Received: 7 October 2020 | Revised: 22 August 2022 | Accepted: 13 October 2022

DOI: 10.1002/hpm.3587

RESEARCH ARTICLE

WILEY

Understanding the non-professional needs of early career doctors: An interview-based study

Tiana Gurney | **Belinda O'Sullivan** | **Matthew McGrail** | **Priya Martin**

The University of Queensland Rural Clinical School, Toowoomba, Queensland, Australia

Correspondence
Tiana Gurney, Rural Clinical School, The University of Queensland, Toowoomba, Queensland, Australia.
Email: t.gurney@uq.edu.au

Abstract

Speciality colleges and health services are often well attuned to professional factors, but non-professional needs are less acknowledged and are the focus of this study. This likely relates to limited research about the non-professional needs of early career doctors. This study aimed to describe the non-professional needs of doctors in their early post-graduate career, including how they intersect with career and training experiences. Semi-structured interviews were conducted with 32 male and female medical graduates working across all Australian states and territories, spanning a variety of speciality areas and early career stages. Participants were asked about their career journey to date including non-professional factors related to their experiences. This study identified important non-professional needs, that strongly interplayed with career and training experiences, including: *children's education*; *partner's career needs*; *family stability*; *major life stages*; *proximity to the extended family*; and *spending time with immediate family*. Results suggested clear gender differences, with female doctor's needs orientated to partner work and carer responsibilities, while male doctor's needs were oriented to spending time with family and meeting the family's needs. Non-professional needs should be considered as legitimate needs within health

service employment and speciality training arrangements enabling early career doctors to realise their full potential.

KEYWORDS
family, gender, non-professional needs, postgraduate training, rural workforce

Highlights

- Non-professional needs of early career doctors intersect with career and training experiences.
- Non-professional needs varied according to gender, location and field of work.
- Career aspirations were affected by non-professional needs.
- Options exist for training systems to consider and account for the non-professional needs of early career doctors.

1 | INTRODUCTION

Doctors are people with families, friends and social interests, often unrelated to medicine. To date major policies and programs supporting doctors focus on their professional domains,[1–3] despite non-professional needs potentially being central to their job satisfaction and observed recruitment and retention patterns. The World Health Organisation (WHO) recognises the equal importance of personal and professional support, for retention, each being highly valued by health workers and potential determinants of where doctors work.[4,5] There is, however, an absence of literature describing the breadth of non-professional needs encountered by doctors in the early stages of their career, failing to describe the needs of the 'whole person'. This absence of evidence affects the capacity to shape policy solutions and programme structures in supporting the non-professional needs of doctors. The early career of a doctor is a time of rapid personal and professional transition that is critical for setting up future working patterns that fit with their preferred work-life goals.[6]

Postgraduate medical training is completed when most doctors are in the age group for consolidating long-term relationships, partners establishing their careers, having young children and purchasing a home.[7–10] Many countries have transitioned to basic medical training of 4–5 years using a postgraduate course structure, after a minimum 3-year Bachelor degree is achieved (thus minimum age of 25 when emerging into the medical workforce). Graduating doctors therefore have more established lives when they reach early careers in medicine, which may provide barriers in their ability to geographically relocate numerous times during their vocational training.[11,12] Most speciality training is based in metropolitan areas, but short-term rural rotations are increasingly common. The benefits of these include increased supply to rural services, building connections and experiences for potential future rural recruitment, as well as educational benefits from rural training that translate to all future work locations.[13,14] The requirement for these relocations can, however, vary amongst specialities and colleges. Due to bottlenecks to get onto the more popular vocational training programs, early career doctors may face substantial professional pressures.[15] The fierce professional competition and tension to fulfil postgraduate selection and education requirements needs to be considered in light of the non-professional lives, running parallel to their emerging career.

The World Health Organisation, in relation to personal and professional support for doctors, recognises the importance of living conditions, the working environment, outreach activities, support programs, networks and recognition measures.[5] The need for good working conditions has also been reinforced by a UK study that determined this to be the most influential characteristic of a training position. Moreover, this highlighted the willingness

of doctors to forgo or accept extra income for changes in working conditions, spouse or partner opportunity, and the desirable of the locality.[16] Few studies have, however, adequately described the personal or non-professional needs of doctors in their early career.

Research in postgraduate medicine highlights non-professional needs interplaying with choice of specialist career[17,18] with some focus on the differences between male and females in their specialist choice due to prioritising non-professional needs. Female doctors target flexibility and support of personal circumstances, more strongly than males,[6,18–23] despite there being a distinct lack of flexibility in most training programs.[11,12] The exact reasons for this lack of flexibility are not clearly defined or explored in the literature. However, one Australian commentary suggested the major barriers to establishing flexible training positions, in advanced training, include difficulty in finding a job-share partner, lack of funding for the creation of supernumerary positions, and concern regarding the educational quality equivalence compared with full-time training.[24] Lifestyle is also a key consideration, where female doctors associate this with compatibility of work with family obligations while male doctors may consider this with respect to leisure time and activities.[7,25] Non-professional factors including children and partner employment needs are likely to be mediated by gender. One study, not limited to early career stage, showed that male and female GPs moved away from rural locations in order to raise children and foster their educational needs (females immediately, males when children hit secondary school) and in relation to their male partner seeking work.[26] Understanding these differences in the needs between male and female doctors during early career is important due to the increasing proportion of females in medicine.[27–29]

In summary, while the literature points to the importance of work-life balance issues in early medical careers, it fails to adequately describe what the non-professional needs are and how they relate to different types and genders of doctors. Yet recognising and supporting non-professional needs, has important implications for recruiting and retaining doctors within medical college training systems and hospitals. For policy makers and employers, it may also underpin the capacity to achieve a gender-balanced workforce. This study aims to describe the non-professional needs of doctors in their early career, including how they intersect with career and training experiences.

1.1 | Context

This study uses data from Australian doctors, where most medical graduates work for at least 2 years as 'junior doctors' prior to specialist training. Many doctors spend longer as a junior doctor as training places in Australian vocational programs are limited and it is challenging to access these. Once a doctor has obtained a vocational training position in a speciality college, they then enter their postgraduate training period called fellowship training, typically of 3–6 years' duration, depending on the speciality pursued. As emerging fellows, they are still considered early career compared to experienced colleagues. Therefore, we consider this study's period (1st–17th postgraduate year) as 'early career' for the purpose of this research as this covers a period when doctors in Australia are trying to get into, currently undertaking or have recently completed speciality training. It should also be noted for the context of this study that in the Australian training system, there is the ability to change career path, however, this is not trivial and may require many years of additional pre-enrolment preparation for the doctor.[30]

2 | METHODS

2.1 | Design and implementation

Participants were sampled from an existing list of graduates of X University (but no longer connected to the university) for whom we had contact details due to their links with a longitudinal workforce tracking project and agreed to be contacted for participation in interviews. Those invited spanned their 1st and 17th postgraduate year, in line with

our definition of 'early career' (see Context). The purposive sampling attempted to achieve a balance of male and female doctors, locations, a breadth of specialities and career stages (covering junior doctors through to fellows), with the focus drawing on different non-professional factors and early career experiences. The online interviews were conducted in 2019 and occurred for up to 60 min led by two PhD-trained qualitative female researchers (author 1, author 4) based in a private office, with the doctors located in a place of choice. Both interviewers had broad experiences and interest in the topic based on their employment in a regional training hub, though there was no pre-existing relationship with participants. An interview guide was developed (Table 1), piloted and used, with emerging themes prompted by the interviewers until data saturation was reached. Data saturation was determined to be when repetition of material in subsequent interviews and the interviewers not identifying new and emerging topics or themes that required further investigation in more interviews. Interviews were recorded and transcribed verbatim and not returned to participants for comment or correction.

2.2 | Analytical approach

Transcripts were initially read by the broader research team (addition of author 2, author 3, author 4), in blocks of nine and key themes were identified through inductive coding.[31] The main author then conducted an in-depth review and analysis of this initial coding. The wider research team was then consulted again, reviewing all transcripts after the initial coding, conducted cross-coding between transcripts and team members, and discussion was had regarding both major themes and diverse cases, until consensus was reached and the data narrative and thick description were achieved.[32,33] In the process, subjective values and inclinations of the researchers were discussed, including establishing the most homogeneous themes possible.

Given our interest in the non-professional experiences, we used a phenomenological approach to describe these by exploring them from the perspective of those who have experienced them,[34] in this case, doctors who were reflecting on their current or recent experiences.

In the data analysis process we used subtext to quotations to denote the characteristics of the person as J '*junior doctor*', T '*trainee*', or F '*fellow*'; work locations in a R 'rural' or M 'metropolitan' location; M '*male*' or F '*female*'; Spec '*chosen or completing/ed a specialty*' or GP '*general practice*' (described in Table 2).

2.3 | Ethical issues/statement

This study had ethical approval from *The University of Queensland Human Research Ethics Committee (Ref no. 2012001171)*.

3 | RESULTS

Overall, 32 participants responded who were working across different states and territories of Australia, with representation across genders, early career stages, specialist type and location of work (Table 2). Our findings indicated that six key themes represented the non-professional needs of early career doctors, shown in Figure 1. These included: *children's education*; *partner's career needs*; *family stability and support network*; *major life events*; and *spending time with immediate family* (Table 3). These factors strongly interplayed with career and training experiences, with the potential to affect participation, satisfaction and completion.

TABLE 1 Interview guide

Question	Specific prompts	General prompts
Could we start by you telling me a little about yourself and your career as a doctor?	Things like your Current practice location, Area of Medicine, Stage of medical career, and where you did each stage of your medical training?	Could you please expand on that? That is very interesting, could you tell me more? Really, what was that like? Reflecting on that time in X, could you give me a bit more detail about X experience?
What are the major factors that have influenced your medical career journey to date?	Identify factors that influenced participant's career decision, current practice location; area of clinical practice; amount of time devoted to clinical medicine; decision-making in the context of family situations, partner employment, incentives, professional support.	
What were the important time points when things happened that determined the current shape of your medical career?		
What made these time points important?		
What happened at those times and how did they affect your career trajectory?		
How much control have you had over how your medical career has turned out?	Things like; going to medical school, internship location, vocational training, geographical location of current clinical practice.	
What are the factors that influenced (gave you more or restricted) that control?		
How easy (or realistic) is it to change where you practice (geographically); and also your field of medical practice?	How flexible is a medical career; and does it vary at different times in one's life? Does it vary by area of medical practice? By where you live (city/country)?	
Have you considered changing where you practice or your field of medical practice?		
Have you had to move from where you were living to pursue a training opportunity, or to meet clinical/professional college requirements?		
Did you later return to where you were?		
Have you had breaks in practice?		
Can you tell me the reasons for those breaks?		

TABLE 1 (Continued)

Question	Specific prompts	General prompts
What would have made your medical career progression better informed?		
What (else) would have improved the way your medical career has progressed?		
Before I turn off the recording device, is there anything else you would like to comment on?		

TABLE 2 Summary characteristics of participants (n = 32)

Characteristics	*n* (%)
Sex	
Female	16 (50)
Male	16 (50)
Early career stage	
Junior—prevocational doctor yet to start a specialist training programme but may have chosen a speciality of interest/attempted to join a training programme	8 (25)
Trainee—doctors who are at least in their second up to their 10th postgraduate year currently enroled in a speciality training programme	10 (31)
Fellow—denotes fellows who have completed speciality training, typically from their fifth to 17th postgraduate year	14 (44)
Specialist type	
GP	12 (38)
Other specialist[a]	20 (63)
Rural background	
Yes	8 (25)
No	24 (75)
Location of work	
Metropolitan[b]	18 (56)
Rural[b]	14 (44)

[a]Other specialists included: anaesthetics, ophthalmology, surgery, physician, radiology, psychiatry, oncology and dermatology.

[b]Metropolitan location: Modified Monash Scale ranking = 1. Rural location: Modified Monash Scale ranking = 2–7.[35]

3.1 | Children's education

Participants prioritised a stable and high-quality education for their children. They noted that the inflexibility in training requirements of early career medicine made it challenging to fulfil this interest. The expectation placed upon early career doctors to change geographical locations for postgraduate training, pressured doctors to choose between children regularly changing schools or absorbing extended separation periods from their children and partner. A third option, to avoid the upheaval for their families, was noted where doctors may resign from postgraduate training positions and pursue other opportunities, changing career directions.

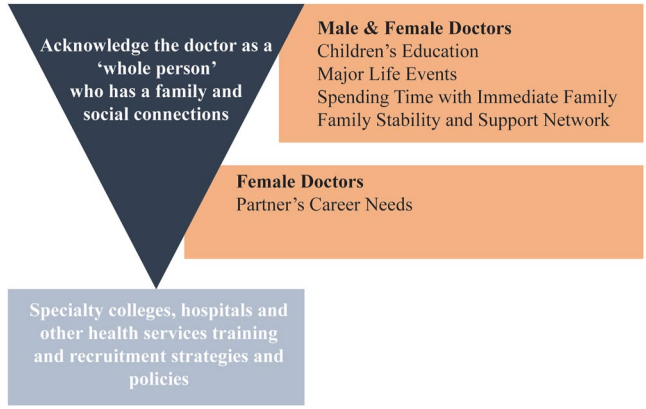

FIGURE 1 Non-professional needs of doctors in their early career [Colour figure can be viewed at wileyonlinelibrary.com]

TABLE 3 Identified themes related to the non-professional needs of early career doctors

Theme	Discussion
Children's education	Doctors prioritised their children's education and sought stability and high quality in the education received by their children. The geographical relocation often associated with postgraduate training requirements placed pressure on the early career doctors to regularly change their children's schools or be forced to endure extended periods of separation from their families to meet training requirements.
Partner's career needs	Female doctors who had partners that were associated with a non-medical oriented profession, were well-educated or who held high-level leadership positions tried to obtain training in geographic locations that offered employment for their partners. This was sometimes to the detriment to their own career with missed opportunities in their postgraduate training and work.
Family stability and support network	Male doctors indicated that they would move themselves, being apart from their partner and children, to undertake training and work, ensuring stability for their family.
	Female doctors, showed a need to work in locations where their partner and family were located, being near extended family. This family network enabled the female doctors to receive support in caring for their children allowing them to work the hours required of them in the postgraduate period.
Major life events	Life events such as buying a house, getting married, or illness were seen to influence a doctor's early career. These events affected a doctor's ability to geographically relocate regularly, as is often required in the postgraduate training period, or work the full-time hours required of early career doctors.
Spending time with immediate family	Male GP's were pleased to be able to enjoy life outside of medicine and spend time with their families, while female GP's expressed an interest in working part-time hours to enable them to accommodate time with their children.

> I suppose having children in school would certainly change your flexibility, especially if you're midway through a training program because there is requirement sometimes, depending on which region you're training, to move around, which can cause instability in schooling and accommodation.
>
> (TM1_Male_GP)

> I've got two young children and a husband who works full time… I was a little bit annoyed that they would send me away…with my children, having to take my children out of school. My husband was going to have to quit his job and, in the end, it was just easier for me to quit.
>
> (TM2_Fem_GP)

Interviewees tended to pursue employment opportunities based on where they perceive good schooling is available and this may shape their career in the postgraduate period. If based in smaller rural communities, boarding school or fly-in, fly-out work models were noted as possibilities to enable children to receive a stable education, but these can also be unattractive options.

> And [town X] was really good as far as schools. It's got good schools, so I think the reasons I've been - well, my point of view, is for the kids. So some people send their kids to boarding school… it's probably less of an option [for me].
>
> (FR2_Fem_GP)

> And it might be that we move to the city and I fly in, fly out one week in three or something…once the kids get to high school. That might be something we have to consider.
>
> (FR1_Male_GP)

> …I could work as a GP anywhere I chose too. But I would be restricted as far as my children's education…we'll probably stay in [metropolitan city] until at least the kids have finished high school.
>
> (FM2_Male_GP)

3.2 | Partner's career needs

Female doctors whose partners had non-medical careers perceived unique impacts on their own career. In contrast, male doctors expressed minimal concerns regarding their partner's careers. Female doctors indicated choosing geographic locations in the postgraduate period, where there was work for their partners, particularly for those who were training and working in rural areas. If their partner's job allowed for flexibility regarding the location they worked, this offered more options in the postgraduate period, and potentially the chance for females to work in smaller rural communities.

> Me personally, my partner is not in a medical field, which just makes it hard. If I am potentially moving around for the next few years of my training…you have to make sure there's work available for your partner.
>
> (TR4_Fem_Spec)

> I headed to [X] because when I applied to anaesthetics, that was the position I was offered, and my husband and I discussed it…and decided that would be the easiest place for him to find a job as well.
>
> (TR1_Fem_Spec)

> My husband had a flexible, really supportive work environment at [X] and he was allowed to work from home for a year, so that allowed me to choose the rural destination.
>
> (FR6_Fem_GP)

Female doctors with well-educated partners or those who held high-level leadership positions indicated more limitations on where they could work. This could influence where female doctors in the postgraduate period trained and practised, including their availability to work in rural areas.

> …for him to move to a rural community would be very difficult. He's in business, so he used to own his own business and he does CEO type roles…we've negotiated that [X] is more rural than [Y] and then less rural than I'd like to be.
>
> (TR1_Fem_Spec)

> …my husband, what he wanted and needed work-wise…he was doing his PhD and I didn't want to, generally speaking, live apart from him…it certainly influenced where I applied for Fellowship jobs…
>
> (FM1_Fem_Spec)

> … with my husband being too well educated to work in a rural setting…no one predicts that your husband's going to do a PhD and be overeducated and you're going to have children, which are going to be difficult to move…
>
> (TM2_Fem_GP)

The consideration that female doctors gave to their partners' careers may result in missed opportunities in their early career. Female doctors tended to place less importance on their own careers in comparison to their partners' careers.

> I make do with wherever I work to support my husband.
>
> (JM5_Fem_Spec)

> …I probably would've got on the [college training] program if I'd taken those [PHO and SHO positions], but my husband's career meant that we couldn't move…I had to turn both of those down.
>
> (TM2_Fem_GP)

Doctors' who had partners also in the medical profession, regardless of gender, were more willing to support each other in early postgraduate career milestones. However, this played out in different ways depending on the partner's position and where they worked.

> …Townsville, Darwin, Sydney, Brisbane; four cities in four years. I've been able to do it because I have to, not because I want to, and I do admit that I've only been able to do it because my partner is also medical and she understands the need for constantly moving around long distance as well. And she'll have to do it too.
>
> (JM3_Male_Spec)

> Sometimes it makes things easier if you have a medical partner…if they do have to move around the state, or even interstate, if their partner's also medical, they can also kind of work anywhere at the same hospital.
>
> (TR4_Fem_Spec)

> Decision to move to [X] was actually influenced by my husband who is a GP. So, he's finishing up his training here and he wanted to move from [Y] for a few years. So, he moved and I got a job here as a result of that.
>
> (JM5_Fem_Spec)

3.3 | Family stability and support network

Beyond maintaining educational stability for children, a broader focus was on stability of the family unit and its proximity to extended family support networks. Male doctors indicated that they would move by themselves in the postgraduate period, prioritising their own instability rather than relocating the whole family.

> I was a rural-bonded scholarship holder, so, I had to work outside capital cities…I chose to travel for the six years every day…so that they [family] didn't move, but I did.
>
> (FM5_Male_Spec)

> As an advanced trainee I got told I had to come to [X] for six months…so once again, my wife stayed in [Y] and they accommodated me in [X].
>
> (FR8_Male_Spec)

In our data, female equivalents did not use this option; instead, they trained in locations where their partner and family were based, as was further shown in the *partner's career needs* theme. For some female doctors the ability to live near extended family and receive support in caring for their children was an enabler of working the hours required of them in their postgraduate training.

> … I've really advocated for myself to stay in [X] for next year [relocated for family reasons], whereas with public health training they were wanting me to rotate out again. So, I just said, "You know, my daughter's in school now, I really rely on these people around me to support my career and support me looking after her with the demands".
>
> (TR2_Fem_Spec)

> …we sort-of stayed in [metropolitan location] because my extended family is there and my husband's extended family are all in [metropolitan location].
>
> (FM1_Fem_Spec)

3.4 | Major life events

Respondents relayed some tension in fitting major life stages around training. Some doctors considered minimising major life events to reduce their intrusion on early career goals. For others, their career stage made it inevitable that major life events like home ownership, would have a big impact on the capacity to move for career development.

> Do all your training before you consider having a life. It makes it a bit easier… the young, single, mobile registrar trainee versus the person married with a mortgage, having to mow the grass on the weekend after being away for a training course.
>
> (FR3_Male_GP)

> …once you've got to the 12th year of your training…most people have a partner…or have a family…are thinking about or have property or a home or assets that are somewhat fixed. At that point, it becomes very difficult and they're much less likely to move locations.
>
> (FR6_Fem_GP)

The lengthy periods of postgraduate training meant that life events had the potential to influence career decisions.

> …soon I'll be getting married. That's something that has restricted where I'll be working next year…I specifically chose to remain in [X] purely because I'm getting married next year and I don't want to be moving around again….
>
> (JM3_Male_Spec)

Illness, both personally and within their families, are major life events that can influence a doctor's early career, through the need to work part-time to meet their personal needs or constraints.

> …I then asked to go part-time because my dad was dying at that point. He had weeks to live. They said, "You can have two weeks' leave, but you won't be allowed any more than that, and when you come back, we expect you back full-time shift work."…I resigned and my dad took a bit longer to die than expected…
>
> (JM6_Fem_GP)

> I'm part-time purely because it's easier around my treatment and the children.
>
> (TM2_Fem_GP)

3.5 | Spending time with immediate family

Interviewees of both genders expressed interest in spending time with their families. Male GPs related to being content in their career during the postgraduate period because they could enjoy life outside of medicine and spend time with their families.

> So, it's not all about a career, is it with our lives? I don't want to spend Christmas Day at the hospital. I want to open up presents with my kids…that's the thing many people in medicine forget is they're all some form of type-A personality, strive, strive, strive, read books…Stop thinking and enjoy.
>
> (FR3_Male_GP)

> …my time is now as a family person…and community is a really important thing. So, I could've forced other things here, but I've come back and said, "Okay, I've got a great life and a great thing with my family as well as lovely medicine and great people to practice medicine with… I've got to look after my family a little bit."
>
> (FR1_Male_GP)

In contrast, female GPs expressed a desire to formally adjust work hours or accommodate time with their children, but a lack of flexibility affected their career directions. No male equivalents, nor specialists, expressed interest to work part-time.

> I took it to the director of the department and I said, "Oh, this is what I want. I really want to work part time and I really want to see my children more and do my training over a longer period."… So, she basically just said, "No, we don't do that. I'm not going to support you…
>
> (FR6_Fem_GP)

> … one friend was told by someone at a very large hospital, a tertiary hospital in [X], a head of a department, that she had to choose between being a mother or a doctor because they would not accommodate her as a mother…I've had two friends that have left because there's just been no flexibility at all and they're both single mothers…
>
> (JM6_Fem_GP)

4 | DISCUSSION

This study has explored the non-professional needs of early career doctors, showing some strong gender differences. These needs have the potential to shape career participation, satisfaction and completion of postgraduate work and speciality training. The central non-professional aspects include needs of children, partner, major life events and lifestyle stability. It should be noted that this study was conducted prior to the COVID-19 pandemic. The pandemic has impacted health systems and clinicians substantially in ways that have never been seen before.[36–43] It is unclear whether inferences that have been made in this study may now be somewhat different; however, there is little doubt the prioritising of non-professional needs of early career doctors will continue to interplay with career decisions and training experiences.

Our findings indicated that female doctors may be more likely to change their career course than males, to achieve an overall balance with other commitments and partner interests. Maintaining a course of employment and training, depended on having access to wider family support. In part, this is related to the long and unpredictable hours that doctors may need to work in order to complete the postgraduate stage of training. Female doctor's needs were orientated to partner work and carer responsibilities, while male doctor's needs were oriented to spending time with family and meeting the family's needs, highlighting for males, these may be preferences, but for females they are structural barriers.

As a source of tension, postgraduate training often requires regular geographical relocation and rigid work and training schedules with minimal flexibility, all of which can be disruptive to doctors' priorities of children's education, partner's careers, and the family's lifestyle/social connections.[7,24,44] At its worst, this inflexibility may lead to a net loss in the workforce,[45] causing doctors to leave the profession, further highlighting the need for training programme leaders to incorporate flexible policies making training locations more attractive.[46] The importance of flexible working conditions in the medical profession has been recognised in the United Kingdom with the British Medical Association, Department of Health and NHS Confederation coming to an agreement regarding part-time and flexible working through initiatives such as the NHS Improving Working Lives initiative and the NHS Flexible Careers Scheme.[47] Initiatives such as these are supported by UK legislation, specifically the Work and Families Act 2006, The Equality Act 2010 and The Children and Families Act 2014. Unfortunately, in Australia initiatives and legislation such as these do not exist.

The demand for flexibility in training programs has been acknowledged in past studies, particularly in the context of allowing doctors more freedom to individualise their training needs, including training locations.[24,48–50] Expectations of the likely requirement for doctors to be flexible in their training location were not, however, directly explored in our interviews. Some doctors readily identified their awareness of the differences between specialities, and it may have subconsciously (or consciously) impacted their career decision making. It requires a degree of 'acceptance' of the inflexibility ahead: "*once you commit to a training program, it becomes a lot less flexible, and you have to just do what's required to take the next step up the pathway." (JM2_Male_Spec).*

Male and female doctors with medical partners may find the requirement to change training locations easier as they have a sympathetic base of support; however, the capacity for two postgraduate pathways to align could also vary depending on the vocational pathway. Female doctors, whose partners work in non-medical specialised fields, may place their partner's career advancement before their own.[51,52] The reasons for placing their partner's career before their own remain unclear. Whether this is a societal or cultural expectation is uncertain.

Possible explanations could include the practical consequences of gender-bias in earnings or females recognising that they will take time off for childbearing/rearing and therefore the male income becomes more important at this stage of life. These reasons, however, need to be investigated further by future research studies. Females with partners of flexible and non-specialised employment were more easily able to work rurally. Notably, male doctors did not identify giving major consideration to their partner's career needs. This may, as an example, be because they did not have medical partners or it may be for a myriad of other different reasons, however, our data did not indicate a clear explanation and there was no observed bias in the selection of participants for this study. Past studies indicate that traditional gender-role attitudes may be reflected amongst male and female doctors where a male's career may be prioritised,[53] females may be less career orientated due to parenthood demands,[54] and female doctors may be less likely to achieve their working hour preferences, especially in hospital-bound specialities.[55] Therefore, it is likely to be important for training programs and health services recruiting female doctors to acknowledge that females may need more support to participate and satisfactorily complete postgraduate work and training requirements. This is critical given that a growing proportion of medical graduates are women.

Our findings suggest that the different life stages doctors will find themselves in at various times should be accounted for in training or recruitment cycles within early medical careers. Despite the extensive planning required around major events like marriage, buying a home and/or having children, many doctors in early career are still required to relocate regularly. In particular, female doctors are planning for both children and partner's careers around postgraduate work and training, often to the detriment of their own career and potentially further impacted by inflexible working conditions.[23] The capacity for females to move was more complicated by prioritising being near extended family for the level of support they needed to juggle training/work roles. This highlights the need for training programs and workplaces to consider initiatives such as, family friendly work patterns, parental leave for sick children and recognising that males have just as an important role to play in childcare as females. The capacity to negotiate ongoing training in specific geographic locations is particularly challenging for training programs that randomly allocate positions, again sometimes to the detriment of those who have more personal constraints, including illness. It is possible for doctors to change training programs or specialities; however, recognition of prior learning (RPL) is not readily available in the Australian medical training system amongst the different speciality colleges.

Our findings showed that a key consideration for recruiting both male and female early career doctors is children's educational opportunities and family stability. This, and work for partners, may be particularly pronounced in rural work and training where training often involves moving locations and educational opportunities may be considered less than in cities.[26] Failing to consider these issues within rural recruitment will be at the detriment of achieving early career doctors in rural areas, and it is likely to explain the poorer uptake of rural medicine by contemporary female doctors.[56]

Our study is not without its limitations. It is limited to a single cross-section of one university's graduates in Australia. The applicability of the findings across different countries and cultures would be of value to explore in future research, especially given that our findings about gender may vary by socio-cultural constructs and norms. Additionally, future work may benefit from considering changes in behaviours or choices of doctors in relation to wider/societal expectations and how this may interplay with career and training experiences. Further, our findings could vary depending on postgraduate work and training systems in medicine in different countries. It should also be recognised that these non-professional needs may change by evolving career stages and also as the workforce and societal constructs change, such as the increasing feminisation of the medical workforce.[23,27–29] Future studies could explore training completion rates, stratified by gender, as our study did not address this, and the body of literature has not examined this either.

The strengths of our study are in the methodological robust design that included the recruitment of research participants who: were not institutionally affiliated any longer; were working in different Australian states and territories; and represented different specialities across the medical field. The design also ensured male and female

representation. The phenomenological approach used in describing the non-professional needs of doctors in their early career working lives also provided a basis for exploring these needs through the lens of those who have experienced them.

5 | IMPLICATIONS

There are several implications that the findings from this study raise. Firstly, are female doctors being inhibited from reaching their true potential, and if so what does this mean to resources being put towards training? Consideration is required towards ensuring training resources are being used in a manner that enables females to reach their true potential as doctors ensuring that their career aspirations are reached without compromising on their non-professional needs. Secondly, are there clear solutions that may 'fix' the issues we have raised in understanding the non-professional needs of early career doctors? Solutions such as family friendly work patterns, flexible training and work practices, and partner employability in rural areas are just some initiatives that should be given due consideration. Thirdly, speciality colleges, employers (hospitals and other health services), recruiters and training systems should give consideration to 'whole of person' factors in postgraduate training policies and programs. In particular, current training and employment pathways could be more flexible, individually tailored, and accountable to the non-professional demands and preferences of doctors.

6 | CONCLUSIONS

Our findings have shown that early career doctors have specific non-professional needs, linked to children, partners, life events and family connection that strongly interplay with career decisions and training experiences. They varied considerably by gender, location and field of work. The non-professional needs have the potential to affect participation, satisfaction and completion of postgraduate work and training, particularly for female doctors. By recognising and supporting the non-professional needs of early career doctors, through incorporating flexible training and work practices, family friendly work patterns, legislative protection of these initiatives, and funding being put towards these initiatives, the true potential of a skilled, satisfied and distributed workforce can be realised, benefiting community well-being.

ACKNOWLEDGEMENTS

The authors graciously thank the doctors that participated in the interviews for this study, offering their experiences and opinions on their early careers and what non-professional needs they encountered during that period of time. The authors acknowledge Dr Remo Ostini who contributed to designing the interview questions. Three of the researchers involved in this study were funded under the Rural Health Multidisciplinary Training Fund of the Commonwealth Department of Health.

Open access publishing facilitated by The University of Queensland, as part of the Wiley - The University of Queensland agreement via the Council of Australian University Librarians.

CONFLICT OF INTEREST

The authors declare that they have no conflicts of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ETHICS STATEMENT

This study had ethical approval from *The University of Queensland Human Research Ethics Committee* (*Ref no 2012001171*).

ORCID

Tiana Gurney https://orcid.org/0000-0003-1183-4759
Belinda O'Sullivan https://orcid.org/0000-0003-4068-3240

REFERENCES

1. Deng S, Yang N, Li S, Wang W, Yan H, Li H. Doctors' job satisfaction and its relationships with doctor-patient relationship and work-family conflict in China: a structural equation modeling. *Inquiry*. 2018;55:46958018790831. https://doi.org/10.1177/0046958018790831
2. Le Floch B, Bastiaens H, Le Reste JY, et al. Which positive factors give general practitioners job satisfaction and make general practice a rewarding career? A European multicentric qualitative research by the European general practice research network. *BMC Fam Pract*. 2019;20(1):96. https://doi.org/10.1186/s12875-019-0985-9
3. Malhotra JL. *An Evaluation of the Determinants of Job Satisfaction in Canadian Family Physicians*. The University of Western Ontario; 2016. https://ir.lib.uwo.ca/etd/3503
4. Dolea C, Stormont L, Braichet JM. Evaluated strategies to increase attraction and retention of health workers in remote and rural areas. *Bull World Health Organ*. 2010;88(5):379-385. https://doi.org/10.2471/blt.09.070607
5. WHO. *Increasing Access to Health Workers in Remote and Rural Areas through Improved Retention: Global Policy Recommendations*. World Health Organization; 2010.
6. Scott A, Joyce C, Cheng T, Wang W. Medical Career Path Decision Making: A Rapid Review; 2013. Accessed March 20, 2020. https://www.saxinstitute.org.au/
7. Rich A, Viney R, Needleman S, Griffin A, Woolf K. 'You can't be a person and a doctor': the work-life balance of doctors in training–a qualitative study. *BMJ Open*. 2016;6(12):e013897-e013897. https://doi.org/10.1136/bmjopen-2016-013897
8. Goldacre MJ, Davidson JM, Lambert TW. Doctors' age at domestic partnership and parenthood: cohort studies. *J R Soc Med*. 2012;105(9):390-399. https://doi.org/10.1258/jrsm.2012.120016
9. AIHW. Australia's Mothers and Babies 2016 – In Brief; 2018.
10. Hall A. Trends in Home Ownership in Australia: A Quick Guide; 2017. Research Paper Series, 2016–17.
11. Evans J, Goldacre MJ, Lambert TW. Views of junior doctors on the specialist registrar (SpR) training scheme: qualitative study of UK medical graduates. *Med Educ*. 2002;36(12):1122-1130. https://doi.org/10.1046/j.1365-2923.2002.01381.x
12. Larkins SL, Spillman M, Parison J, Hays RB, Vanlint J, Veitch C. Isolation, flexibility and change in vocational training for general practice: personal and educational problems experienced by general practice registrars in Australia. *Fam Pract*. 2004;21(5):559-566. https://doi.org/10.1093/fampra/cmh513
13. Grobler L, Marais BJ, Mabunda S. Interventions for increasing the proportion of health professionals practising in rural and other underserved areas. *Cochrane Database Syst Rev*. 2015;6. https://doi.org/10.1002/14651858.CD005314.pub3
14. Singleton R. The benefits of rural training: producing the expert generalists of the future. *Future Healthc J*. 2020;7(1):50-52. https://doi.org/10.7861/fhj.2019-0071
15. McNamara S. Does it take too long to become a doctor? *Med J Aust*. 2012;196(8):528-530. https://doi.org/10.5694/mja12.10619
16. Cleland J, Johnston P, Watson V, Krucien N, Skåtun D. What do UK doctors in training value in a post? A discrete choice experiment. *Med Educ*. 2016;50(2):189-202. https://doi.org/10.1111/medu.12896
17. Spooner S, Pearson E, Gibson J, Checkland K. How do workplaces, working practices and colleagues affect UK doctors' career decisions? A qualitative study of junior doctors' career decision making in the UK. *BMJ Open*. 2017;7(10):e018462. https://doi.org/10.1136/bmjopen-2017-018462
18. Douglas PS, Rzeszut AK, Bairey Merz CN, et al. Career preferences and perceptions of cardiology among US internal medicine trainees: factors influencing cardiology career choice. *JAMA Cardiol*. 2018;3(8):682-691. https://doi.org/10.1001/jamacardio.2018.1279
19. Clayton G. *Perceived Barriers and Incentives to Rural Practice: A Comparison of Female Medical Students to Male Medical Students*. Northcentral University; 2019.
20. Clemen NM, Blacker BC, Floen MJ, Schweinle WE, Huber JN. Work-life balance in women physicians in South Dakota: results of a state-wide assessment survey. *S D Med*. 2018;71(12):550-558.
21. Harris MG, Gavel PH, Young JR. Factors influencing the choice of specialty of Australian medical graduates. *Med J Aust*. 2005;183(6):295-300. https://doi.org/10.5694/j.1326-5377.2005.tb07058.x

22. Tolhurst HM, Stewart SM. Balancing work, family and other lifestyle aspects: a qualitative study of Australian medical students' attitudes. *Med J Aust*. 2004;181(7):361-364. https://doi.org/10.5694/j.1326-5377.2004.tb06326.x
23. Mobilos S, Chan M, Brown JB. Women in medicine: the challenge of finding balance. *Can Fam Physician*. 2008;54(9):1285-1286.e5.
24. Mahady SE. Adding flexibility to physician training. *Med J Aust*. 2011;194(9):460-462. https://doi.org/10.5694/j.1326-5377.2011.tb03061.x
25. Petchey R, Williams J, Baker M. 'Ending up a GP': a qualitative study of junior doctors' perceptions of general practice as a career. *Fam Pract*. 1997;14(3):194-198. https://doi.org/10.1093/fampra/14.3.194
26. McGrail MR, Russell DJ, O'Sullivan BG. Family effects on the rurality of GP's work location: a longitudinal panel study. *Hum Resour Health*. 2017;15(1):75-75. https://doi.org/10.1186/s12960-017-0250-z
27. Hedden L, Barer ML, Cardiff K, McGrail KM, Law MR, Bourgeault IL. The implications of the feminization of the primary care physician workforce on service supply: a systematic review. *Hum Resour Health*. 2014;12(1):32. https://doi.org/10.1186/1478-4491-12-32
28. Mohamed NA, Abdulhadi NN, Al-Maniri AA, Al-Lawati NR, Al-Qasmi AM. The trend of feminization of doctors' workforce in Oman: is it a phenomenon that could rouse the health system? *Hum Resour Health*. 2018;16(1):19. https://doi.org/10.1186/s12960-018-0283-y
29. Pas B, Peters P, Doorewaard H, Eisinga R, Lagro-Janssen T. Feminisation of the medical profession: a strategic HRM dilemma? The effects of family-friendly HR practices on female doctors' contracted working hours. *Hum Resour Manag J*. 2011;21(3):285-302. https://doi.org/10.1111/j.1748-8583.2010.00161.x
30. O'Sullivan B, McGrail M, Gurney T, Martin P. Barriers to getting into postgraduate specialty training for junior Australian doctors: an interview-based study. *PLoS One*. 2021;16(10):e0258584. https://doi.org/10.1371/journal.pone.0258584
31. Strauss A. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Sage; 1998.
32. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol*. 2006;3(2):77-101. https://doi.org/10.1191/1478088706qp063oa
33. Braun V, Clark V, Hayfield N, Terry G. Thematic analysis. In: Liamputtong P, ed. *Handbook of research methods in health social sciences*. Springer Nature; 2019:843-860.
34. Teherani A, Martimianakis T, Stenfors-Hayes T, Wadhwa A, Varpio L. Choosing a qualitative research approach. *J Grad Med Educ*. 2015;7(4):669-670. https://doi.org/10.4300/jgme-d-15-00414.1
35. Australian Government Department of Health. The modified Monash model Canberra: DoH. Accessed August 13, 2020. https://www.health.gov.au/health-workforce/health-workforce-classifications/modified-monash-model
36. Madara J, Miyamoto S, Farley JE, et al. Clinicians and professional societies COVID-19 impact assessment: lessons learned and compelling needs. *NAM Perspect*. 2021. https://doi.org/10.31478/202105b
37. Dewey C, Hingle S, Goelz E, Linzer M. Supporting clinicians during the COVID-19 pandemic. *Ann Intern Med*. 2020;172(11):752-753. https://doi.org/10.7326/m20-1033
38. Balasubramanian A, Paleri V, Bennett R, Paleri V. Impact of COVID-19 on the mental health of surgeons and coping strategies. *Head Neck*. 2020;42(7):1638-1644. https://doi.org/10.1002/hed.26291
39. Filippi MK, Callen E, Wade A, et al. COVID-19's financial impact on primary care clinicians and practices. *J Am Board Fam Med*. 2021;34(3):489-497. https://doi.org/10.3122/jabfm.2021.03.200502
40. Sethi BA, Sethi A, Ali S, Aamir HS. Impact of coronavirus disease (COVID-19) pandemic on health professionals. *Pak J Med Sci*. 2020;36(Covid19-s4):S6-S11. https://doi.org/10.12669/pjms.36.COVID19-S4.2779
41. Ferrara P, Albano L. COVID-19 and healthcare systems: what should we do next? *Publ Health*. 2020;185:1-2. https://doi.org/10.1016/j.puhe.2020.05.014
42. Blecher GE, Blashki GA, Judkins S. Crisis as opportunity: how COVID-19 can reshape the Australian health system. *Med J Aust*. 2020;213(5):196-198.e1. https://doi.org/10.5694/mja2.50730
43. Quigley AL, Stone H, Nguyen PY, Chughtai AA, MacIntyre CR. Estimating the burden of COVID-19 on the Australian healthcare workers and health system during the first six months of the pandemic. *Int J Nurs Stud*. 2021;114:103811. https://doi.org/10.1016/j.ijnurstu.2020.103811
44. McGrath BP, Graham IS, Crotty BJ, Jolly BC. Lack of integration of medical education in Australia: the need for change. *Med J Aust*. 2006;184(7):346-348. https://doi.org/10.5694/j.1326-5377.2006.tb00269.x
45. Francis KL, Mills JE. Sustaining and growing the rural nursing and midwifery workforce: understanding the issues and isolating directions for the future. *Collegian*. 2011;18(2):55-60. https://doi.org/10.1016/j.colegn.2010.08.003
46. Hoffman R, Mullan J, Bonney AD. Motherhood and medicine: systematic review of the experiences of mothers who are doctors. *Med J Aust*. 2021;214(11):533-533.e1. https://doi.org/10.5694/mja2.51093
47. The British Medical Association. Consultant Part-Time and Flexible Working. 2021. Accessed August 26, 2021. https://www.bma.org.uk/pay-and-contracts/contracts/consultant-contract/consultant-part-time-and-flexible-working
48. Simpkin AL, Walesby KE. Training tomorrow's doctors. *Future Hosp J*. 2017;4(1):56-60. https://doi.org/10.7861/futurehosp.4-1-56

49. Hollis AC, Streeter J, Van Hamel C, Milburn L, Alberti H. The new cultural norm: reasons why UK foundation doctors are choosing not to go straight into speciality training. *BMC Med Educ*. 2020;20(1):282. https://doi.org/10.1186/s12909-020-02157-7
50. Nixon G, Blattner K, Williamson M, McHugh P, Reid J. Training Generalist Doctors for Rural Practice in New Zealand; 2017.
51. Bielby WT, Bielby DD. I will follow him: family ties, gender-role beliefs, and reluctance to relocate for a better job. *Am J Sociol*. 1992;97(5):1241-1267. https://doi.org/10.1086/229901
52. McKinnish T. Spousal mobility and earnings. *Demography*. 2008;45(4):829-849. https://doi.org/10.1353/dem.0.0028
53. Stamm M, Buddeberg-Fischer B. How do physicians and their partners coordinate their careers and private lives? *Swiss Med Wkly*. 2011;141:w13179. https://doi.org/10.4414/smw.2011.13179
54. Buddeberg-Fischer B, Stamm M, Buddeberg C, et al. The impact of gender and parenthood on physicians' careers—professional and personal situation seven years after graduation. *BMC Health Serv Res*. 2010;10(1):40. https://doi.org/10.1186/1472-6963-10-40
55. Heiliger PJ, Hingstman L. Career preferences and the work-family balance in medicine: gender differences among medical specialists. *Soc Sci Med*. 2000;50(9):1235-1246. https://doi.org/10.1016/s0277-9536(99)00363-9
56. O'Sullivan BG, McGrail MR. Effective dimensions of rural undergraduate training and the value of training policies for encouraging rural work. *Med Educ*. 2020;54(4):364-374. https://doi.org/10.1111/medu.14069

AUTHOR BIOGRAPHIES

Dr Tiana Gurney is the Research Manager at the University of Queensland Rural Clinical School. She has research interests in strategic planning in regional, rural and remote healthcare, and health workforce outcomes.

Dr Belinda O'Sullivan is an expert in rural health systems, workforce capacity building, access, quality and distribution. She is the Executive Leader rural primary care—strategic investments, research, policy and planning at the Murray Primary Health Network.

Associate Professor Matthew McGrail is internationally recognised for his rural medical workforce research, particularly in rural medical workforce supply and distribution and the evaluation of health services policies. He is the Head of Regional Training Hubs Research at the University of Queensland Rural Clinical School.

Dr Priya Martin is a health services researcher working to improve the safety and quality of healthcare, enhance collaborative work, and bridge the evidence-practice gap. Her professional excellence, research and translational efforts have been recognised through 19 prestigious awards and prizes to date. She is a Senior Research Fellow at the University of Queensland Rural Clinical School.

How to cite this article: Gurney T, O'Sullivan B, McGrail M, Martin P. Understanding the non-professional needs of early career doctors: an interview-based study. *Int J Health Plann Mgmt*. 2023;38(2):330-346. https://doi.org/10.1002/hpm.3587