

What are General Practitioner perceptions of workload in England? A qualitative study

Caroline HD Croxson¹, Helen F Ashdown^{1*}, FD Richard Hobbs¹

¹Nuffield Department of Primary Care Health Sciences, University of Oxford, Radcliffe Observatory Quarter, Woodstock Road, Oxford, OX2 6GG, UK

Caroline HD Croxson
Senior Researcher

Helen F Ashdown
Clinical Researcher

FD Richard Hobbs
Professor of Primary Care Health Sciences

*Corresponding Author: helen.ashdown@phc.ox.ac.uk

Abstract

Background: General Practitioner (GP) morale is the lowest amongst doctors, job satisfaction is low, and the GP workforce is diminishing. Workload is frequently cited as negatively impacting on commitment to a career in general practice, and many GPs report their workload to be unmanageable.

Aim: To gather in-depth understanding of GPs' perceptions and attitudes towards workload.

Design and Setting: All GPs working within NHS England were eligible. Of those who responded to advertisements, a maximum variation sample was selected until data saturation was reached.

Method: Semi-structured, qualitative interviews were conducted. Data were analysed thematically.

Results: 171 GPs responded, and 34 were included. GPs described an increase in workload over recent years, with current working days being long and intense, which raised concerns over wellbeing of GPs and patients. Full-time partnership was generally not considered to be possible, and many participants felt workload was unsustainable, particularly given the diminishing workforce. Four major themes emerged to explain increased workload: 1) increased patient needs and expectations, 2) changing relationship between primary and secondary care, 3) bureaucracy and resources, and 4) the balance of workload within a practice. Continuity of care was perceived to be being eroded by changes in contracts and working patterns to deal with workload.

Conclusion: This study highlights the urgent need to address perceived lack of investment and clinical capacity in general practice; and suggests that influencing patient expectations of

what primary care can deliver and reducing bureaucracy have become key issues, at least until the capacity issues are resolved.

Keywords: Primary health care, general practice, general practitioners, workload, qualitative research

How this fits in:

Previous research indicates burgeoning workloads in primary care, with GPs struggling to cope. This in-depth qualitative interview study of GPs provides evidence that GPs perceive workload to have increased in recent years, and this may be having adverse consequences for both patients and doctors. Reasons for this increased workload are analysed and this provides potential targets for future strategies to try to reduce GP workload.

Introduction

General practice has a pivotal role within the UK NHS (National Health Service), delivering holistic and comprehensive care to all, including urgent care, diagnosis, monitoring, health promotion and prevention, and managing access to secondary care. 90% of NHS activity is reported to take place in primary care.(1) However, general practitioners (GPs) report the lowest levels of morale amongst doctors,(2) and recent surveys have highlighted that job satisfaction is at its lowest since 2001.(3) This discontent is compounded by concerns over diminishing workforce: the proportion of GPs retiring or intending to leave direct patient care is increasing,(4) and recruitment to GP training schemes has been low in recent years.(5) Workload is cited most frequently as the factor negatively impacting on commitment to a career in general practice,(4) with two thirds of GPs reporting an 'unmanageable' or 'unsustainable' workload.(2) 93% of GPs reported that workload has negatively impacted quality of patient care, and 68% that they experience significant work-related stress.(4) Several policy documents have been recently produced aiming to address diminishing workforce and plan sustainable models of care.(6-8)

Previous UK qualitative studies have identified paperwork, structural changes, changes in patient expectations and consultation rates as influencing GP workload,(9-11) with impact on morale and inequity in workload identified as concerns.(12,13) However, the decade since these publications has seen significant changes in UK general practice, including increasing consultation rates,(14) changes to contracts and funding arrangements including the Quality and Outcomes Framework (QOF),(15) service reorganisation including Clinical Commissioning Groups (CCGs),(16) changes in modes of patient access for example telephone consultations,(4) as well as changes in the nature of consultations due to demographic and

disease characteristics.(1) Therefore up-to-date, evidence-based, in-depth understanding of GPs' perceptions and attitudes towards workload is lacking. This qualitative interview study of GPs in England aimed to understand factors which influence workload, and how it has changed over time.

Method

This semi-structured interview study was approved by the University of Oxford Central University Research Ethics Committee. All qualified GPs working within NHS England were eligible. An advertisement was circulated via regional GP email lists and national social media networks, and those who responded were purposively selected to obtain a maximum variation sample in terms of GP characteristics (number of sessions, years as a GP, additional roles, GP role), and practice characteristics (list size, geographical location, rurality, number of other staff). Interviews continued until data saturation was reached. GPs were reimbursed with a £50 gift voucher.

Interviews were conducted in June and July 2015 by telephone or face-to-face, and participants provided oral or written consent respectively. CC, an experienced female non-clinical primary care researcher, conducted interviews using a flexible topic guide (Table 1). The topic guide was based on existing literature and discussion amongst practising GPs in the wider research team. It was pilot tested with HA (an academic GP) prior to the study commencing (and prior to her joining the study team) and amended accordingly, and continued to be amended during the course of the study. HA reviewed the interviews throughout the study and collaborated in identifying data saturation.

Interviews lasted 30-70 minutes and were audio recorded, transcribed verbatim, and anonymised. Thematic analysis was carried out by CC and HA, who collaboratively produced a coding scheme and coded the data, with the assistance of QSR NVivo. Throughout analysis, codes and themes were added, merged and refined. Attention was paid to the diversity of participants' experiences and attitudes, discrepant cases, and differences between GPs with varying characteristics.

Results

171 GPs responded to advertisements, of whom 34 participated. A maximum variation sample was achieved (Table 2), including GPs from across England. We first discuss participants' descriptions of current workload, followed by factors contributing to workload. Data on strategies for dealing with workload will be published separately.

Participants' descriptions of workload

Most participants described long, intense days in general practice. Typical working days ranged from 10-14 hours, often with little or no time for breaks. GP partners tended to describe longer days than salaried or locum GPs. Many GPs described needing to do administrative work during evenings, weekends or days off. Despite GPs mostly feeling '*a bit resentful*' (GP21) about this, some did comment that this was preferable to being on-call or working weekends. GPs mostly felt that workload has increased in recent years, and sustainability was a concern for some. Perhaps more than working hours, GPs were concerned with the current intensity of workload:

it's not just that you're working long hours... the thing which massively changed is the intensity of when I'm here... what you can't explain is the fact that within every moment of every day, you know, is that the numbers of tasks, and your multi-tasking capabilities, have had to increase (GP29, male partner, 10 sessions, 11-15 years' experience, medium semirural practice)

I have a flask in my room and a little fridge to ensure I keep hydrated, otherwise I wouldn't get a drink because it's just so, I can't pop out, I probably have one wee a day! You forget to wee unfortunately, 'cos you're so busy, and it's the non-stop, it's the non-stop sort of of the job I think that's the hardest (GP28, female partner, 7 sessions, 6-10 years' experience, medium urban practice)

A fulltime career as a GP partner was felt by nearly all participants to be unsustainable. This led to concerns about diminishing workforce: many participants were planning early retirement, or had experience of colleagues leaving the profession early, coupled with difficulty recruiting GPs, particularly to partnership positions, which they attributed to the difficult nature of the job.

Participants were concerned about the impacts of increasing workload both for GPs (physical and mental wellbeing, work-life balance, morale, job satisfaction) and patients (safety and care):

stress in the profession I think is, is pretty significant I would say, you know, you do hear regularly of sort of GPs sort of, you know, committing suicide and stuff like that ... we need to make sure that we sustain our health and our energy... surely we should have probably half an hour downtime to have some food where nobody disturbs us and we can and you know, we need to have time when we get home that we don't feel completely shattered and too tired to go and do some exercise and stuff like that and keep ourselves fit. (GP13, male partner, 9 sessions, 16-20 years' experience, medium suburban practice)

the workload in the last sort of 5 years is just sort of seeming to go up year on year, and I know that I'm rushing a) patients and b) decisions, so I don't feel I'm as safe as I was 5 years ago... I'm working harder and rushing, so I don't have time to think about things quite so much (GP6, male partner, 6 sessions, 16-20 years' experience, medium rural practice)

And other things have gone, you know, things that, you know, just doing a postnatal visit on somebody who's just come back from hospital having their baby, now I haven't done one of those in years, you know, I would always visit in the past relatives after a bereavement, I don't, I certainly don't always manage it now, often it's unfortunately just a phone call. (GP8, female partner, 5 sessions, 16-20 years' experience, medium suburban practice)

There were some exceptions to the overall feeling of negativity regarding workload. One GP described that: *there are positives with this workload crisis... It could be the making of general practice, I think... what we're thinking is working more cleverly really (GP5, male partner, 8 sessions, 11-15 years' experience, medium urban practice)*. However, none of the respondents felt that workload was not an issue in general practice at all: whilst some participants were not dissatisfied with their own working life, all acknowledged that workload has become more intense or that workload is an issue for colleagues.

Some salaried and locum GPs felt less negatively about workload than partner GPs; GPs with good team support and particular consultation styles also felt less negatively (discussed below).

Factors impacting GP workload

Major themes which emerged to explain the perceived increase in workload were patient needs and expectations, relationship between primary care and secondary care, bureaucracy and resources, and balance of workload within a practice (Table 3).

Patient needs and expectations

GPs felt that patient needs have increased due to medical and socio-economic factors, which combined with increasing levels of expectation led to concerns about the confines of a 10-minute consultation.

Medical factors

Increasing complexity due to an ageing population, chronic disease, mental illness, dementia, multi-morbidity and polypharmacy were perceived to have led to more complex and longer

consultations. Participants with a large proportion of elderly patients felt their workload was greater compared to those with a smaller proportion, both within and between practices.

A number of participants described workload increasing during the winter due to influenza and influenza vaccinations, and reducing during the summer due to less acute illness.

Socio-economic factors

Many participants discussed workload in relation to social and economic deprivation: patients in more deprived areas were less well educated about health and requested more consultations for minor illness, whereas patients in more affluent areas had higher expectations and perhaps higher levels of anxiety.

quite a large cohort of homeless people, street-workers and drug substance abuse that actually take a long time to obviously sort out and the constraints of the 10 minutes, it's pretty much impossible to sort of sort that out.... Whereas my rural practice... the patients around here are a lot more affluent and there's a lot of worried well, so a lot of consultations where perhaps not as much healthcare has happened that I'd expected to and the sort of demands are sometimes unreasonable (GP27, male locum, 8 sessions, 1-5 years' experience, regularly works at one inner-city and one rural practice)

Largely due to greater social and economic deprivation in inner-city areas, some participants felt that workload varied with level of practice rurality. This was also due to patient attitudes and health education, and time taken for home visits.

I've worked in different practices and in more rural places I think patients are a lot more resilient, you know, and will hang on [before consulting a GP] (GP14, male partner, 9 sessions, 16-20 years' experience, large suburban practice)

In areas with a significant ethnic minority population, the time needed to organise and utilise translation services, and explain the pathways through and constraints of the NHS, considerably added to workload.

Patient expectations

Some GPs strongly felt that patient demand for consultations has increased because of a growing lack of self-management and reduced tolerance for illness, resulting in patients presenting more frequently for more minor illness, or earlier in the course of an illness:

patients are coming in more frequently, their ability to self-manage appears to be, in my view, zero... Someone rang me up this morning, he said "I've got a pain in my foot", I said "Have you taken some pain relief?" He went "No", I said "Well when you have, ring me back", you know, why do they ring for this stuff? Why, why has the public confidence in its own ability to self-manage itself fallen to zero? (GP12, female partner, 8 sessions, >20 years' experience, small rural practice)

Perceived reasons for diminishing self-management and tolerance for illness were threefold:

1. Breakdown in society, resulting in patients having less medical and social support from other sources, hence turning to the GP more commonly:

because of the breakdown in society I think because you know, people don't know their neighbours or their family and there's no wise person down the road that they can go to if their baby vomits... I feel like GPs are in a sense propping up society, we are just, we're taking that role of the wise old granny down the road (GP5, male partner, 8 sessions, 11-15 years' experience, medium urban practice)

I think we are the first port of call when somebody's relationship goes wrong or somebody loses their job or whatever it is and that takes time because often there isn't anything medically wrong with them... just people who've had something bad happen, there just isn't the social support in the community and so we are the port of call for that and that probably has had some increase. (GP7, female partner, 6 sessions, 6-10 years' experience, medium suburban practice)

2. Increasing public access to information about health and illness, particularly from the internet, public health campaigns and the media, resulting in increased consultations (without additional resources to manage them):

I've got patients who've Googled their symptoms and they've come with reams of internet printouts. And probably some of the internet sites they go onto are quite scary because they're not medically vetted. So yes, then they'll be alarmed and then they'll come down. (GP23, male partner, 8 sessions, >20 years' experience, medium suburban practice)

the media, campaigns, you know go and see your doctor if you've had a cough for three weeks, that kind of thing... all of a sudden everybody with a cough for three weeks during flu season comes in. So yes, so health campaigns affect workload, local health scares. (GP7, female partner, 6 sessions, 6-10 years' experience, medium suburban practice)

3. Inflation of patient expectations, which some participants believed was somewhat politically and media-driven:

this is stoked up to some extent by the politicians because they, particularly around elections will say that, you know, the NHS will encompass everything, every problem you should go and see your doctor, we'll make it possible for you to see your doctor within so much time, what they do is they stoke up expectations, instead of seeing that, the mismatch between supply and demand (GP10, male partner, 4 sessions, >20 years' experience, medium semi-rural practice)

Related to patient demand, some GPs felt that society has become less tolerant of mistakes, and feared complaints and litigation, which impacted their workload:

Now I, we work in, I think in increasingly not only litigious but complaining environment and that really for me is the reason why I just visit everybody that asks me to. I don't question any of it anymore and again I think, I think that probably fear is probably pushing workload up (GP15, female partner, 8 sessions, 1-5 years' experience, medium rural practice)

Dealing with complaints which did happen was a major source of workload for those involved.

10 minute consultations

Participants agreed that patients commonly come to consultations with lists of multiple issues to discuss (although not all participants perceived this to be a new phenomenon). Multiple issues, combined with patient complexity and comorbidities, as well as items on the 'doctor's agenda' such as the QOF, meant that GPs commonly believed ten-minute consultations are

insufficient. Inadequate resources to enable longer consultations was a strong cause of concern for a number of participants.

Accessibility

Many GPs' practices had responded to increasing patient demand by offering alternative means of contact, particularly telephone encounters. While some found this effective, many felt the increase in telephone contact had contributed to the rise in workload, particularly because extra time was not always allocated to this.

patients think it's much easier to, obviously to reach us now, so perhaps before they would say, "oh you know, I'll wait a day or so", but now, "oh, I'll just ring the doctor, they can give advice", so I actually think funny enough it has actually increased our workload. (GP18, female partner, 9 sessions, 6-10 years' experience, medium suburban practice)

Relationship between primary and secondary care

Participants described a shift in tasks from secondary to primary care, much of which was felt to be appropriate, but was not accompanied by sufficient resources. For example GPs now manage conditions previously managed by secondary care such as palliative care and chronic disease, and patients are discharged to the GP more quickly. There was intense frustration amongst many GPs at hospital doctors increasingly requesting tasks of them which they felt were inappropriate, such as arranging further investigations.

there are whole disease areas which we've taken on, quite rightly actually, I think, but often which aren't funded, you know, very straightforward and simple sort of chronic disease management things like chronic kidney disease and diabetes and things like that which, you know, should be managed closer to home in a more reactive responsive place but we need the funding for it so I don't really think that's come our way (GP5, male partner, 8 sessions, 11-15 years' experience, medium urban practice)

when patients are seen at the hospital or discharged from the hospital, every single letter we now read is asking the GP to do something... Now it's, "We're discharging this patient and in three months' time, could you do these blood tests and then just check their this, that and the other, and if necessary do X, Y and Z." So basically they're being kind of discharged to us, which obviously is just more appointments, obviously more; And every time I read a letter, I have got to action something. (GP3, female partner, 5 sessions, 16-20 years' experience, medium semirural practice)

GPs described arranging referrals and follow-up as difficult and time-consuming, and inefficient communication increased workload, for example GPs not receiving discharge information. Some, particularly more experienced, GPs felt that personal communication with colleagues has been eroded by electronic systems. Availability, waiting times and communication with other local health services impacted GP workload; for example lack of community nurse capacity, insufficient mental health services, and lack of an Accident & Emergency or Minor Injuries Unit nearby all led to patients being managed more, and for longer, in primary care.

Bureaucracy and resources

There was agreement amongst GPs that bureaucracy has increased dramatically in recent years, particularly with the introduction of QOF, enhanced services, CQC inspections, and care planning. Some participants, particularly partners, felt very strongly that the requirement to meet targets has increased workload exponentially whilst not always being evidence-based or benefitting patient care:

we have to do these care planning for elderly which I think's counterproductive, just increases the workload, and actually doesn't address what they want anyway... you have to do so many tick boxes that after an hour you are so exhausted you actually never discussed with the patient what they actually came for (GP18, female partner, 9 sessions, 6-10 years' experience, medium suburban practice)

I mean the bureaucracy is mind boggling, unbelievable, I can't even begin to tell you the amount of unbelievable bureaucracy that gets dumped upon us, and it's all you ever do,

*seeing the patients is a piece of cake, the bureaucracy around seeing them is unbelievable.
(GP12, female partner, 8 sessions, >20 years' experience, small rural practice)*

For many partners, running the practice was a major contributor to workload, and funding structures and the processes of remuneration contributed to the perceived workload crisis due to lack of money to employ more staff to deal with increasing workload, and the requirement to spend longer and longer meeting targets in order to be funded.

Balance of workload within a practice

GPs frequently discussed their role within the practice team and how this impacted workload. Integral to this was an aim to maintain continuity of care.

Practice size

Patient list size (which for some participants had increased rapidly) was reported to impact workload due to number of consultations and more difficulty establishing continuity. A few GPs described smaller teams being more affected by increases in workload.

Individual GP characteristics

Participants' beliefs about how evenly workload was distributed amongst GPs in their practice were variable. One female GP believed that having a disproportionately large number of gynaecological consultations increased her workload due to the increased time required. Age or level of experience were thought to affect workload in different ways: workload could be greater for more experienced GPs due to having older, more complex patients; or lesser, due to quicker recognition of disease with greater experience.

Consultation style could impact workload: this was commented on by GPs who perceived their style to both lengthen and reduce consultations:

I'm a pretty efficient consulter so I don't find time management a problem... I think there's a fine line between being flexible and, in inverted commas, going the extra mile for patients and making yourself too available. I think if you maintain a professional distance that puts a certain brake on your workload (GP9, male partner, 9 sessions, 6-10 years' experience, medium urban practice)

if you're the type of consulter who attracts people, if you're a more sympathetic listener type of consulter, you'll attract people who take longer and who need more support and more

continuity which makes you less accessible to than other people so that increases workload. (GP7, female partner, 6 sessions, 6-10 years' experience, medium suburban practice)

GP role and hours

Both partners and salaried/ locum GPs generally felt that partners had greater workload, due to practice management, other administrative tasks, and responsibility. Two GPs had left partnerships due to unmanageable workload and described reduced stress levels as a result, and sessional GPs were widely seen as having an improved work-life balance; although one salaried GP still aspired to become a partner. Partners felt that employing locums did not necessarily help in reducing workload:

I'm never a big fan of locums because I think it does not decrease your workload, yes they see the patient in that minute but the patient hasn't been sorted out, so I think for coughs and colds yeah it's fine but if it's sort of more complex patients that's very difficult and it doesn't sort the patient out. (GP18, female partner, 9 sessions, 6-10 years' experience, medium suburban practice)

GPs as part of a team

The importance of a good team was frequently cited as a positive influence on workload and job satisfaction. Some experienced GPs felt communication amongst their practice team had diminished due to increased workload intensity, which negatively impacted support:

I've been a partner now since beginning of 1999 and there definitely used to be a slack in the day when you could sort of, you know, have a breather, just sit and chat to your colleagues and that's gone. (GP8, female partner, 5 sessions, 16-20 years' experience, medium suburban practice)

Other members of the practice team (nursing and administrative staff, practice manager) were acknowledged as important to many GPs, with some staff members seen as invaluable to managing workload, and staff absences being very problematic.

Continuity of care

Having an ongoing relationship with patients was generally felt to improve workload and enhance patient care, particularly for chronic conditions, because patients would not have to explain their condition to multiple GPs. Continuity was felt by some participants to be disappearing, due to part-time working and employing locums (often as a strategy for dealing with workload), and this had a negative impact on patient care. Paradoxically, a GP also reported that continuity of care could increase workload:

if you've known somebody and you know that they've had breast cancer 2 years ago or their husband died 3 years ago, you tend to ask that, whereas if you were new to them and just dealing with their complaint it would be easier (GP6, male partner, 6 sessions, 16-20 years' experience, medium rural practice)

Discussion

Summary

GPs described workload increasing over recent years, with long and intense working days. Participants were concerned about the impact on GPs and patients. Full-time partnership was not possible for most, and many GPs felt the current workload situation to be unsustainable, particularly given the diminishing workforce.

Four major themes emerged to explain the increase in workload: 1) increasing patient needs and expectations, 2) changing relationship between primary and secondary care, 3) bureaucracy and resources, and 4) the balance of workload within practices. Continuity of care was seen as integral to general practice, but potentially being eroded by changes in contracts and working patterns to deal with workload.

Strengths and limitations

This qualitative study provides a more in-depth assessment of GPs' perceptions and concerns regarding workload compared to quantitative methods. We had a large number of respondents from whom to select a maximum variation sample. Our independent research team comprised clinical and non-clinical researchers; having interviews conducted by a non-GP may have meant that participants felt able to speak more freely about feelings on workload.

Limitations include those naturally associated with qualitative research such as the small diverse sample which is not necessarily representative of GPs in England. It is possible that there was natural self-selection, resulting in over-reporting of workload problems. The study took place in the summer, and responses may have been different during busier winter months.

Comparison with existing literature

Our findings corroborate GP surveys(2-4) and quantitative assessment of consultation rates(14) reporting increased workload over time, decreased morale and job satisfaction; as well as older qualitative studies.(9,12,13,17,18) Our team recently published a quantitative study using the Clinical Practice Research Datalink, which found a 12% rise in GP consultation rates between 2007-08 and 2013-14, and increase in duration of consultations, contributing to an overall workload increase of 16%.(19) A British Medical Association focus group identified similar issues to those highlighted here including shift in care provision from secondary to primary care, increasing patient expectations and demands with some GPs practising "defensively", bureaucracy, and partnership being unattractive due to high workload and responsibility.(16)

An online GP survey reported that 82% participants intended to leave general practice, take a career break, and/or reduce clinical hours in the next five years, due to primarily workload intensity followed by workload volume, time spent on unimportant tasks, concerns about introduction of a seven-day working week and job satisfaction. Similar themes to ours arose including increased patient expectations, recruitment and retention difficulties, burgeoning administration and bureaucracy, transfer of work from secondary care, and the introduction of seven-day working.(20) The latter concern was raised by some GPs in our study, perhaps because the '7-day NHS' formed part of the government's election campaign shortly before we conducted our interviews.(21) A recent mixed methods study exploring why so many GPs in England leave practice before the age of 50 years also found that increased workload, due in part to increased bureaucracy, shift of work from secondary care to primary care, change in patient demands, and time pressures, is a major contributor.(22)

Implications for practice and research

These are disturbing findings, raising important concerns about the unsustainability of GP workload and the potential impacts on patient safety and care and GP wellbeing. High workload and job stress are associated with lower practice performance and more negative patient experiences,(18) so this is a significant problem with potential to cause harm to patients and GPs.

General practice has changed over the decade since the introduction of the 2004 contract. Major changes have taken place for day-to-day working as well as funding and commissioning structures. Particularly, there has been decreasing investment in primary care compared to hospital, despite increasing expectations of the work that should be done in primary care,(8)

and it seems that in combination with reducing numbers of GPs and role complexity, GPs are struggling with workload.(23)

Some strategies have been introduced at a practice level to try to address increased workload, such as telephone triage,(24) however recent evidence suggests this is not effective.(25) In 2015, a Primary Care Workforce Commission was established to identify models of primary care to meet the needs of the future as part of a 'New Deal for General Practice' and 'Ten Point Plan' for recruitment and retention of GPs.(6) Their July 2015 report laid out recommendations, including restructuring of primary care services.(8) There is controversy over whether the current partnership model is best going forward:(26) what is clear from our study is that continuity of care is important for many GPs.

These findings indicate that general practice in England may be at a crossroads regarding a sustainable model of care. GPs in devolved nations, and other countries, may be facing similar pressures. Many of the workload pressures identified in earlier surveys (such as societal dislocation, greater public expectations, increasing bureaucracy, tension of workload equity) are still reported, but additional stressors have appeared which are eroding the ability of GPs to adapt (for example no extra time in the day, hospital-driven tasks) or are prompting mal-adaption (for example feeling the need to practise defensive medicine, having to offer less holistic care, prioritising external targets and inspections above patient care). Whilst understandable responses to external demands, these are worrying trends which may undermine GP job satisfaction. Difficulty recruiting doctors, lack of a solution provided by locums, and the financial pressures on practices further indicate that 'coping strategies' are presently limited (our paper on GPs' suggestions for strategies to cope with increasing workload is published alongside). The unattractiveness of partnership is particularly worrying

since these positions are mainly occupied by the most experienced GPs who have the most ability to retire.

Above all, our study highlights the urgent need to address perceived lack of investment and clinical capacity, already acknowledged by the NHS, and which the General Practice Forward View⁽²⁷⁾ published in April 2016 may go some way to addressing; but also suggests that influencing, or rather reducing, patient expectations of what primary care can deliver and reducing bureaucracy have become key issues, at least until the capacity issues are resolved.

Funding: Most of the costs of this study were funded internally by the department, but a contribution was made by the NIHR School of Primary Care Research. FDRH acknowledges part funding by the NIHR School for Primary Care Research, the NIHR CLAHRC Oxford, the NIHR Oxford BRC, and is a Professorial Fellow at Harris Manchester College, Oxford.

Ethical approval: This study was approved by the University of Oxford Central University Research Ethics Committee (MS-IDREC-C1-2015-092).

Competing interests: FDRH is a practising GP and Research Lead for the Modality Super-Partnership. HFA is a practising GP. We have no competing interests.

Acknowledgements: We thank all the GPs who volunteered and took part in the study, those who circulated advertisements about the study to GPs, and the CPRD Workload group.

References

1. NHS England (London Region). Transforming Primary Care in London: General Practice - A Call to Action. November 2013. Available from: <https://www.england.nhs.uk/london/wp-content/uploads/sites/8/2013/11/Call-Action-ACCESSIBLE.pdf>
2. British Medical Association Health Policy and Economic Research Unit. BMA quarterly tracker survey: Current views from across the medical profession. Quarter 3: July 2015. Available from: <http://bma.org.uk/working-for-change/policy-and-lobbying/training-and-workforce/tracker-survey/omnibus-survey-july-2015>
3. Gibson J, Checkland K, Coleman A, Hann M, McCall R, Spooner S, Sutton M. Eighth National GP Worklife Survey Report. Policy Research Unit in Commissioning and the Health Care System (PRUComm) 2015. Available from: <http://www.population-health.manchester.ac.uk/healthconomics/research/Reports/EighthNationalGPWorklifeSurveyreport>
4. British Medical Association. National survey of GPs: The future of General Practice 2015. 2015. Available from: <http://bma.org.uk/working-for-change/negotiating-for-the-profession/bma-general-practitioners-committee/surveys/future-of-general-practice>
5. Rimmer A. One in eight GP training posts vacant, despite unprecedented third round of recruitment. BMJ 2014; 349: g6478.
6. NHS England and Health Education England. Building the Workforce - the New Deal for General Practice. January 2015. Available from: <https://www.hee.nhs.uk/sites/default/files/Building%20The%20Workforce.pdf>
7. Health Education England. Five Year Forward View. October 2014. Available from: https://www.hee.nhs.uk/sites/default/files/documents/WES_5year_forward.pdf
8. Health Education England Primary Care Workforce Commission. The future of primary care: Creating teams for tomorrow. 2015. Available from: https://www.hee.nhs.uk/sites/default/files/documents/WES_The-future-of-primary-care.pdf
9. Iversen L, Farmer JC, Hannaford PC. Workload pressures in rural general practice: a qualitative investigation. Scand J Prim Health Care 2002; 20(3): 139-44.
10. Ahluwalia S, Offredy M. A qualitative study of the impact of the implementation of advanced access in primary healthcare on the working lives of general practice staff. BMC Fam Pract 2005; 6: 39.
11. Jacobs S. Addressing the problems associated with general practitioners' workload in nursing and residential homes: findings from a qualitative study. Br J Gen Pract 2003; 53(487): 113-9.
12. Huby G, Gerry M, McKinstry B, Porter M, Shaw J, Wrate R. Morale among general practitioners: qualitative study exploring relations between partnership arrangements, personal style, and workload. BMJ 2002; 325(7356): 140.
13. Branson R, Armstrong D. General practitioners' perceptions of sharing workload in group practices: qualitative study. BMJ 2004; 329(7462): 381.
14. NHS Information Centre. Trends in Consultation Rates in General Practice 1995/1996 to 2008/2009: Analysis of the QResearch database. 2009. Available from: <http://www.hscic.gov.uk/catalogue/PUB01077/tren-cons-rate-gene-prac-95-09-95-09-rep.pdf>
15. Appleby J. Is general practice in trouble? BMJ 2014; 349: g6814.

16. British Medical Association Health Policy and Economic Research Unit. GPs' views on the future of General Practice - Focus Group findings. 2013. Available from: <http://bma.org.uk/-/media/files/pdfs/working%20for%20change/negotiating%20for%20the%20profession/general%20practitioners/the%20future%20of%20general%20practice%20report.pdf>
17. Pedersen AF, Vedsted P. Understanding the inverse care law: a register and survey-based study of patient deprivation and burnout in general practice. *Int J Equity Health* 2014; 13(1): 121.
18. van den Hombergh P, Kunzi B, Elwyn G, van Doremalen J, Akkermans R, Grol R, et al. High workload and job stress are associated with lower practice performance in general practice: an observational study in 239 general practices in the Netherlands. *BMC Health Serv Res* 2009; 9: 118.
19. Hobbs FD, Bankhead C, Mukhtar T, Stevens R, Perera-Salazar R, Holt T, et al. Clinical workload in UK primary care: a retrospective analysis of 100 million consultations in England, 2007-14. *Lancet* 2016; doi: 10.1016/S0140-6736(16)00620-6. [Epub ahead of print]
20. Dale J, Potter R, Owen K, Parsons N, Realpe A, Leach J. Retaining the general practitioner workforce in England: what matters to GPs? A cross-sectional study. *BMC Fam Pract* 2015; 16(1): 140.
21. Department of Health. 7-day NHS services: a factsheet. 2015. Available from: <https://www.gov.uk/government/publications/7-day-nhs-services-a-factsheet/7-day-nhs-services-a-factsheet>
22. Doran N, Fox F, Rodham K, Taylor G, Harris M. Lost to the NHS: a mixed methods study of why GPs leave practice early in England. *Br J Gen Pract* 2016; 66(643):e128-35.
23. Lyon-Marais J, Edwards L, Scallan S, Locke R. GP workload: time for a rethink of the generalist model of care to promote retention. *Br J Gen Pract* 2015; 65(639): e711-3.
24. Leibowitz R, Day S, Dunt D. A systematic review of the effect of different models of after-hours primary medical care services on clinical outcome, medical workload, and patient and GP satisfaction. *Fam Pract* 2003; 20(3): 311-7.
25. Campbell JL, Fletcher E, Britten N, Green C, Holt TA, Lattimer V, et al. Telephone triage for management of same-day consultation requests in general practice (the ESTEEM trial): a cluster-randomised controlled trial and cost-consequence analysis. *Lancet* 2014; 384(9957): 1859-68.
26. Chan S. Are GP partners a dying breed? *GP magazine* May 2015. Available from: <http://www.gponline.com/gp-partners-dying-breed/article/1348004>
27. NHS England. General Practice Forward View. April 2016. Available from: <https://www.england.nhs.uk/wp-content/uploads/2016/04/gpfv.pdf>

Table 1: Interview Topic Guide

Topic (prompts if necessary)
Can you describe your workload? (<i>Volume, working hours, intensity</i>)
Can you describe a typical working day/ week?
How do you feel about your workload? (<i>Manageability, sustainability, job satisfaction</i>)
What contributes to your workload? (<i>Patient care, other activities</i>)
Do you think that workload has changed over time? (<i>When, why, how</i>)
What are your thoughts about the content of consultations? (<i>Complexity, duration, change over time, what makes consultations complex</i>)
How is workload distributed across your practice?
What factors influence your workload?
How do you cope with your workload?
Do you/ your practice have any strategies for dealing with workload? (<i>How effective do you think these strategies are?</i>)
Do you have any ideas for other strategies for dealing with workload?
Are you expecting workload to change in the future?
Is there anything else about GP workload that you'd like to mention?

Table 2: Characteristics of participants

GP Characteristics		n (34)
Gender	Male	17
	Female	17
GP role	Partner	28
	Salaried	3
	Locum	3
Number of sessions in general practice per week	1-4	3
	5-6	13
	7-8	11
	9-10	7
Years as a GP	1-5	7
	6-10	7
	11-15	3
	16-20	9
	>20	8
Other roles	GP trainer	14
	Appraiser	6
	CCG roles	8
	Out of hours	7
	None of the above	13
Practice Characteristics*		N (31)
List size	≤5000 (small)	4
	5001-10,000 (medium)	10
	10,001-15,000 (medium)	13
	>15,000 (large)	4
Location	Rural	7
	Semirural	7
	Suburban	9
	Urban	8
Dispensing	Yes	9
	No	22
Number of other GPs**	1-3	4
	4-6	7
	7-9	12
	10-12	4
	13-15	2
	>15	2
Number of clinical staff who are not GPs**	1-3	6
	4-5	10
	6-7	5
	8-10	8
	11-20	2
Number of non-clinical staff **, ***	1-10	6
	11-20	14
	21-30	7
	>30	3

* Partners and salaried GPs only

** Absolute number, not full time equivalents

*** Data missing for one participant

Table 3: Factors impacting GP workload

Major theme	Subthemes
Patient needs and expectations	<p>Medical factors</p> <ul style="list-style-type: none"> - Medical complexity - Time of year <p>Socio-economic factors</p> <ul style="list-style-type: none"> - Social and economic deprivation - Rurality - Cultural factors - Communication <p>Patient expectations</p> <ul style="list-style-type: none"> - Self-management and tolerance for illness - Tolerance of mistakes <p>Ten minute consultations</p> <ul style="list-style-type: none"> - Patient lists <p>Accessibility</p>
Relationship between primary and secondary care	<p>Shift in tasks from secondary to primary care</p> <p>Communication with secondary care</p> <p>Availability of other local health services</p>
Bureaucracy and resources	<p>Increase in bureaucracy</p> <p>Meeting targets</p> <p>Funding</p>
Balance of workload within a practice	<p>Practice size</p> <p>Individual GP characteristics</p> <p>GP role and hours</p> <p>GPs as part of a team</p> <p>Continuity of care</p>