

Opioids and the challenges of managing chronic non-cancer pain in rural Australia: a qualitative study

Jessica A Thomas¹ , Jill Benson¹, Philip Davidson², Paul R Ward³

The known: Opioids are more frequently prescribed for people with chronic non-cancer pain in regional and rural Australia than in urban areas. Prescription monitoring and education interventions for reducing opioid prescribing have been less effective in rural than in urban areas.

The new: General practitioners in country areas are familiar with chronic pain management guidelines, but systemic problems (time limitations, Medicare priorities) and limited access to alternative pain management options nevertheless influence favour opioid prescribing.

The implications: Targeted strategies are needed to enhance patient care, reduce inappropriate opioid prescribing, prevent avoidable deaths, and alleviate chronic pain in rural Australia.

The widespread use of opioids for managing chronic non-cancer pain in Australia is associated with increased mortality risk, suboptimal pain management, and drug dependence.¹ Opioid prescribing rates are substantially higher in rural and regional areas than in capital cities,² reflecting the complex interplay of limited pain management alternatives outside metropolitan areas, the greater burden of chronic disease, and socio-economic differences.³

Rural doctors must maintain a balance between the risks of undertreated pain and opioid misuse, often without specialist support.⁴ Opioids are routinely prescribed for managing chronic pain, but the evidence for the efficacy of their long term use is limited, and they may cause more harm than benefit.⁵ Patients' expectations regarding long term pain relief are often shaped by the effectiveness of opioids for managing acute pain, and the lack of effective alternatives can contribute to opioid dependency and overdose risk.⁶

Despite stronger regulatory protections than in the United States, prescription opioids are involved in about 70% of drug-induced deaths in Australia, the number of which has surpassed the number of road traffic fatalities since 2009.⁷ Chronic pain costs in Australia total \$73 billion per year, and the annual cost has been projected to rise to \$215.6 billion by 2050.⁸

Guidelines recommend a biopsychosocial, multidisciplinary approach to pain management that integrates allied health and non-pharmacologic therapies,⁹ but rural allied health workforce shortages can make non-opioid alternatives difficult. More cautious opioid prescribing is being driven by awareness of opioid-related harms and new clinical recommendations,^{10,11} but opioids are still used more frequently in rural and regional areas than in large cities.²

Despite advances, knowledge about optimal opioid maintenance and tapering strategies is incomplete, and access to comprehensive pain management services is more limited in rural areas than in cities.¹² We therefore investigated why rural general practitioners prescribe opioids, with the aims of explaining

Abstract

Objective: To investigate why rural general practitioners prescribe opioids for people with chronic non-cancer pain, with the aims of explaining geographic differences in opioid prescribing and improving pain management in rural areas.

Study design: Qualitative study; interviews with convenience sample of rural general practitioners.

Setting, participants: Seventeen rural general practitioners who had prescribed opioids for people with chronic non-cancer pain during the preceding twelve months; the interviews were undertaken during 11 September 2023 – 31 May 2024.

Major outcome measures: Contextual and individual factors that influence decision making by rural general practitioners about prescribing opioids for people with chronic non-cancer pain.

Results: We found that rural opioid prescribing is influenced more by health care system deficiencies than lack of knowledge among practitioners. Two major themes were identified: systematic constraints (insufficient time for alternative management strategies and the influence of Medicare remuneration); and limited access to multidisciplinary pain management (limited availability of non-pharmaceutical treatments, colleagues for consultation, and referral pathways). Participants described feeling trapped between brief consultations and complex deprescribing requirements; Medicare remuneration schedules encourage shorter appointments (and therefore continuing current management) rather than comprehensive pain management. Implementing evidence-based guidelines was difficult in rural areas with limited resources. The limited availability of allied health services further restricted alternative pain management approaches. Participants reported greater psychological pressure to justify opioid deprescribing than prescribing. Doctors acknowledged that the evidence for the value of opioids for managing chronic pain was limited but felt caught between inadequate system resources and patient demands.

Conclusion: We found a marked disparity between evidence-based guidelines for chronic pain management and the reality of rural medical practice. Rural doctors operating in a difficult context resort to prescribing opioids because of systemic inadequacies rather than lack of awareness of their limited value. Chronic pain management in rural areas could be improved by better Medicare support for longer pain management consultations, improved access to allied health, rural area-specific guidelines that take resource constraints into account, and improved support for general practitioners in pain management and deprescribing.

geographic differences in opioid prescribing and improving pain management in rural areas.

Methods

We conducted a qualitative study, interviewing rural general practitioners who had prescribed opioids for managing chronic non-cancer pain during the preceding twelve months. We report our study according to COREQ guidelines ([Supporting Information](#)).¹³

We recruited participants through online posts in Royal Australian College of General Practitioners (RACGP) and Australian College of Rural and Remote Medicine (ACRRM) forums and websites, followed by snowball sampling of colleagues of recruited participants. We recruited general practitioners practising in rural areas (Modified Monash Model categories 2 to 5¹⁴) who had prescribed opioids to people with chronic non-cancer pain during 11 September 2023 – 31 May 2024. Eligibility was confirmed in pre-interview questionnaires, and all eligible participants were interviewed. Interviews were conducted remotely by videoconferencing or phone calls in a private room. Each interview participant was offered a \$100 gift card as reimbursement for their time. We aimed to recruit fifteen to twenty participants.

Interviews explored the professional backgrounds of participants, barriers to and enablers of opioid prescribing, alternative pain strategies, and solutions for rural areas. Given the sensitive nature of the topic, a non-judgmental approach based on empathic neutrality was used;¹⁵ active listening, reflective questioning, and open-ended prompts facilitated a supportive environment.

The interviews, lasting 25 to 75 minutes, were audio-recorded, transcribed verbatim, and analysed using NVivo 14. Analysis using a constructivist grounded theory approach and open coding, without applying an *a priori* theoretical framework, was followed by deductive coding. Thematic analysis followed a systematic six-phase approach: familiarising oneself with the transcripts, generating codes, searching for themes, reviewing themes, and defining and naming themes.¹⁶ The codes were developed deductively (based on a literature review and the research questions) and inductively using grounded theory. Recurring patterns were identified by constant comparison and developed into focused codes.

A team approach enhanced trustworthiness through triangulation. Two researchers independently conducted line-by-line coding of each of the first three transcripts, establishing *in vivo* codes that preserved the participants' language and then compared their interpretations. The remaining transcripts were coded by individual researchers, with regular team meetings to discuss emerging themes, refine the analytical framework, and identify potential biases. Memo writing was employed to document insights, connections, and emerging theoretical constructs. This iterative and recursive process facilitated rigorous identification of meaningful patterns and themes, enabling a comprehensive and nuanced interpretation of the experiences of rural doctors with opioid prescribing for people with chronic non-cancer pain. Recruitment was continued until thematic saturation was achieved.¹⁷

Researcher positionality

The interviews were conducted by author JAT, a female rural medical student with a PhD and several years' experience in public health research, drawing on the knowledge-sharing culture of the medical community. Her insider status facilitated the recruitment of rural medical practitioners, discussing medico-legally sensitive topics, and interpreting medical treatment rationales and prescribing practices.

Three of the participants were known to the interviewer prior to study commencement. At the start of each interview, participants were informed about the study aim and JAT's motivation, which stemmed from her noting discrepancies between chronic pain management principles as taught during training and actual

clinical practice. She disclosed her medical student status and her interest in the research topic.

Ethics approval

The Flinders University Human Research Ethics Committee approved the study (project 6141). Written informed consent was provided by all participants prior to their interviews.

Results

We recruited seventeen rural general practitioners as participants (twelve men, five women; sixteen aged 30–60 years). Seven participants had advanced skills in obstetrics, anaesthetics, or emergency medicine; reported chronic pain management training included medical acupuncture (four participants), specialty-integrated training (three participants), and a targeted short course (one participant). The participants all practised in rural locations, including nine in areas classified as MMM5; thirteen participants had at least ten years' clinical experience, including eleven with at least ten years' experience in rural practice (Box).

We identified two major themes:

- systematic constraints: the perception of insufficient time for alternative management strategies and the influence of Medicare remuneration; and
- limited access to multidisciplinary pain management: the limited availability of non-pharmaceutical treatments, colleagues for consultation, and referral pathways.

Systemic constraints

Clinicians described a nuanced opioid prescribing decision-making process, characterised by deliberate choice and perceived constraints. While some practitioners prescribed opioids as a considered intervention, many expressed a sense of professional resignation, viewing continued opioid prescribing as the most pragmatic approach given clinical time limitations: "If you want to manage the patient within 20 minutes, then you just have to give the script and get them out the door" (MMM3 location, 28 years' clinical practice, eighteen years' rural practice, no specialised chronic pain training).

Participants felt constrained by the difficult nature of deprescribing opioids, particularly given consultation times of 10–15 minutes. Given the anticipated complexity of initiating a conversation about reducing opioid medication use, combined with brief appointment windows, alternative management strategies seemed impractical and overwhelming:

I'm not blaming GPs prescribing in those kind of scenarios, because, like, they've got a patient in front of them. They want to do something to help and maybe they say [to the patient] next time book a double appointment, or we'll talk about doing a pain management plan next time or that sort of thing, like everyone, I believe that everyone's trying to do the right thing, but they probably feel like they're limited with what they can do to help as well. (MMM5 location, eight years' clinical practice, six years' rural practice, completed short course in chronic pain management)

Participants described apathy, a feeling of being resigned to continuing current management despite wanting to help,

Characteristics of the seventeen general practitioners who participated in our study

Characteristic	Number
Gender	
Men	12
Women	5
Age group (years)	
30–39	
40–49	4
50–59	5
60–69	3
Practice remoteness (MMM) ¹⁴	
MMM2	1
MMM3	4
MMM4	3
MMM5	9
State	
South Australia	9
Queensland	4
New South Wales	2
Victoria	2
Clinical practice (years)	
Less than 10	4
10–20	5
21–30	4
30	4
Rural practice (years)	
Less than 10	6
10–20	6
21–30	4
30 or more	1
Advanced skills	
Obstetrics	2
Anaesthetics	3
Emergency medicine	2
Palliative care	1
Chronic pain management	1
None	8
Formal pain management training	
Medical acupuncture	4
Pain management in anaesthetic training	3
Online short course	1
None	9

suggesting that they knew opioids might not be in the best interests of the patient and that their use for managing chronic pain was not supported by evidence. Time needed to deal with

people with several medical problems and the difficulty of aligning doctor and patient expectations reduced the feasibility of deprescribing:

... if they come in with a shopping list, I'm guessing that the way that they prioritise the list of things might be different to you, and they may not see the opioids as a problem. (MMM3 location, 14 years' rural clinical practice, anaesthesia training)

Another participant described how Medicare, the government funding system that subsidises primary care in Australia, does not provide incentives for doctors to deal with difficult problems such as chronic pain management:

Medicare doesn't fund complexity. So you know, it's much, much, better financially, to see patients quickly. (MMM3 location, 28 years' clinical practice, eighteen years' rural practice, no specialised chronic pain training)

Participants acknowledged that financial incentives encouraged them to continue current management rather than tackle time-intensive matters like deprescribing. The amount of money primary care doctors receive is based on the consultation length and the number of patients seen per day; they receive more money for several short appointments than one longer consultation. If the management and patient behaviour do not cause any concerns, continuing opioid prescribing was seen as a safe option:

... if they've had a regular GP for two years who has been prescribing them, and they've been picking up at regular intervals. And it all appears to be above board, I would, I would be a little bit hesitant to say, no. (MMM5 location, eight years' clinical practice, six years' rural practice, completed short course in chronic pain management)

This comment indicates the level of pressure doctors feel to meet patients' expectations and the ease of continuing current management. One participant described an alternative management option, deprescribing, and how time constraints influence prescribing decisions:

If you're happy to sit down and spend that time, for chronic pain it's almost like a mental health consult. They are really long, it might be 30 minutes, 40 minutes, but you just have to spend that time ... it's almost like a mental health consult. The patient might break down. It's hard. The easier thing is to give a script. Like if you have pain we will give a pill and you will not end up in withdrawal. (MMM3 location, twelve years' clinical practice, one year of rural practice, advanced skills in chronic pain management)

Participants' perceptions of time significantly influenced decision making. Although many desired more time for thorough assessments and in depth discussions with patients, they were constrained by appointment lengths and the financial structures within which they operated.

Limited access to multidisciplinary pain management

Participants reported a pronounced discrepancy between evidence-based clinical guidelines for chronic pain management and the pragmatic constraints of rural health care delivery.

Participants consistently articulated the recommended approach of multidisciplinary interventions, including allied health support, physical therapy, and weight management strategies, while highlighting the significant contextual barriers to implementing these evidence-based recommendations in rural practice.

One participant described the financial reality of access to health care in rural Australia, and how an opioid prescription is much less expensive and easier to obtain than an allied health professional:

The private physios charge heaps more than I charge, like, probably, you know, around like \$300 an hour or something. And, ya know, that people just can't afford to see them. And, you know, dietitians, all that sort of stuff, we just don't have access to it, there's no, yeah, there's no support to help people do other things to help their pain. (MMM5 location, 16 years' clinical practice, 16 years' rural practice, no additional chronic pain training)

All right, so doctors will generally use the tools they have on hand to fix a problem. So, if all that they've got is to prescribe medications to try and address an issue, then that's what they'll use. (MMM4 location, 30 years' clinical practice, 26 years' rural practice, anaesthesia training)

When the predominant or most straightforward tool available is medication, doctors are likely to use it as a primary intervention; doctors feel compelled to reduce suffering and view opioids as the most feasible option:

If people need them for pain, then I don't know why we would be deprescribing, unless we have some way of managing their pain. (MMM5 location, 16 years' rural practice, no additional chronic pain training)

Resource-related constraints on access to and quality of care were discussed by participants. One doctor described considering referring people to pain clinics and the reality of limited access:

But most of my clients couldn't afford private pain clinics. So therefore they haven't. And, and so therefore, you are kind of left with, the public waitlist, because we know that's a long time, what do you do in the meantime, while you're off work? You know, so a lot of GPs realised that the easiest solution was to give you something just to try to get by. And there's this argument well, what's better is to give you something that's going to give you some quality of life, but may have a long term problem while they wait to see what the pain specialist. And then you know, and that's the kind of GP dilemma that most particularly so. (MMM5 location, 25 years' clinical practice, 24 years' rural practice, training in medical acupuncture)

Lower health literacy makes communicating with patients about chronic pain more difficult. One doctor described their perception of how educational achievement influences health literacy:

It really depends very much on the patient's educational level. Like do they have an education? The health literacy levels in this country is just appalling. It's absolutely appalling. Unless you've got a university level education. (MMM5, 25 years' clinical experience, 23 years' rural practice, anaesthesia training)

People with limited understanding of pain may find it difficult to comprehend medical information or instructions, leading to confusion or misinterpretation. This can result in relying on medications as a one-size-fits-all solution rather than willingness to engage in a biopsychosocial approach to treatment recommended by clinical guidelines.

Other themes

Other themes identified during data analysis included differences between rural and urban practice, and solutions for improving chronic pain management in rural areas.

Participants described difficulties in adapting guidelines developed for city-based doctors to rural practice, where access to specialists and allied health services is limited. Rural doctors said that they "operate within a different reality than the one imagined for urban-created clinical guidelines" (MMM3 location, 14 years' rural clinical practice, anaesthesia training), indicating the divide between evidence-based recommendations and their practical implementation.

Solutions for improving chronic pain management included practitioners' proactive approaches to expanding treatment options within rural constraints. Several participants described undertaking additional training to develop a broader "toolkit" of non-pharmacological alternatives for pain management. They recognised the importance of gradually reducing opioid use while providing viable alternative treatment, and rural doctors often noted the lack of services in their communities and took it upon themselves to undertake training to provide them. Some found medical acupuncture particularly effective, one participant enthusiastically commenting: "After all these years of treating chronic pain, I now actually have a tool that is effective, for most people." (MMM4 location, 30 years' rural clinical practice, medical acupuncture training). Other participants emphasised the value of establishing local pain management expertise in rural communities by obtaining training for one doctor in each practice.

Participants reported facilitating cultural change by educating general practice registrars about contemporary evidence-based pain management, emphasising non-opioid strategies for reducing the "significant amount of sediment in the system" (MMM3 location, 20 years' clinical practice, 16 years' rural practice, no formal chronic pain training). Their aim was to move from the entrenched practices of some older doctors who, despite evidence for the lack of efficacy and the risks of long term opioid treatment of chronic pain, continued to prescribe opioids because of their familiarity and established patient expectations.

Discussion

Our qualitative study illuminates the multifaceted problems for rural doctors navigating the complex landscape of chronic pain management. We found that prescribing was influenced by two dominant themes: systemic constraints, and limited access to multidisciplinary pain management resources. These factors decisively shaped prescribing and decision-making processes, with substantial implications for rural health care workforce sustainability, patient care outcomes, and policy development.

System constraints

Limited consultation times significantly affect the ability of doctors to implement alternative pain management strategies

and to initiate deprescribing conversations. Our findings are consistent with research findings that time pressure in primary care can lead to suboptimal prescribing practices and be a barrier to deprescribing.^{18,19} While best practice guidelines for chronic pain management emphasise comprehensive approaches, practical constraints limit their implementation in primary care. Although tiered models accommodate briefer interventions at the primary care level, remuneration structures often do not adequately compensate general practitioners for providing the longer consultations needed for optimal pain management approaches.²⁰ Despite the barrier of limited time, some researchers have found that brief interventions with primary care doctors improve clinical knowledge and facilitate self-management of chronic pain by patients.²¹

Resource limitations in rural settings

Our findings indicate the complex decision-making process for general practitioners weighing the treatment options for people with chronic pain. They are consistent with previously reported problems in opioid prescribing for people with chronic pain, including time pressure and insufficient resources as barriers to guideline adherence for primary care doctors in the United States.²² In Australia, general practitioner registrars model their prescribing practices on those of their clinical supervisors, even when they perceive them to be unsafe and are aware of the lack of evidence for the efficacy of opioids for managing chronic pain.²³

Chronic pain management is even more complex in rural primary care. We found that lack of access to allied health professionals caused doctors to rely on opioids, perceived to be the most pragmatic solution under the circumstances. Opioid prescribing rates have declined more in urban than rural areas, and rates of use are still high in rural areas.^{2,24} This difference between urban and rural areas in opioid prescribing rates may reflect structural and cultural barriers, such as less access to allied health services, lower socio-economic status, and lower health literacy in rural Australia.^{2,25}

One striking finding was the pressure felt by doctors to continue prescribing opioids, the burden of justification falling on decisions to withhold rather than to prescribe. Despite acknowledging that the evidence for the value of opioids for managing chronic pain was limited, doctors justified prescribing as both safe and necessary. Preferring to continue opioid treatment rather than deprescribing may have been a psychological defence mechanism for coping with managing patient demands and the limited non-pharmacological management options in rural areas. While our participants were aware of the limitations of opioids and expressed a desire for alternative approaches, they described feeling trapped and powerless. Deprescribing was hampered by insufficient time and the lack of allied health support; participants felt stuck between a rock and a hard place. Rather than reflecting the outdated practices of a few practitioners, our findings point to a systemic problem that leaves doctors without adequate resources or support to implement evidence-based deprescribing. Reducing inappropriate opioid prescribing will require system level interventions beyond targeting doctors' knowledge and behaviour.

Implications

The difference between guideline recommendations and rural practice reality indicates that systemic constraints can influence opioid prescribing, despite concerns about their long term

efficacy and evidence that duration of therapy is a stronger predictor of addiction than dose.²⁶ As interventions that reduce opioid prescribing by urban general practitioners have been less effective in rural areas,²⁷ context-specific solutions are needed.

Based on our findings, we recommend Medicare reforms that support extended pain management consultations, improving access to allied health services in rural areas, developing rural practice-specific guidelines that take resource limitations into account, and strengthening support for general practitioners in pain management and deprescribing.

Limitations

Convenience sampling means that we do not know whether our sample was representative of medical practitioners in rural areas across Australia, limiting the generalisability of our findings. The prescribing confidence and interest in the research question was probably greater for our participants than for rural practitioners in general, introducing selection bias.

Conclusion

We have found a marked disparity between evidence-based guidelines for chronic pain management and the reality of rural medical practice. Rural doctors are hampered by several systemic barriers — limited consultation times, few financial incentives for providing complex care, restricted access to multidisciplinary resources — that encourage opioid prescribing despite awareness of their limitations for chronic pain management. The psychological pressure to justify deprescribing rather than prescribing further complicates the problem. We found that rural opioid prescribing patterns are influenced more by health care system deficiencies than lack of knowledge among practitioners. Targeted policies must take the constraints of rural health care into account by providing Medicare incentives for complex consultations, improving telehealth infrastructure to increase pain specialist access, and providing care models that integrate allied health professionals into health care in areas with limited resources. Contextually appropriate interventions that enable rural practitioners to undertake evidence-based pain management within system constraints should be developed and evaluated.

Acknowledgements: The study was supported by Flinders University funding for advanced studies research. The funder played no role in the study design, conduct, data analysis, and interpretation of the research.

Open access: Open access publishing facilitated by Flinders University, as part of the Wiley – Flinders University agreement via the Council of Australian University Librarians.

Competing interests: No relevant disclosures.

Data sharing: The data for this study will not be shared, as we do not have permission from the participants or ethics approval to do so.

Author contributions: Jessica A Thomas, Paul R Ward were responsible for the initial research design. Jessica A Thomas performed the literature review for the research project. JAT wrote the ethics application. Jessica A Thomas performed the data collection. Jessica A Thomas, Paul R Ward contributed to the data analysis. Jessica A Thomas wrote the first draft of the manuscript. Jessica A Thomas, Paul R Ward, Philip Davidson, Jill Benson agreed on the final version of the manuscript before submission.

Received 31 October 2024, accepted 5 May 2025 ■

© 2025 The Author(s). *Medical Journal of Australia* published by John Wiley & Sons Australia, Ltd on behalf of AMPCo Pty Ltd.

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](#) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

- 1 Lalic S, Ilomäki J, Bell JS, et al. Prevalence and incidence of prescription opioid analgesic use in Australia. *Br J Clin Pharmacol* 2019; 85: 202-215.
- 2 Degenhardt L, Gisev N, Cama E, et al. The extent and correlates of community-based pharmaceutical opioid utilisation in Australia. *Pharmacoepidemiol Drug Saf* 2016; 25: 521-538.
- 3 Holliday S, Hayes C, Dunlop A. Opioid use in chronic non-cancer pain. Part 1: known knowns and known unknowns. *Aust Fam Physician* 2013; 42: 98-102.
- 4 Peacock A, Nielsen S, Raimondo B, et al. Geographic variation in health service use and perceived access barriers for Australian adults with chronic non-cancer pain receiving opioid therapy. *Pain Med* 2016; 17: 2003-2016.
- 5 Campbell G, Nielsen S, Bruno R, et al. The Pain and Opioids IN Treatment study: characteristics of a cohort using opioids to manage chronic non-cancer pain. *Pain* 2015; 156: 231-242.
- 6 Volkow ND, McLellan AT. Opioid abuse in chronic pain: misconceptions and mitigation strategies. *N Engl J Med* 2016; 374: 1253-1263.
- 7 Pennington Institute. Australia's annual overdose report. Aug 2024. <https://www.penin-gton.org.au/australias-annual-overdose-report> (viewed Aug 2024).
- 8 Deloitte Australia (for PainAustralia). The cost of pain in Australia. Mar 2019. <https://www.deloitte.com/au/en/services/economics/analysis/cost-pain-australia.html> (viewed Sept 2024).
- 9 Therapeutic Guidelines. What's new in pain and analgesia (2020). Dec 2020. <https://tgldcdp.tg.org.au/topicTeaser?guidelinePage=Pain+and+Analgesia&etgAccess=true> (viewed July 2025).
- 10 Giannitrapani KF, Ahluwalia SC, McCaa M, et al. Barriers to using nonpharmacologic approaches and reducing opioid use in primary care. *Pain Med* 2018; 19: 1357-1364.
- 11 Australian Institute of Health and Welfare. Chronic pain in Australia (PHE 267). 7 May 2020. <https://www.aihw.gov.au/reports/chronic-disease/chronic-pain-in-australia/summary> (viewed Aug 2024).
- 12 Gkiouleka A, Aquino MRJ, Ojo-Aromokudu O, et al. Allied health professionals: a promising ally in the work against health inequalities. A rapid review. *Public Health Pract (Oxf)* 2022; 3: 100269.
- 13 Booth A, Hannes K, Harden A, et al. COREQ (Consolidated criteria for reporting qualitative studies). In: Moher D, Altman G, Schulz KF, et al, editors. Guidelines for reporting health research: a user's manual. Chichester: John Wiley & Sons; 2014; pp. 214-226.
- 14 Australian Department of Health, Disability, and Ageing. Modified Monash model. Updated 10 Apr 2025. <https://www.health.gov.au/topics/rural-health-workforce/classifications/mmm> (viewed Aug 2024).
- 15 Patton MQ. Strategic themes in qualitative inquiry. In: Qualitative research and evaluation methods. Thousand Oaks: Sage, 2002; pp 37-75 (here: p 50).
- 16 Braun V, Clarke V. Thematic analysis. In: H Cooper, PM Camic, DL Long, et al, editors. APA handbook of research methods in psychology. Washington: American Psychological Association, 2012; pp. 57-71.
- 17 Saunders B, Sim J, Kingstone T, et al. Saturation in qualitative research: exploring its conceptualization and operationalization. *Qual Quant* 2018; 52: 1893-1907.
- 18 Østbye T, Yarnall KSH, Krause KM, et al. Is there time for management of patients with chronic diseases in primary care? *Ann Fam Med* 2005; 3: 209-214.
- 19 Hamilton M, Mathieson S, Gnjdic D, et al. Barriers, facilitators, and resources to opioid deprescribing in primary care: experiences of general practitioners in Australia. *Pain* 2022; 163: e518-e526.
- 20 Kligler B, Bair MJ, Banerjee R et al. Clinical policy recommendations from the VHA state-of-the-art conference on non-pharmacological approaches to chronic musculoskeletal pain. *J Gen Intern Med* 2018; 33: 16-23.
- 21 Holliday SM, Hayes C, Jones LE, et al. Prescribers or multidisciplinary? An evaluation of brief education for general practitioners on chronic pain management. *Health Education in Practice* 2020; 3: 5-25.
- 22 Krebs EE, Bergman AA, Coffing JM, et al. Barriers to guideline-concordant opioid management in primary care: a qualitative study. *J Pain* 2014; 15: 1148-1155.
- 23 Prathivadi P, Barton C, Mazza D. The opioid-prescribing practices of Australian general practice registrars: an interview study. *Fam Pract* 2021; 38: 473-478.
- 24 Rich R, Chou R, Mariano ER, et al. Pain Management Guidelines and Evidence Standards Working Group. Best practices, research gaps, and future priorities to support tapering patients on long-term opioid therapy for chronic non-cancer pain in outpatient settings. *NAM Perspect* 2020; <https://doi.org/10.31478/202008c>.
- 25 Aljassim N, Ostini R. Health literacy in rural and urban populations: a systematic review. *Patient Educ Couns* 2020; 103: 2142-2154.
- 26 Edlund MJ, Martin BC, Russo JE, et al. The role of opioid prescription in incident opioid abuse and dependence among individuals with chronic noncancer pain: the role of opioid prescription. *Clin J Pain* 2014; 30: 557-564.
- 27 Australian Department of Health. Opioid prescribing practices project: key outcomes. Mar 2021. <https://www.health.gov.au/resources/publications/opioid-prescribing-practices-project-key-outcomes?language=en> (viewed July 2024). ■

Supporting Information

Additional Supporting Information is included with the online version of this article.