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RESEARCH ARTICLE OPEN ACCESS

“Jumping on the Blood Pressure Bandwagon”: Nurse, GP, and Patient Perspectives of a General Practice Nurse-Led Hypertension Management Intervention

Catherine Stephen¹  | Nick Zwar²  | Marijka Batterham³  | Elizabeth Halcomb¹ 

¹School of Nursing, Faculty of Science, Medicine & Health, University of Wollongong, Wollongong, New South Wales, Australia | ²Faculty of Health Sciences & Medicine, Bond University, Gold Coast, Queensland, Australia | ³Statistical Consulting Centre, Faculty of Engineering and Information Sciences, University of Wollongong, Wollongong, New South Wales, Australia

Correspondence: Catherine Stephen (cstephen@uow.edu.au)

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ABSTRACT

To explore the perceptions and experiences of general practice nurses, general practitioners, and patients who participated in a nurse-led intervention to improve blood pressure control. Given the impact of hypertension on rates of premature death and disability, it is important that interventions be evaluated to reduce blood pressure. A key component of such evaluation is understanding the experiences of participants and clinicians. Understanding these experiences can provide insight into acceptability and feasibility that informs future research and implementation. Qualitative descriptive study within a mixed methods project. Semi-structured interviews were conducted post-intervention with six patients, five nurses, and three general practitioners. Interviews were audio-recorded, transcribed, and analyzed using thematic analysis. The COREQ checklist guided reporting. Three themes around the need for change, navigating change, and sustaining change were revealed. In highlighting the need for change, participants recognized that it was time to actively work toward improved blood pressure control. In navigating change, general practice nurses were perceived as ideally placed to communicate risks around uncontrolled blood pressure and support lifestyle change. The final theme, sustaining change revealed the feasibility of the intervention in practice, however, clinician participants identified that appropriate funding is required to ensure sustainability. Nurse-led intervention to improve blood pressure control in general practice is feasible in practice and acceptable to patients. This highlights an opportunity for nurses to play a more proactive role in hypertension management within general practice. To ensure sustainability, however, issues such as funding, teamwork, and collaboration need to be addressed.

Trial Registration: Australian and New Zealand Clinical Trials Registry: ACTRN12618000169246

1 | Introduction

Hypertension is the leading cause of premature death and chronic disability globally (Schutte et al. 2022), reducing productive life years (Hird et al. 2019) and exacerbating health costs (Gavino, Isaac, and McLachlan 2018; Schutte et al. 2022; Zwar et al. 2017). Globally, over 1 billion people have hypertension (Zhou et al. 2021) and this is predicted to further increase to 1.6 billion by 2025

(Mills, Stefanescu, and He 2020). In Australia, one in three adults have hypertension, and only 30% of these people have their blood pressure under control (Schutte et al. 2022). This means that over 1.5 million Australians are at high risk of heart attack, stroke, kidney disease, or dementia because of inadequate blood pressure control (Schutte et al. 2022). Improving blood pressure control can not only reduce death and disability, but it will also reduce health costs (Roseleur et al. 2023). Given the failure to shift rates of

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Summary

- There is recognition that current models of care do not effectively support blood pressure management.
- GPN's are well placed to communicate risk and provide support for lifestyle change for people with hypertension.
- Insight provided by this study could inform future interventions to improve blood pressure control.

blood pressure control in the last decade, innovative solutions are needed to address blood pressure control more effectively (Schutte et al. 2022; Zhou et al. 2021).

Hypertension can be managed through a combination of pharmacological therapy and lifestyle modification (National Heart Foundation of Australia 2016; Zhou et al. 2021). Yet blood pressure control remains elusive for many (Mills, Stefanescu, and He 2020). While global blood pressure screening campaigns have raised awareness of hypertension (Carnagarin et al. 2021), a proactive, coordinated approach to treatment and ongoing management is needed to reduce risk and optimize health outcomes (Stephen et al. 2019; Zwar et al. 2017). Improving blood pressure control and modifying lifestyle risks around smoking, nutrition, physical activity, and alcohol is complex and will likely require a coordinated response within an accessible location. A systematic review of nurse-led interventions to improve blood pressure control in general practice has demonstrated promising health outcomes (Stephen et al. 2024). However, less is known about patients' experiences in such trials and the clinicians involved in delivering them. These data could inform future research and practice change to ensure that interventions meet consumer and clinician needs.

2 | Background

General practice represents the first point of engagement an individual has with the health system and is the referral point to diagnostic and allied health services (Australian Medical Association. 2021). Most patients attend the same practice for at least periods of time, so a degree of care continuity and longitudinal health care is provided. General practice services various health needs, including diagnostic activities, acute and chronic condition management, and preventive care (Australian Medical Association. 2021). The term general practice is synonymous with primary care and family practice (Halcomb et al. 2021). The range of screening, preventive, and chronic condition management services it provides makes it an ideal location to support blood pressure control (Britt et al. 2015). Australian general practice increasingly involves a multidisciplinary team-based approach that utilizes each member's knowledge and skills to the top of their scope of practice (Department of Health 2022). Most Australian general practices now employ baccalaureate-prepared registered nurses (GPNs) (Halcomb et al. 2020). While these nurses have knowledge and skills in health promotion, preventive care, and chronic condition management, they are often reported to be underutilized (Halcomb and Ashley 2019). There is an opportunity to leverage this nursing workforce to enhance

general practice service delivery and proactively address preventive care needs (Halcomb and Ashley 2019; Stephen, McInnes, and Halcomb 2018).

GPN-led interventions deliver evidence-based, person-centered care that has been found feasible and acceptable to patients for various chronic conditions (James et al. 2019; Stephen, McInnes, and Halcomb 2018). GPNs are in a prime position as they have the capacity to build ongoing therapeutic relationships with patients over time, which could help develop health literacy and provide structured support for lifestyle change (Morris et al. 2022). While the components of GPN-led interventions for hypertension vary, they typically involve screening and assessment, care planning and monitoring, and health education activities to promote self-management (Kappes et al. 2023; Stephen et al. 2022). The GPN works closely with the general practitioner (GP) to provide person-centered care that addresses physical, social, and psychological needs. Increasingly, general practice policy is recognizing the need for such a multidisciplinary team approach to care to address growing community health needs (Department of Health 2022).

There is increasing evidence to suggest positive health impacts of GPN-led interventions (Bulto et al. 2023; Lukewich et al. 2022; Stephen et al. 2022). Beyond understanding the health-related impacts, it is important to understand the experiences of those delivering and receiving the interventions to guide future translation and implementation. Previous qualitative studies have demonstrated the feasibility and acceptability of GPN-led interventions, with patients reporting confidence and satisfaction with this model of care (Crowe et al. 2019; Stephen, McInnes, and Halcomb 2018). Building on this knowledge, greater insight into participant experiences within GPN-led interventions may reveal key elements that work and, more importantly, do not work well. Therefore, this paper examines the perceptions and experiences of GPNs, GPs, and patients who participated in a nurse-led intervention to improve blood pressure control.

3 | Methods

3.1 | Design

This qualitative descriptive study was the second phase of a larger sequential explanatory mixed methods project. The first stage was a pilot randomized control trial (the ImPress Study) of a GPN-led intervention to reduce blood pressure in people living with hypertension and high CVD risk conducted across 10 general practices (Authors own). Within a proactive, nurse-led model of care, patients in the intervention were offered five flexible consultations with GPNs to improve blood pressure control and support lifestyle risk modification. GPNs worked in partnership with participants to assess lifestyle risk, provide individualized lifestyle advice, set goals, and develop action plans. GPs provided optimization of pharmacotherapy in line with current guidelines. The quantitative outcomes of the trial are reported separately (Authors own).

In this second phase, a qualitative descriptive approach was used to understand the experiences of clinicians delivering the intervention and the patients who received it. The qualitative descriptive approach allowed researchers to be "data-near"

remaining close to the participants' voices without excessive layers of interpretation (Sandelowski 2010). The Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist was used to guide the reporting of findings.

3.2 | Participant Recruitment

During trial recruitment, participants indicated on their consent form if they were willing to be contacted for an interview on intervention completion. Those who confirmed their willingness to be interviewed were contacted by the doctoral candidate (##) to provide information about the interviews, provide consent, and schedule a suitable interview time. The research team purposely sought to recruit a mix of GP, GPNs, and patient participants from the trial to gain a convenience sample to provide perspectives from the clinicians who delivered the intervention and the patients who received it. Participants were recruited until the doctoral candidate (##) reported that they were not revealing any new ideas in the interviews. The number of participants recruited from each group broadly reflected the composition of the trial sample, with fewer GPs ($n=3$) and more patients ($n=6$) and GPNs ($n=5$) (Authors own).

3.3 | Data Collection

An interview schedule was developed based on existing literature and the research team's expertise in qualitative research, general practice research, intervention development, and hypertension management. The open-ended questions were adapted for each participant group. For example, while the patient participants were asked, "Tell me your experiences of being involved in the ImPress study?" GPs and GPNs were asked questions like, "What role did you play in the ImPress intervention?" and "How did you find delivering the study?" Questions related to perceptions of feasibility, acceptability, and sustainability of the intervention. Prompts such as "what worked?" "what didn't work?" and "why was that?" were used to elicit richer responses. Given the relatively small number of trial participants, these questions were piloted among the research team and with key contacts with expertise in primary care prior to the commencement of data collection. This resulted in minor changes to wording and order to improve flow.

All interviews were conducted by the doctoral candidate (C.S), a female registered nurse experienced in general practice from December 2019 to July 2020. Interviews lasted a mean of 12 min. Depending on participant preference and COVID-19 restrictions, interviews were conducted face-to-face at the practice ($n=5$) or via telephone ($n=9$). Interviews were audio-recorded and transcribed verbatim by a professional transcription service before transcripts were uploaded into NVivo Version 12 (Lumivero 2018). In addition, field notes were maintained by the doctoral candidate to aid reflection.

3.4 | Data Analysis

An inductive approach of reflexive thematic analysis guided data analysis (Braun and Clarke 2022). Analysis began with

data familiarization, where researchers read and reread transcripts following each interview to compare with the audio recordings. Due to the delays in the trial related to COVID-19 and natural disaster events (Authors own) data collection was somewhat protracted. Therefore, initial coding of each transcript was undertaken as they were transcribed. As more data were collected, themes were generated and reviewed by all researchers. Once final themes were defined and named, researchers circled back to the data to ensure that each theme portrayed an authentic story. The final reporting stage brought the narrative together in context with contemporary literature.

3.5 | Rigor

Study rigor was established using the criteria reported by Lincoln and Guba (1985) All researchers participated in the process of checking, reviewing, and refining themes against the transcripts to ensure results were a credible account of the data. Including participant quotes to verify themes establishes credibility, while providing rich description of the participants added the context required for transferability. An audit trail provides evidence of dependability.

3.6 | Ethical Considerations

This study was approved by the University of Wollongong Human Research Ethics Committee (Approval no. 2017/412). Participants provided informed consent and were able to cease participation at any time.

4 | Results

Fourteen people, comprising three GPs, five GPNs, and six patients, participated in the interviews. All GPN participants were female and GPNs who had at least 5 years experience in general practice nursing. All GP participants were male and had been working as practice principals for over 8 years. Of the six patient participants, four (66.6%) were male and two (33.4%) were female. All participants had a diagnosis of hypertension and high blood pressure on entry to the main trial. This sample size provided saturation of data, as evidenced by no new ideas emerging from subsequent interviews, and so sufficiently describes the phenomenon of interest.

Most participants viewed the intervention positively; however, they also recognized that it represented a change to current usual care. Three themes, "the need for change," "navigating change," and "sustaining change," revealed key insights into the participants' perceptions and experiences of the intervention.

4.1 | The Need for Change

Participants recognized that it was time to "jump on the blood pressure bandwagon" (GPN 2) and actively work to address uncontrolled hypertension. While the clinician participants described that blood pressure was routinely monitored, they

agreed that the current approach lacked coordination. When asked about blood pressure management practices pre-intervention, GP 2 stated, “I suppose it [blood pressure] is more part of health assessments on older people or even some of our disabled people.” Similarly, GPN 3 described the ad hoc way in which the GP they worked with recorded routine blood pressures:

“He [GP] often does blood pressures in the rooms and doesn’t always put it down <laughs> because he’d have so many files open at the time and he goes back and does notes, so I think he just goes “Yeah, that blood pressure is okay”... whereas, I’m a bit more vigilant with recording it.”

While some attempts had been made to improve blood pressure by patients individually and by GP/GPN participants, this was not well coordinated within the practice. There was a sense that the current ad hoc strategies were ineffective and that more could be done to improve care quality and consistency.

“I know a doctor gives advice, probably lifestyle advice, well, I’m presuming most of them do, but it doesn’t seem to be enough” (GPN 2).

“A lot of people know, they have information about lifestyle, and what’s good and what’s bad, but some, I think, just are unaware that some of the things that they’re doing are a problem” (GPN 1).

“Being a diabetic I’ve been aware of all those strategies for years I was avoiding salt I was watching my diet as normal. Apart from that, and taking the medications regularly, probably nothing really out of the ordinary I don’t think” (Patient 1).

Patients also described a lack of structure in their approach to self-management and limited guidance on how to effectively reduce their blood pressure. One patient described how, before the ImPress intervention, they were “just sort of...how can I say? battling along with it” (Patient 2). Additionally, patient participants’ knowledge about blood pressure varied. Some believed hypertension was inevitable and a normal part of life, while others saw it as a hereditary condition.

“I knew I had high blood pressure, I’ve had it for as long as I can remember. For me [high] blood pressure runs in my family, my parents are both dead, they died in their 50s” (Patient 3).

“I’m not medically up to date with all that sort of stuff. Like most people, we’re told that we have high blood pressure. Even my grandparents always suffered from high blood pressure as well. So, whether it’s hereditary or not I don’t really know” (Patient 4).

However, it was evident that patients were mostly motivated to better understand their blood pressure and eager to learn strategies for improving self-management.

“I wanted to find out why the blood pressure was up or what I was doing to make the blood pressure go up” (Patient 5).

“My blood pressure was fluctuating all the time, and I could not work out what was causing it. I thought this intervention might be a good way to find out why, that way I could keep an eye on blood pressure and keep it under control” (Patient 2).

4.2 | Navigating Change

GPNs were described by patient participants as being approachable and ideally placed to facilitate conversations around blood pressure management and lifestyle change;

“I think it’s more important that you see the nurse to talk about the silly bits...but the doctor doesn’t want to know if you’re eating cake and whether you’ve given it up or not [laughs]. I suppose he does, but you don’t feel like you should bother him with all that silliness” (Patient 6).

“Doctors don’t have the time to sit and listen to like, little things to them but obviously to you, it could change a lot, like from what I learned from the nurses” (Patient 2).

GPNs were also described as positive enablers of lifestyle change. Patient participants described how the opportunity to talk, set goals, and monitor progress was helpful. Patient 1 described how the nurse consultations “probably helped keep me on the straight and narrow.” This idea of accountability was echoed by Patient 4, whose motivation to maintain focus on lifestyle goals was generated through regular interaction with the nurse.

“I was coming back to see them again [laughs]. Because I knew that I had another appointment, otherwise I don’t think you do it. You think, oh gosh, I can’t go back there and not have lost at least half a kilo or a kilo or something, I have to do something. So, you tend to have that in your mind that someone is sort of checking on you so you do it, whereas if you haven’t got that you can bluff yourself” (Patient 4).

Despite the value of the GPNs’ role, all participant groups identified that “it’s up to the patient to want to be involved in it, that’s the thing” (Patient 2). Patient 6 observed, “some people don’t want to do things like this...you have to be one that wants to do it.” Clinician participants agreed;

“You need patients that are really wanting to change it, and maybe, in my opinion, can’t see how, can’t see that road though, how to change things” (GPN 1).

“some [patients] had good results and some didn’t, and the people that didn’t have the good results were the patients who also had other complications with their health and they didn’t—you know, as much as they wanted to do changes, they didn’t really do changes” (GPN 5).

Patient participants perceived that while they saw GPNs more frequently, the GPN and GP were working together to manage their blood pressure. They valued this team-based approach, recognizing that both professionals were on the same page and working toward set health goals.

“When I went to visit him [GP] for a couple of different things, and he’d taken my blood pressure, he would say “That’s good!” you must have been listening to what the nurses have been telling you” (Patient 2).

“When I went back to see the doctor, he’d say how did it go? And did everything go all right? So they’re the people that know what they’re trained to do and they worked good as a team” (Patient 6).

“So, to talk to the nurse first is good. Yeah, it makes you more relaxed too because when you go into the doctor he’s already got the results—he knows your blood pressure, he knows whether you’ve lost weight and he can just say—well that’s good you’ve lost weight or your blood pressure is fine this week” (Patient 3).

Similarly, clinician participants agreed that GPNs play a key role in general practice. Interestingly, GPs and GPNs reported a more collaborative approach to routine practice, with GPNs playing a more central role in blood pressure management as a result of the intervention.

“Nurses play a big role in all the stuff. They’re very good and active—and they are, they are part of the team” (GP 1).

“The thing that worked really well was that it was nurse-driven...obviously the nurses were really running our end of the study” (GP 3).

The GPs here are pretty good. We just send them a note if there are problems with their blood pressure or any other things that are going on in their lives...so we just drop a helpful hint and if the patient’s out of the room, I would even ring the GP and say, “Talk to them about this because this is a problem” (GPN 1).

“The GP saw them even if it was for a bit of encouragement and to validate that they were on the right track and doing the right job, so she was really happy to be part of it from her end” (GPN 4).

Contrary to this, one GPN described the challenges they faced when navigating change to their usual practice:

“We had to try and beg, borrow, steal time to get them to do the database searches for us. Both the GP and the practice manager were not supportive in that. They didn’t give us any more support than they normally do. No. Short answer. It would be good” (GPN 1).

4.3 | Sustaining Change

Clinician participants positively described the feasibility of the intervention. “It worked extremely well because it was nurse-driven and was quite simple to implement in the practice setting” (GP 1). Some described how it made a lasting impression on their approach not only to blood pressure management but also to the way that they approached patients.

“ImPress has affected the way I approach everybody; I’ve moved into talking about lifestyle with other patients now. It needs to be rolled out in every General Practice from tomorrow!” (GPN 3).

One GP even described how the intervention prompted him to address his inertia about medication titration.

“It was actually very straightforward—I’ve changed quite a few of the patients during the course of the study, we put them on different medications” (GP 3).

Similarly, patient participants reflected on their increased understanding of blood pressure control and considered how they could sustain lifestyle change strategies into the future.

“It make me very aware of the things that I should have known before which I didn’t. I sort of stick to it even when I’m having dinner with the salt shaker now...I start to think about it instead of where before—just piling it all over my food” (Patient 2).

“Sometimes in the past, I’d be thinking, have I taken them (the tablets), but now I’ve got that under control. I feel really, really good about my BP. Now I never forget to take my tablets. I have them sitting there and I take them” (Patient 6).

“I found it quite good. I did, because it kept—actually, I lost four kilos, so that’s pretty good, and then I’ve kept my blood pressure down and talking to the nurse

about your goals or whatever you're planning to have, it's good" (Patient 4).

All participant groups believed the model was feasible, suggesting that GPNs were ideally placed to play a greater role in blood pressure management in the future.

"Nowadays you go to these big doctors' surgeries, and the waiting times are horrendous, but with the nurse, that's not the case, so if the nurse can help the doctor, I think that would be a very important thing" (Patient 3).

"There are so many patients out there that have got their blood pressure out of control, and they can't do anything about it, but if they had, maybe, nurses to help encourage them on a bit more regular basis, that might motivate them. A lot of them need just a little bit of help" (GPN 3).

"We need to try to encourage that culture of people. Nurses working at the extent of what they are trained to do" (GP 1).

Barriers around time and funding were identified during study implementation. GPN participants revealed how their workplace underestimated how much time lifestyle risk communication requires, musing that protected time for preventative health activity was a rare luxury:

"The time pressure, particularly our surgery, were pretty tight. One thing that I really struggled with was getting the time, and although my boss or GP was helpful and on board with the study, in practice, it didn't necessarily work out that way" (GPN 4).

"It was nice to have the luxury of time, which we don't often get in general practice, to sit down and have a good chat with someone about where they're at currently and what their goals are and that sort of stuff that we try to address, but it's usually under tight time constraints" (GPN 1).

Both GP and GPN participants noted that the intervention's sustainability would require more comprehensive reforms to current general practice funding. There was a perception that current funding models precluded proactive GPN activity in preventive care.

"I think the nurses can, I mean there's no doubt about it—this is a financially driven model in Aus it really is, because if nurses were able to get rebates and things like that it would actually encourage a lot more of this. At the moment only the doctor gets the rebates so if you want to get paid for doing the job, the doctor has to get involved in annoying the care" (GP 1).

"If we had a financial model in Australia to support this, it could work" (GP 2).

"I think the barrier in General Practice is that there's not really any allowance from MBS or billing side of things for health promotion and health prevention. It's all sort of patching things up after the fact" (GPN 5).

5 | Discussion

This study demonstrated that a GPN-led intervention to improve blood pressure control was acceptable to both clinician and patient participants. Strategies to better support blood pressure control are of international significance, given the risks and costs related to poor blood pressure control for individuals, families, and their community (Mills, Stefanescu, and He 2020; Schutte et al. 2022). This study highlights that GPNs can play a more proactive role in supporting better blood pressure management. By working to the full extent of their practice scope, GPNs can increase the range of services available and provide structure and coordination to general practice-based preventative care. This has implications locally and internationally to improve the quality of care and health outcomes.

Patient participants in this study demonstrated some knowledge of hypertension. However, key uncertainties around the causes of hypertension and strategies to manage it were evident. This is characteristic of global trends where people may be aware they have hypertension yet still struggle to keep blood pressure under control (Mills, Stefanescu, and He 2020). Given that high blood pressure is often symptomless, it is not uncommon for people to underestimate their risk, especially when they perceive their overall health as good (Grauman et al. 2021; Vörös et al. 2018). Nurse-led interventions containing educational components to enhance health literacy have been found effective in hypertension management (Bulto et al. 2023; Stephen et al. 2022). In our study, patients valued the structured approach to hypertension management and the way that GPNs communicated risk and provided ongoing support for behavior change. The ongoing interaction between nurses and patients was acknowledged by GPNs and patients as a key component of the intervention. This finding is consistent with literature which highlights that GPN interventions that go beyond ad hoc education to involve lifestyle risk communication, goal setting, and consistent follow-up assist patients in achieving lifestyle modification (James et al. 2019; Stephen, McInnes, and Halcomb 2018). It also supports the concept of continuity of care, which has been reported to be central to general practice outcomes (Fox et al. 2024).

Our study demonstrated that GPNs can be more proactive, addressing key gaps in the coordination and provision of team-based hypertension management in general practice. This echoes wider calls for team-based blood pressure control (Mills et al. 2016; Schutte et al. 2022) and indeed, greater emphasis on team-based general practice models (Department of Health 2022). However, as highlighted in this study, the uptake

of team-based care does not just happen but rather requires planning and strategic investment. The challenges of effective teamwork in general practice have been described both within Australia and internationally (Grant et al. 2024; McInnes et al. 2017b). Adoption of team-based care likely requires collective effort on a macro level involving primary health care reform and financial incentives to facilitate team members to undertake roles that allow them to practice to the full extent of their practice scope (McInnes et al. 2017a). At a local level, individual practices and clinicians need to have an open dialogue about the nature of teamwork and interprofessional collaboration within the practice. Such conversations should seek to promote an understanding of the potential roles of each team member within their practice scope and strategies to share patient care across the team (McInnes et al. 2015). In this study, encouraging such dialogue led to a more collaborative approach to patient care by GPs and GPNs which was positively perceived by both patients and clinicians.

While this study demonstrated that the intervention was feasible and acceptable, the current Australian fee-for-service funding model was seen as a barrier to proactive GPN activity (Department of Health 2022; McInnes et al. 2017a). Traditionally, this funding mechanism has incentivized volume-based care over team-based approaches with little remuneration for nurse services (Department of Health 2022). Moving toward proactive nursing roles within team-based care will require financial investment in nurse-led models and a concerted effort to build a sustainable nursing workforce. Recent literature has revealed that general practice nurses feel underutilized (Halcomb and Ashley 2019), and have been significantly impacted by the COVID-19 pandemic (Ashley et al. 2022; Halcomb et al. 2022). Not being able to work to the full extent of their practice scope and the psychological sequelae of the COVID-19 pandemic has negatively impacted both job satisfaction and intention to stay in the workforce (Halcomb et al. 2021, 2022). Additionally, since many undergraduate nurses don't perceive general practice nursing as a priority career path (Calma et al. 2021), limited new graduate nurses entering this workforce could jeopardize the future of multidisciplinary team-based models of care. Therefore, strategies are urgently needed to adequately fund GPNs to work to the full extent of their practice scope to facilitate effective service provision and support workforce recruitment and retention.

The evidence supporting the feasibility, acceptability, and impact of GPN-led interventions is growing. This study showed that GPNs were highly valued by patients and GPs as an important addition to the general practice team. To date, GPN-led interventions have been associated with high levels of patient satisfaction and resulted in improved health outcomes in a variety of chronic conditions (Crowe et al. 2019; Davis et al. 2021; Stephen et al. 2022). However, gaps remain in understanding the successful elements of these models of care (Stephen, McInnes, and Halcomb 2018). While our study provided insight into participants' experiences, future research focused on understanding the professional, organizational, and systemic factors that impact nurses' capacity to address lifestyle risks is needed (James et al. 2019; Morris et al. 2022). It is evident that nurse-led interventions for hypertension

are an evolving space (Bulto et al. 2023; Stephen et al. 2022; Stephen, McInnes, and Halcomb 2018). As such, further research is required to understand participant engagement with the model, identify its effective components, and monitor long-term impact.

6 | Limitations

This study provides key insights into intervention delivery, acceptability, feasibility, and sustainability. However, some limitations must be considered. Participants were drawn from a mix of rural, regional, and metropolitan practices across New South Wales (NSW), Australia and may have experienced the intervention differently depending on their location. Additionally, those who participated in the interviews may have had stronger feelings toward the intervention than those who did not.

Data collection was severely impacted by catastrophic bushfires that struck NSW between July 2019 and March 2020, causing massive destruction to infrastructure, homes, and communities in the local area (Halcomb et al. 2023). The subsequent COVID-19 pandemic further impacted participant recruitment and retention and study progression due to changes in health service delivery and isolation mandates (Authors own). Despite this, participants gave their time generously, providing rich accounts of their experiences which is a significant study strength.

7 | Conclusion

This study revealed the GPN-led intervention to improve blood pressure control in general practice is feasible in practice and acceptable to patients. GPN, GP, and patient experiences provided key insights into the delivery, feasibility, and acceptability of this intervention. It was evident that the intervention provided a structure for preventative care, raised awareness of the benefits of blood pressure control, and supported people to reduce their lifestyle risk factors. While this study highlights an opportunity for nurses to play a more proactive role in hypertension management within general practice, to ensure sustainability, issues such as funding, teamwork, and collaboration need to be addressed.

8 | Relevance to Clinical Practice

This study provides insights to understand the experiences of clinicians delivering the intervention and those patients receiving it. There is a need to evaluate and understand the impact of interventions to improve blood pressure control. This study has demonstrated the potential for general practice, using a nurse-led approach, to enhance the coordination of hypertension management to improve awareness of hypertension, the need for intervention, and enhance hypertension control. This study also provides valuable insight into the potential scope of nursing activity within Australian general practice that could be used to inform future directions for team-based models of care involving GPNs. Improving the delivery of preventive care in general

practice can improve health outcomes, reduce disability, and limit health costs.

Author Contributions

Catherine Stephen: conceptualization, investigation, writing – original draft, writing – review and editing, project administration, methodology, validation, visualization, data curation, formal analysis. **Nick Zwar:** conceptualization, writing – review and editing, validation, supervision, methodology. **Marijka Batterham:** conceptualization, supervision, writing – review and editing, validation. **Elizabeth Halcomb:** conceptualization, supervision, project administration, visualization, writing – original draft, writing – review and editing, resources, validation, methodology, formal analysis.

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Conflicts of Interest

The authors declare 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.

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