What leads to burnout in general practice supervisors?
A qualitative study

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This article is part of a series of articles on doctors' health and wellbeing.

Background and objective
Little research has explored burnout and wellbeing among supervisors. Because supervisor wellbeing is critical for trainee education and wellbeing, the present study explored risk and protective factors facing this group.

Methods
Interviews were conducted with 14 supervisors, and focus groups were run with five training stakeholders from two training organisations involved with Australian general practice training. Data were approached from a critical realist grounded theory perspective, applying template analysis to generate themes.

Results
Supervisors faced the same risk factors as non-educator doctors, including high workloads, personal stressors and an unsupportive medical culture. These were overlayed by additional factors from their supervisory duties, including the 'burden' of supervision, practices' supportiveness of supervision and under-valuing their contributions.

Discussion
The findings of this study fill important gaps in the literature regarding organisational and systemic contributors to supervisor burnout. Suggestions are offered for how individuals, practices and organisations can support supervisors' wellbeing to establish a sustainable medical education workforce for general practice.

MEDICINE FACES A WELLBEING CRISIS,[1–3] especially among its trainees.[4,5] Research is recognising that the wellbeing of educators (eg faculty, supervisors) is critical for medical trainee wellbeing.[6–8] Indeed, trainees' burnout correlates as much with their perceived relationships with their educators as it does with their own sense of professional autonomy or dissatisfaction with work–life balance.[9] Furthermore, educators experiencing poor wellbeing will model this to trainees, who might internalise this as part of their professional identity formation, thereby perpetuating poor wellbeing.[6,8,10,11] Thus, educator wellbeing is a key strategy to support learner wellbeing.[12]

Supporting educator wellbeing will likely introduce broader benefits for medical education. Educator wellbeing is associated with higher education quality.[13–15] Additionally, addressing educator burnout might improve stability within the medical education workforce.[16,17] As practising clinicians, burnout interventions might also improve educators' clinical practice, benefitting their patients and workplaces.[18–20] Enhancing educators' wellbeing is therefore a research priority.

Research from the broader doctor wellbeing literature is somewhat applicable to educators. However, educators' duties differ markedly from those of non-educator clinicians. Educators combine clinical practice with teaching, supervision and assessment of trainees, introducing distinct stressors. Research specifically with educators is needed to understand these nuances. However, there are notable gaps in the educator wellbeing literature. A systematic review focusing on general practice educators identified that research has largely focused on individualistic risk and protective factors for burnout (eg resilience, sense of meaningfulness) rather than considering organisational and systemic risk factors (eg remuneration, medical culture).[21] Further, there is little research from other specialties to provide additional insights.[22–25]

To date, research has focused on 'faculty' rather than 'supervisors'. Unlike faculty, who often hold academic duties alongside their teaching and clinical duties within a large training organisation (eg hospital, university), supervisors practise in small clinics, sometimes being the only supervisor within their clinic, and are tasked with supervising and teaching trainees with often limited connection with training providers. Thus, faculty's experiences likely differ from supervisors' experiences. This study aimed to address

these literature gaps by exploring the causes of burnout among Australian general practice supervisors. A secondary aim was to understand how these causes could be mitigated to support their wellbeing.

Methods

This manuscript adheres to the Standards for Reporting Qualitative Research Guidelines (refer to Appendix 1, available online only).[26] Using a critical realist epistemology, the researchers acknowledged they could only approximate the nature of the phenomena being studied.[27,28] This epistemology was adopted to increase the findings' longevity and relevance, particularly given the study was undertaken shortly before the transition to national College-led training.

Recruitment and data collection

Interviews with supervisors and focus groups with training organisation-affiliated staff were conducted across two training organisations (GPEx and GPTQ) spanning two states (South Australia and Queensland).

Supervisors could participate if they were actively supervising an Australian general practice training registrar 'on-site' (ie not remotely) through either participating training organisation. So that participants could reflect longitudinally on their experiences and observations, supervisors needed at least 3 years' supervision experience. Supervisors who were also medical educators (ie those responsible for overseeing registrars' training and delivering out-of-practice education to registrars) or supervisor liaison officers could not participate in interviews, as their views were sought via focus groups. Given the stigma associated with identifying current or historical burnout experiences,[6] supervisors were not asked whether they personally had experienced burnout.

All supervisors from participating training organisations were emailed invitations to participate in the study and sent one reminder. The emailed survey (refer to Appendix 2, available online only) verified supervisors' eligibility and collected sociodemographic details. Although purposive sampling based on sociodemographic details was planned, interviews were offered to all supervisors who expressed interest because of low response rates. In the researchers' experiences, low response rates to research invitations among supervisors are common and were likely compounded by the ongoing COVID-19 pandemic and imminent transition to a new training model. Recruitment occurred between April and June 2022, ceasing once all interested supervisors were given opportunities to participate. Interviews occurred between May and July 2022. Supervisors were provided an honorarium for their participation in line with The Royal Australian College of General Practitioners' guidelines (AUD 125).

The authors also sought the perspectives of those working with supervisors, effectively providing an 'other-report'. Medical educators, supervisor liaison officers, practice manager liaison officers and nominated training organisation staff from both training organisations were invited to participate in focus groups. Recruitment occurred from April to June 2022, and focus groups were held in June and July 2022. Participants engaged in one focus group each during paid working time.

SP and HM facilitated the interviews. SP facilitated the focus groups. This combination balanced SP's academic experience in the field and HM's experience as a supervisor. Recognising the potential power imbalance from HM's role as a medical educator with one training organisation, SP conducted all interviews and focus groups from HM's training organisation.

Interviews and focus groups followed the same question schedule (refer to Appendix 3, available online only), adapted from a previous study and reviewed by the project's steering committee.[29,30] These questions focused on burnout, but construed wellbeing as a continuous spectrum encompassing personal and professional domains, with burnout representing one point on this spectrum.[31] The schedule was piloted and interviewers met to standardise their approach to questions. Interview questions remained unchanged after piloting.

Interviews and focus groups were conducted via Zoom (Zoom Communications Inc., San Jose, CA, USA) and audio recorded where participants consented. Interviewers de-identified recordings, which were professionally transcribed. Participants were provided a copy of their transcript to review if requested. No transcript changes were made by participants. Subsequently, the respective interviewer removed identifying details and added sociodemographic details (eg gender, duration of supervisory experience) to the transcript, then imported it into NVivo 20 for Windows (Lumivero, Denver, CO, USA).

Analysis

Each transcript was treated as one unit of study. SP, HM and JB independently analysed line-by-line a sample transcript using this structure. Each analyst developed a preliminary coding structure corresponding to each research question. The analysts met to share and fuse their coding structures into a preliminary structure to guide further analysis. Rolling analysis followed; facilitators analysed their transcripts as they were received. The preliminary coding template guided analysis, with analysts adapting and expanding it where required. Analysts kept an audit trail of their coding, noting emerging patterns and describing their coding decisions. Given concurrent data collection and analysis, facilitators adapted their questions using emerging themes. Once all data were analysed, SP and HM compared their coding structures and fused these into a master coding structure. The analysts then agreed that thematic saturation had been reached. SP applied the master structure to the interviews conducted by HM to familiarise himself with the entire dataset. The few focus groups limited the richness of these data, precluding triangulation with interview data. Instead, interview and focus group data were analysed simultaneously within the one coding structure. HM analysed one of SP's interview transcripts using the master coding structure. Inter-rater agreement for the coding structure reached 100%. The University of Queensland Human Research Ethics Committee granted ethical approval for this study (2021/HE0022612).

Results

Participant recruitment and characteristics

Fourteen supervisors participated in individual interviews (Figure 1). Three focus groups were conducted, comprising five participants in total – three medical

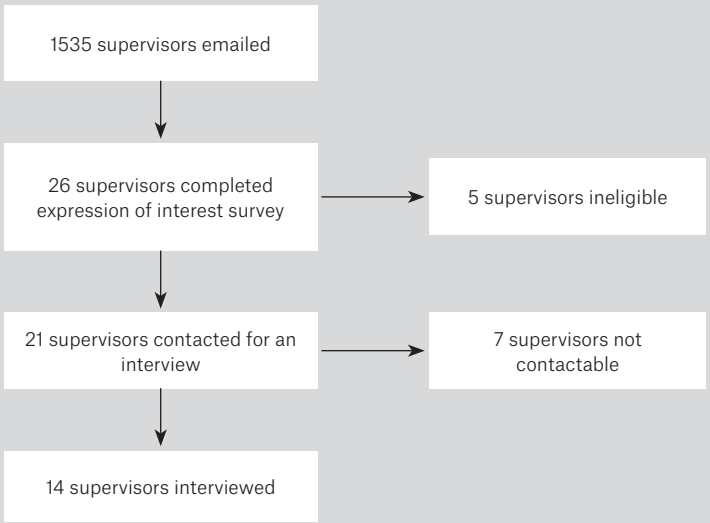

Figure 1. Flow diagram of supervisor recruitment.

educators, one training organisation education administration staff member and one practice manager. One medical educator 'focus group' comprised only one medical educator.

Most (63.2%) participants were female. Of the 14 supervisors, half practised in an urban area, and most also supervised medical trainees besides general practice registrars (92.9%) and worked in a practice with up to 10 clinicians (85.8%). Most supervisors (57.1%) had been supervising for between 3 and 5 years. The supervisors had worked as general practitioners (GPs) for various lengths of time. Participants were approximately evenly distributed between the two training organisations. Further details are reported in Table 1.

What causes burnout in supervisors?

Themes were categorised using the model of factors affecting clinician wellbeing proposed by Brigham et al.[32] These are summarised in Table 2 and discussed below. Given the overlap between organisational factors and the learning/practice environment categories when applied to the Australian general practice setting, these categories were collapsed for the present study.

Personal factors

Supervisors' personal psychosocial context was discussed considerably. One aspect was personal stressors and responsibilities. This spanned ongoing commitments (eg caring responsibilities) and acute stressful events, such as natural disasters, illness and relationship disruptions. To counterbalance this, participants emphasised having personal social supports to provide practical and emotional support: '... having a supportive family is pretty important if you're going to do any level of supervision, because there are going to be times when you're unexpectedly going to need to do extra stuff' (Supervisor).

Another risk factor could be supervisor's psychological traits. For example, perfectionism combined with low uncertainty tolerance could mean a supervisor had '... high demands for our registrars and (themselves) ... (leading to) an additional strain ...' (Supervisor). Similar issues could arise '... if you're not able to give up autonomy and you're very much a controlling person' (Supervisor). Another example was a supervisor's sense of duty towards others, which would encourage self-sacrificial behaviours. Supervisors' coping mechanisms also featured; disengaging from work and supervision when off-duty was important to facilitate boundaries. Conversely, supervisors who were reluctant to seek support from others could be at elevated risk of burnout. Psychological support for unhelpful traits (eg perfectionism) and developing awareness of one's values were considered beneficial, potentially supported by the practice or training system.

A further theme was the supervisor's financial situation. Background financial stress – either personal or business – could be exacerbated by loss of income from supervising, because '... even though you're teaching, it's not enough to pay your pay bills' (Supervisor). The impact of financial stress from teaching varied by career stage:

> *Junior supervisors are far more in need of the financial input because they're usually supporting a family ... to take an hour out a week, and then to take regular time off, and decrease the amount of patients you're seeing, can impact on them financially. Whereas those of us who are older ... it doesn't impact ... as much.* (Supervisor)

Skills and abilities

Participants' discussions of supervisors' skills and abilities pertained exclusively to supervision, particularly duration of supervision experience. The large learning load facing new supervisors could make them feel '... that you don't have the skills to be able to ... bring them (registrars) to where they need to be ...' (Supervisor), particularly for registrars requiring extra support. Similarly, struggling registrars could prompt self-doubt: 'Am I the reason that they're struggling? Am I not giving enough education or answering their questions ...' (Medical Educator). Supervisors who had recently commenced independent practice were at greater risk still: '... if (I'm) not even confident in (my) own skills ... then how do I teach a registrar how to do that (procedure) as well?" (Supervisor).

Conversely, experienced supervisors' preconceptions when judging a registrar's competence could induce stress when a registrar was not meeting their internal benchmarks. Likewise, skewed experiences with under- or over-performing registrars could distort these benchmarks and introduce 'a risk ... of not just seeing them (the registrar) for who they are' (Supervisor).

Table 1. Participant characteristics for interviews and focus groups

Characteristic	No. of participants (%)
Gender	**19**
Female	12 (63.2)
Male	7 (36.8)
Role	**19**
Education staff	1 (5.3)
Medical educator	3 (15.8)
Practice manager	1 (5.3)
Supervisor	14 (73.7)
Location[A]	**14**
Urban	7 (50.0)
Outer metropolitan	3 (21.4)
Rural	4 (28.6)
Position[A]	**14**
Contractor	8 (57.1)
Employee	2 (14.3)
Partner	1 (7.1)
Practice owner	3 (21.4)
Supervises non-registrar trainees	**14**
Yes	13 (92.9)
No	1 (7.1)
Number of employees in the practice[A]	**14**
1–5	6 (42.9)
6–10	6 (42.9)
11–15	1 (7.1)
16–20	1 (7.1)
Years' experience as a GP[A]	**14**
<10	4 (28.6)
10–20	4 (28.6)
21–30	3 (21.4)
31–40	3 (21.4)
Years' experience as a supervisor[A]	**14**
3–5	8 (57.1)
6–10	3 (21.4)
>10	3 (21.4)

[A]Characteristics only collected for interviewed supervisors.

GP, general practitioner.

Experienced supervisors, by virtue of their career stage, likely held greater professional responsibilities (eg leadership roles in the practice), creating additional demands.

To mitigate these risks, supervisors recommended aligning one's supervision workload with one's supervision experience to minimise becoming overwhelmed. More formalised opportunities to develop supervisors' supervision skills was viewed as key.

Healthcare role

Participants acknowledged the inherent stressors of general practice. Some commented on the draining nature of clinical work, including constant decision making, high load of mental health presentations (which '... (puts) an extra load on you as a doctor and as a person' (Supervisor)), experiencing vicarious trauma, and risks of negative clinical outcomes. This was compounded by the large clinical and administrative workload facing GPs, exacerbated by workforce shortages and the COVID-19 pandemic.

Overlaying this was the 'burden of supervision'. Participants largely commented on trainee characteristics, such as the stress and effort required to manage registrars with competency difficulties or who were disengaged from learning, overconfident and/or unreceptive. Critically, these experiences could accumulate: 'if they (the registrar) don't put in the effort, they bring you down. Then another one brings you down a bit further. Eventually, you go, "oh well I guess they're all like that"' (Supervisor). Some supervisors also highlighted the extra work required to dismantle poor practice habits that registrars had acquired in previous placements. Another aspect of this supervisory burden was a sense of loss: '... despite you essentially nurturing and raising a really great registrar, ... there's things that are outside of our control, like their partners and their jobs, that they then leave and you're like, "oh, is it worth it?"' (Supervisor). At a systemic level, supervisors were concerned about the onerous assessment (and associated administrative) load, particularly when a registrar was not meeting expectations and required remediation.

To manage this 'burden', supervisors clearly defined the scope of their supervision to avoid becoming overwhelmed.

Debriefing with others was also recommended, either at a practice level or within a broader supervisor community of practice.

However, supervision also provided meaning. Participants spoke about the sense of appreciation they drew from supervising; supervision could represent '... one of the times where you do get some thanks or acknowledgement for the work that you do ...' (Supervisor). Some also found joy when teaching registrars, noting supervision as a learning opportunity, a chance to 'give back' to the community, and greatly impacted a registrar's career.

Learning/practice environment and organisational factors

An extensively discussed theme was the supportive culture of the practice for supervising. This included the administrative team understanding supervisors' pressures and making accommodations (eg not booking over teaching time, allowing supervisors to hold a reduced clinical load). Motivational misalignment between supervisors and practice management, particularly if management's motivation for supervision was financial, could mean '... (the workload is) going to fall to the supervisor' (Supervisor). Practice culture also impacted a supervisor's actual or perceived level of control. Having autonomy over appointment scheduling, supervision load and practising style was important. Conversely, feeling 'trapped' could prompt hopelessness.

Belonging to a supervisor community of practice could facilitate debriefing and sharing of teaching ideas. Co-located supervisors could share the supervisory load, although this required compatibility in supervision style to prevent registrars from '... call(ing) the doctor who ... was more engaging with them' (Supervisor) and overloading one supervisor. Participants encouraged a team approach to supervision to reduce the burden on any one supervisor. Participants recommended establishing regional or national supervisor communities of practice. This could facilitate delegation of supervision for specific areas of practice to those with greater expertise. Participants also suggested other practice staff could undertake administrative tasks, reducing supervisors' workload. They also called for rationalisation of the assessment and administrative load.

Regulatory, business and payer environment

Various challenges facing Australian general practice were highlighted, including workforce shortages, low remuneration and feeling undervalued. These elements increased workloads and exacerbated existing demands by instilling hopelessness and futility – 'the future of general practice seems somewhat bleak to me ...' (Supervisor). To offset these threats, participants called for growth in the

Table 2. Overview of themes regarding the development of burnout in Australian general practice supervisors

Level	Category	Theme	Definition
Individual	Personal factors	Personal stressors and responsibilities	Personal commitments (eg parenting) and stressors (eg relationship breakdowns)
		Personal social supports	Having a social network beyond work that can provide practical and emotional support
		Psychology	The psychological make-up of a supervisor (eg personality traits, beliefs) that can affect their predisposition for burnout
		Finances	The level of financial stress that a supervisor is facing
	Skills and abilities	Qualities as a supervisor	An individual's attributes specific to their supervisory role (eg level of experience)
	Healthcare role	General practice	Aspects of clinical work that are draining
		Burdens related to supervision	The additional workload of being a supervisor
		Meaningfulness	Aspects of work tasks that are rewarding by virtue of fulfilling one's values
External	Learning/practice environment and organisational factors	Supportive practice culture	Having a practice culture that understands what supervision entails and makes accommodations to support this
		Autonomy	How much actual or perceived control supervisors enjoy in their different roles in life
		Supervisor community of practice	Having a network of other supervisors to debrief with and share ideas, as well as potentially sharing the supervision workload
	Regulatory, business and payer environment	Structural problems	Systemic problems with general practice building a sense of hopelessness and futility
	Sociocultural factors	Medical culture	Harmful attitudes within medicine towards doctors' wellbeing

GP workforce to reduce the workload facing the profession. Likewise, supervisors sought greater remuneration for supervision as acknowledgement of their role's value.

Sociocultural factors

Participants discussed medical culture's discouragement of doctors prioritising their wellbeing, describing strong stigma against being '... seen as the one with the mental health issue' (Supervisor), exacerbated by a default attitude of thinking '... it is their fault and they should be able to fix it ...' (Supervisor). The combination of this stigma and an emphasis on self-sacrifice encouraged supervisors to prioritise patients and persist in the face of adversity rather than pause and reflect. Consequently, 'Any suggestion that you're not coping, even if it's with the best of intentions, might actually push people away' (Supervisor).

Discussion

Key findings

This study explored factors contributing to, or protecting against, burnout among Australian general practice supervisors. Among the areas highlighted by Brigham et al,[32] participants emphasised personal factors (eg ability to disconnect from work, financial stress, caring responsibilities), healthcare role (eg demands from clinical work, the 'burden of supervision', professional meaningfulness) and the practice/organisational environment (eg practice culture, autonomy, having a supervisor community of practice). Many of these themes align with previous findings. For example, patient demands, workforce shortages and administrative duties affect the wellbeing of clinicians more broadly.[32,33] Similarly, connection with peers, meaningfulness from work and autonomy have each been raised within medical literature.[21,34] This study's emphasis on meaningfulness is supported by a rich body of literature highlighting its protective effects for doctors' wellbeing.[34,35] For example, Woodward et al found physicians with a low risk of burnout also discussed concepts of community and connection, calling and spirituality, and empowerment.[36]

A novel theme was the 'burden of supervision'. This primarily arose from interactions with trainees who were disengaged with learning or who required intensive support. This contrasted with the energising effects of supervising a trainee who was engaged with learning.[37] Further demands placed on supervisors entailed the educational and administrative load, which have previously been documented as problematic,[38,39] suggesting a need for educational and administrative rationalisation. The present study introduced additional factors influencing supervisors' wellbeing, in particular the supportiveness of practice culture, medical culture, and concerns with the structure of general practice. Recognition of these organisational and systemic contributors addresses important literature gaps, enabling more holistic and nuanced recognition of the complex interplay of burnout causes facing this group.[21]

Implications

The present study findings offer pragmatic guidance at several levels. Box 1 lists practical strategies to prevent and manage burnout raised by participants in this study; the validity of many is bolstered by previous literature. Readers should note that the strategies highlighted for practices and training/health systems might overlap. An overarching message is the importance of supporting individuals to build professional meaningfulness. Values offer a useful framework for defining meaningfulness and could span aspects including professional relationships or 'giving back' to the medical community.[40]

Strengths and limitations

Conducting this study across two training sites enhances the findings' transferability to alternative settings. Despite the low response rate, a diverse sample was recruited and thematic saturation reached, suggesting these findings are robust and represent an array of perspectives. These claims are re-inforced by the findings' alignment with previous literature. Selection bias is likely given voluntary recruitment, favouring those with an interest in the topic. Accordingly, the applicability of these findings to the 'average' supervisor deserves further exploration (including quantitative surveys) to examine the views of more individuals. Limited data were available regarding 'other-reports' of supervisor burnout and wellbeing; further investigation of these perspectives might be valuable. Although many participants also supervised medical students, the transferability of these findings to supervising non-registrar trainees is an area for further research.

Participants were not required to have personally experienced burnout. Although this could limit the data's richness, such a requirement would have increased the stigma associated with participating, reducing the sample's breadth.[30] Nonetheless, many participants reflected on their personal experiences of burnout during their interviews, supporting the findings' validity.

Box 1. Practical strategies to prevent and manage burnout among supervisors

Individual strategies

- Aligning supervision workload with experience
- Time away from medicine[41]
- Clear expectations and boundaries regarding scope of supervision[42]
- Seeking support for unhelpful traits and beliefs (eg perfectionism, uncertainty intolerance)[43–48]
- Self-awareness of personal values
- Prioritising self-care

Practice strategies

- Team approach to supervision[49]
- Capacity for administrative task delegation
- Other clinicians involved in teaching
- Training and health systems
- Providing opportunities for debriefing
- Offering access to confidential mental health services[50]
- (Reasonable) flexibility towards supervisors seeking to fulfil their values (eg part-time roles to facilitate diversification)[51–53]

Training and health systems strategies

- Building general practitioner workforce[54–56]
- Reducing assessment and administrative load
- Individualised supports for trainees' needs
- Supporting establishment of supervisor communities of practice[57,58]
- Building supervisors' supervision skills[59]
- Greater remuneration for supervision[60,61]
- Dismantling stigma regarding help-seeking and mental health[62–64]
- (Reasonable) flexibility towards supervisors seeking to fulfil their values (eg part-time roles to facilitate diversification)[51–53]

Conclusion

This study provides insights into the pressures facing Australian general practice supervisors. Alongside the challenges associated with general practice, supervisors face a complex series of rewards and stressors that can impact their wellbeing. Connecting with meaningfulness appeared important to successfully navigate these challenges. The findings highlight opportunities for individuals, practices and systems to intervene to optimise supervisors' wellbeing, ensuring a sustainable medical education workforce.

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Competing interests: SP, JB and HM began their employment with The Royal Australian College of General Practitioners after the completion of this project. MK has no competing interests to declare.

Funding: This study was completed as part of a project supported by an Education Research Grant awarded by The Royal Australian College of General Practitioners with funding from the Australian General Practice Training Program: An Australian Government initiative. The funding organisations were not involved in the present review in any form.

Provenance and peer review: Commissioned, externally peer reviewed.

AI declaration: The authors confirm that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

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Acknowledgements

The authors wish to thank the participants who contributed data to this study. The authors would also like to thank Ms Michelle Pitot for administrative support with project management.

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Appendix 1. Standards for Reporting Qualitative Research checklist[A]

No.	Section	Topic	Location in manuscript
S1	Title and abstract	Title	Title page
S2		Abstract	Page 2
S3	Introduction	Problem formulation	Pages 3–4
S4		Purpose or research question	Page 4
S5	Methods	Qualitative approach and research paradigm	Page 4
S6		Researcher characteristics and reflexivity	Page 6
S7		Context	Page 4
S8		Sampling strategy	Pages 4–5
S9		Ethical issues pertaining to human subjects	Pages 6–7
S10		Data collection methods	Pages 4–6
S11		Data collection instruments and technologies	Page 6
S12		Units of study	Page 6
S13		Data processing	Pages 6–7
S14		Data analysis	Pages 6–7
S15		Techniques to enhance trustworthiness	Pages 6–7
S16	Results/findings	Synthesis and interpretation	Pages 7–15
S17		Links to empirical data	Pages 7–15
S18	Discussion	Integration with prior work, implications, transferability and contribution(s) to the field	Pages 15–17
S19		Limitations	Pages 17–18
S20	Other	Conflicts of interest	Title page
S21		Funding	Title page

[A]O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: A synthesis of recommendations. Acad Med 2014;89(9):1245–51. doi: 10.1097/ACM.0000000000000388.

Appendix 2. Understanding how to promote and sustain General Practice supervisors' wellbeing – interview expression of interest

Note: This is published as supplied and is unedited by *AJGP*.

Participant Information Sheet

Research Title: Understanding how to promote and sustain General Practice supervisors' wellbeing

Researchers: A.Prof. Jill Benson AM (Senior Medical Educator – GPEx Ltd.); Dr Margaret Kay (Senior Lecturer – General Practice Clinical Unit, Faculty of Medicine, University of Queensland); Mr Shaun Prentice (Research Officer – GPEx Ltd.); Dr Helen Mullner (Medical Educator – GPEx Ltd.); Ms Michelle Pitot (Project Manager – GPEx Ltd.); Dr Taryn Elliott (Manager of Research and Innovation – GPEx Ltd.)

Thank you for your interest in participating in this research project. Please read the following information about the project so that you can decide whether you would like to take part in this research. Please feel free to ask any questions you might have about the project.

If you decide to participate in this research, please keep in mind that your participation is voluntary. If you do not wish to take part, you do not have to. If you decide to take part and later change your mind, you are free to stop at any time up until 01/10/2022. You would not need to give any explanation for your decision to withdraw from the project. If you choose to withdraw, your data will not be used in the research.

What is this research about?

GP supervisors are a vital part of the Australian General Practice Training model. Promoting the wellbeing of GP Supervisors may have a myriad of benefits over and above the benefits to the individual supervisor. However, little research has been conducted to explore wellbeing and burnout amongst GP Supervisors. This project seeks to remedy this gap by exploring how GP Supervisors understand wellbeing and burnout, what factors affect these, and what individual and organisational strategies might enhance and protect GP supervisors' wellbeing. You will not be required to disclose any personal experiences of burnout. This research project is supported by The Royal Australian College of General Practitioners with funding from the Australian General Practice Training Program: An Australian Government initiative.

What will I need to do?

If you would like to participate, please complete the expression of interest form at this link. This form will check your eligibility to participate and, if you are, requests basic demographic and professional experience details. These details will help the researchers select a broad range of GP supervisors. If you are selected, you will be invited to complete a 75-minute interview with a member of the research team. You will not be required to disclose any personal experiences of burnout. This interview will occur via Zoom. With your permission, the interview will be audio recorded and then transcribed. You will be given the option to review the transcript of your interview. If you choose to do so, following the interview when the interview transcript is available, you will be able to review the transcript and comment on or correct any content. We will send this to you in deidentified form in an email and you will have two weeks to provide your comment. If you need more time, then please let the research team know by return email. To acknowledge your participation, those who complete the interview will be provided a $155 Prezee gift card.

What are the possible benefits of taking part?

There will be no benefit to you from your participation in this research. The findings from this research will help identify threats and enablers of supervisors' wellbeing as well as interventional ideas, helping to inform development of relevant resources and policies. Additionally, the findings will enhance the theoretical understandings of wellbeing and burnout in GP Supervisors, supporting future research efforts.

What are the possible risks and disadvantages of taking part?

If you are selected to participate in the interview, you will be asked to discuss burnout. This discussion may raise issues related to mental health. The interview does not involve asking you to disclose any personal information about your own health or wellbeing. If the discussion becomes distressing at any point, you can immediately withdraw from the study, without needing to provide any explanation. If you would like support, then you can contact any of the following services:

- Lifeline – ph 13 11 14 or visit https://www.lifeline.org.au
- BeyondBlue – ph 1300 22 4636 or visit https://www.beyondblue.org.au
- Doctors' Health in QLD – ph 3833 4352 or visit https://dhq.org.au
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Interviews will be conducted by individuals who are registered with AHPRA and therefore have the obligation under The National Law for mandatory notification. Given the nature of the questions, it is highly unlikely that a participant will disclose information that could result in a mandatory report being made, but it is important that participants are aware of this issue for the interview.

Your contribution to the research and personal data will be kept confidential. You will not be identified in any publications arising from this research. Your views expressed in these interviews and decisions regarding participation and withdrawing will have no impact on your relationship with the research team, GPTQ, GPEx, the RACGP or the University of Queensland.

What will happen to the information about me?

All information collected about you will remain confidential. Your responses to the expression of interest form will be stored via Qualtrics and only accessible to members of the research team. With your permission, your interview will be audio recorded. The audio recording will be coded and then transcribed by a professional transcription company who has signed a confidentiality agreement. Any potentially identifying information will be removed as part of this transcription process. Audio recordings will temporarily be stored on secure GPEx servers and an encrypted hard drive, both of which will only be accessible to members of the research team. Transcripts will be stored on secure GPEx servers only accessible to members of the research team. When the transcript is ready, you will be given the opportunity to review the transcript. If you would like, you will be able to comment on or correct the information that you provided. Following this process, the audio recording will be securely destroyed. All other data will be stored for at least five years following submission of the final report (i.e. at least until December 2027). Interview data will be thematically analysed. As part of participating in this research, you will be offered a copy of a summary report of the findings. Your information will only be used as described in this participant information sheet and it will only be disclosed according to the consent provided, except as required by law.

It is anticipated that the results of this research project will be published and/or presented in a variety of forms. In any publication and/or presentation, information will be provided in such a way that you cannot be identified.

What will happen if I decide to withdraw?

Your participation in this research is voluntary and you are free to withdraw from the research anytime up until 01/10/2022 without needing to provide any explanation, and you would not receive any penalty or bias as a result of your withdrawal. Your decision to withdraw will have no impact whatsoever on your relationship with the research team, your RTO and/or GPEx, the RACGP or The University of Queensland. Should you decide to withdraw, all the information collected from/about you will be destroyed and will not be used in the research.

Can I hear about the results of this research?
You can choose to receive a summary report of the findings at the completion of the project. We also plan to publish a summary of the results on GPEx Website, present the results at relevant conferences and publish the findings in an academic journal.

Who can I contact if I have any concerns about the project?
This study adheres to the Guidelines of the ethical review process of The University of Queensland and the National Statement on Ethical Conduct in Human Research. Whilst you are free to discuss your participation in this study with the researcher contactable at jill.benson@gpex.com.au, if you would like to speak to an officer of the University not involved in the study, you may contact the Ethics Coordinator on +617 3365 3924 / +617 3443 1656 or email humanethics@research.uq.edu.au

This research Ethics ID number: 2021/HE002612

In ticking this box, I indicate that I have read the above information sheet and agree to my responses to this form being used in the way described above

- ○ I agree

Screening questions

Are you currently actively supervising an AGPT registrar?

- ○ Yes
- ○ No

Do you supervise a registrar remotely (i.e. supervise a registrar who is not in your practice)?

- ○ Yes
- ○ No

Are you a Supervisor Liaison Officer?

- ○ Yes
- ○ No

Are you a Medical Educator?

- ○ Yes
- ○ No

Are you currently a supervisor affiliated with GPEx or GPTQ?

- ○ Yes
- ○ No

How many years' experience do you have as a GP Supervisor?

Ineligible

Unfortunately, based on your responses you are not eligible to participate in this study. If you would like to receive a summary report of the findings from this study when it has concluded, please provide your email below. Thank you for your time.

Please provide your email address to receive a copy of the summary report if you are interested

Demographics + professional experience

Based on your responses, you are eligible to participate in this study. Please answer the below questions to be considered for participating in an interview

Please specify your gender

- ○ Male
- ○ Female
- ○ Non-binary / third gender
- ○ Prefer not to say

Which of these best represents your primary place of practice?

- ○ Urban
- ○ Outer metropolitan
- ○ Rural
- ○ Remote

Which of the following best describes your role in your current primary practice?

- ○ Practice owner
- ○ Partner
- ○ Contractor
- ○ Employee
- ○ Other

For how many years have you practised as a GP?

How many non-registrar doctors work in your practice?

Do you also provide supervision to medical trainees other than GP registrars?

- ○ Yes
- ○ No

Please provide your email address so we can contact you if you are selected to participate in an interview

Would you like to receive a summary report of the findings from this research?

- ○ Yes
- ○ No

Appendix 3. Interview and focus group schedule[29]

Question	Prompt/s
What do you think it means for a GP supervisor to be experiencing 'burnout'?	• What do you think are the signs and symptoms of a GP supervisor who is 'burnt out'? • What do you think might be the early warning signs? • What might be the signs and symptoms when burnout is more severe?
What do you think wellbeing looks like in a GP supervisor?	• What are the signs of wellbeing in a GP supervisor?
What do you think are the causes of burnout in GP supervisors?	• Personal • Registrar interactions • Workplace-based • Training organisation (including training staff)/Colleges • Any other causes? • Do you think these change as you gain more experience as a supervisor? • *(If identified multiple burnout symptoms)* Do you think the signs and symptoms of burnout might change based on the above? If so, how? (use participant's examples of causes and burnout symptoms)
What might be the consequences of burnout on one's role as a GP supervisor?	• What impact does burnout have on: – Teaching registrars – Supporting registrars – Assessing registrars
What do you think are effective strategies for managing burnout in GP supervisors?	• Personal • At the general practice you work in • Training organisation/Colleges • General practice as a whole/discipline • Resources (eg helplines)
What strategies have you seen GP supervisors use that are ineffective for managing burnout?	• Personal • At the general practice you work in • Training organisation • Resources (eg helplines)
What do you think are effective strategies for preventing burnout and promoting wellbeing in GP supervisors?	• Personal • Workplace-based (including training staff) • Training organisation/Colleges • General practice as a whole/discipline • Patient expectations
Are there any other comments you wanted to make today?	

GP, general practitioner.