew GPs, which resulted in 67% of the interest.
- Postal invitations and faxes were the most commonly used methods mentioned in literature to recruit GPs. However, questions may need to be asked about its effectiveness due to the low response rate and costs associated with them. In this study, inexpensive and creative methods were used to recruit GPs to research, such as sending invitation letters through email, advertising in GP Email Newsletters, and recruiting through friends, acquaintances, and on Twitter.
- GPs had different reasons for participating. Some of them took part because they had an interest in the subject area or thought it was relevant to current practice, while others wanted to contribute to research, or help a friend out.

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### 13 Ways to Increase GPs' Participation in Qualitative Research

The following are 13 practical ways to increase GPs' participation in qualitative research:

1. Take advice from those who have recruited GPs before to similar studies as yours.
2. Get advice from the PCRN. They may help informally even if they have not formally adopted your

study.

3. Ask GP friends or other medical acquaintances to ask other GPs on your behalf. GPs may be more likely to respond to GPs or medical acquaintances.
4. Consider getting a prominent GP or GP Academic to formally send out the invitation on your behalf or endorse the study.
5. Be flexible and willing to conduct the interview out of hours and on the weekend.
6. Be flexible with the location of the interview. You may have to interview at the GP's home or another location of their choice. You may also have to travel a distance.
7. Skype or phone may suit some GPs better for interviews because they can take part on their day off, away from the GP practice.
8. Consider changing sampling strategy when needed, for example, moving from random sampling to snowball sampling.
9. Consider using digital tools such as email, email-based newsletters, and social media to recruit GPs.
10. Target GP Continuing Professional Development (CPD) meetings, especially useful for short interviews or surveys.
11. Target major PCT meetings, again especially useful for short interviews or short surveys.
12. Consider targeting locum GPs. They have more time and flexibility. However, this should be used with caution as it could introduce bias depending on the research topic.
13. Consider targeting academic GPs too. They are likely to be keen to support research. However, this should be used with caution too as it could introduce bias depending on the research topic.

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## Conclusion

Despite the initial set back, I was committed to recruiting GPs and continued recruiting through the strategies and methods mentioned until the required number of GPs agreed to take part in the study. I believe my experience of recruiting GPs to an interview-based study provides valuable lessons for those attempting to recruit GPs to qualitative-based studies. I have identified inexpensive and creative methods that were successful for recruitment of GPs, such as sending an invitation letter through email, advertising in GP Email Newsletters, and recruiting through friends and acquaintances, and on Twitter. I would recommend that strategies to maximize recruitment of GPs mentioned in the previous section be given prominent consideration when researchers attempt to recruit GPs in the England to qualitative research.

I acknowledge that this case study captures only my experience of attempting to recruit GPs to take part in a specific study, and that it may not be generalizable to others' experiences of conducting other types of qualitative research with GPs in England. The participation rates could have been affected by factors such as the nature of the topic, the timing of when the invitations were sent out, and the GP sample population that was targeted. However, despite this, because this case study details eight strategies used and their respective success rates, as well as suggestions to improve participation, I believe the findings and recommendations will be useful to those considering approaching GPs in

England to take part in qualitative research.

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### Exercises and Discussion Questions

1. Are there any other strategies you can think of that could be used to recruit general practitioners (GPs) to take part in research?
2. Do you believe that the topic of the research affects the rate of recruitment? What type of studies do you think GPs would be more interested in, or more willing to take part in?
3. Do you believe it is ethical to pay GPs to take part in research? Do you think payment affects the response rate and the quality of the subsequent participation?
4. Do you believe £80 is sufficient to cover a GP's time and effort to take part in research?
5. What implications (both positive and negative) do you think using snowball sampling could have on the results of a study?
6. Should it be compulsory for GPs and other healthcare professionals to take part in research?

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### Further Readings

**Barclay, S., Todd, C., Finlay, I., Grande, G., & Wyatt, P.** (2002). Not another questionnaire! Maximizing the response rate, predicting non-response and assessing non-response bias in postal questionnaire studies of GPs. *Family Practice*, 19, 105–111.

**Hummers-Pradier, E., Scheidt-Nave, C., Martin, H., Heinemann, S., Kochen, M. M., & Himmel, W.** (2008). Simply no time? Barriers to GPs' participation in primary health care research. *Family Practice*, 25, 105–112. doi:<http://dx.doi.org/10.1093/fampra/cmn015>

**Shelton, B. J., Wofford, J. L., Gosselink, C. A., McClatchey, M. W., Brekke, K., Conry, C., ... Cohen, S. J.** (2002). Recruitment and retention of physicians for primary care research. *Journal of Community Health*, 27, 79–89.

**Templeton, L., Deehan, A., Taylor, C., Drummond, C., & Strang, J.** (1997). Surveying general practitioners: Does a low response rate matter? *The British Journal of General Practice*, 47, 91–94.

**Stocks, N., Braunack-Mayer, A., Somerset, M., & Gunell, D.** (2004). Binners, fillers and filers: A qualitative study of GPs who don't return postal questionnaires. *The European Journal of General Practice*, 10, 146–151.

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### Web Resources

National Institute for Health Research (NIHR) Clinical research network primary care: <https://www.crn.nihr.ac.uk/primarycare/>

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### References

**Asch, S., Connor, S. E., Hamilton, E. G., & Fox, S. A.** (2000). Problems in recruiting community-

based physicians for health services research. *Journal of General Internal Medicine*, 15, 591–599. doi:<http://dx.doi.org/10.1046/j.1525-1497.2000.02329.x>

**Barclay, S.** (2002). Not another questionnaire! *Maximizing the response rate, predicting non-response and assessing non-response bias in postal questionnaire studies of GPs. Family Practice*, 19, 105–111. doi:<http://dx.doi.org/10.1093/fampra/19.1.105>

**Butler, C. C., Rollnick, S., Pill, R., Maggs-Rapport, F., & Stott, N.** (1998). Understanding the culture of prescribing: Qualitative study of general practitioners' and patients' perceptions of antibiotics for sore throats. *British Medical Journal*, 317, 637–642. Retrieved from <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=28658&tool=pmcentrez&rendertype=abstract>

**Corbett, M., Foster, N., & Ong, B. N.** (2009). GP attitudes and self-reported behaviour in primary care consultations for low back pain. *Family Practice*, 26, 359–364. doi:<http://dx.doi.org/10.1093/fampra/cmp042>

**Curnock, E., Bowie, P., Pope, L., & McKay, J.** (2012). Barriers and attitudes influencing non-engagement in a peer feedback model to inform evidence for GP appraisal. *BMC Medical Education*, 12(1), 15. doi:<http://dx.doi.org/10.1186/1472-6920-12-15>

**Gott, M., Hinchliff, S., & Galena, E.** (2004). General practitioner attitudes to discussing sexual health issues with older people. *Social Science & Medicine*, 58, 2093–2103. doi:<http://dx.doi.org/10.1016/j.socscimed.2003.08.025>

**Graneheim, U. H., & Lundman, B.** (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24, 105–112. doi:<http://dx.doi.org/10.1016/j.nedt.2003.10.001>

**Hsieh, H.-F., & Shannon, S. E.** (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15, 1277–1288. doi:<http://dx.doi.org/10.1177/1049732305276687>

**Hummers-Pradier, E., Scheidt-Nave, C., Martin, H., Heinemann, S., Kochen, M. M., & Himmel, W.** (2008). Simply no time? *Barriers to GPs' participation in primary health care research. Family Practice*, 25, 105–112. doi:<http://dx.doi.org/10.1093/fampra/cmn015>

**Jepson, C., Asch, D. A., Hershey, J. C., & Ubel, P. A.** (2005). In a mailed physician survey, questionnaire length had a threshold effect on response rate. *Journal of Clinical Epidemiology*, 58, 103–105. doi:<http://dx.doi.org/10.1016/j.jclinepi.2004.06.004>

**Lock, C., Wilson, G., Kaner, E., Cassidy, P., Chirstie, M., & Heather, N.** (2010). *A survey of GPs' knowledge, attitudes and practices regarding the prevention and management of alcohol-related problems: An update of a World Health Organisation survey ten years on.* Retrieved from [http://www.heriechydcaerdydd.co.uk/attributes/newsletters\\_professional/GPsurveyAlcohol\\_2010\\_02.pdf](http://www.heriechydcaerdydd.co.uk/attributes/newsletters_professional/GPsurveyAlcohol_2010_02.pdf)

**Prosser, H.** (2003). New drug uptake: Qualitative comparison of high and low prescribing GPs' attitudes and approach. *Family Practice*, 20, 583–591. doi:<http://dx.doi.org/10.1093/fampra/cmz516>

**Rogers, W. A.** (2002). Whose autonomy? Which choice? A study of GPs' attitudes towards patient autonomy in the management of low back pain. *Family Practice*, 19, 140-145. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/11906978>

**Stocks, N., Braunack-Mayer, A., Somerset, M., & Gunell, D.** (2004). Binners, fillers and filers: A qualitative study of GPs who don't return postal questionnaires. *The European Journal of General Practice*, 10, 146-151. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/15724124>

**Wetzel, D., Himmel, W., Heidenreich, R., Hummers-Pradier, E., Kochen, M. M., Rogausch, A., ... Scheidt-Nave, C.** (2005). Participation in a quality of care study and consequences for generalizability of general practice research. *Family Practice*, 22, 458–464. doi:<http://dx.doi.org/10.1093/fampra/cmi022>

**Williamson, M. K., Pirkis, J., Pfaff, J. J., Tyson, O., Sim, M., Kerse, N., ... Almeida, O. P.** (2007). Recruiting and retaining GPs and patients in intervention studies: The DEPS-GP project as a case study. *BMC Medical Research Methodology*, 7, 42. doi:<http://dx.doi.org/10.1186/1471-2288-7-42>

