To cite: Luckett T, Newton-

John T, Phillips J, et al. Risk

related clinical considerations:

general practitioners. BMJ Open

2020:10:e034363. doi:10.1136/

Prepublication history and

paper are available online. To

view these files, please visit

org/10.1136/bmjopen-2019-

Received 17 September 2019

Revised 15 January 2020

Accepted 29 January 2020

034363).

the journal online (http://dx.doi.

additional material for this

of opioid misuse in people

with cancer and pain and

a qualitative study of the

perspectives of Australian

bmjopen-2019-034363

# **BMJ Open** Risk of opioid misuse in people with cancer and pain and related clinical considerations: a qualitative study of the perspectives of Australian general practitioners

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### ABSTRACT

**Objective** To explore the perspectives of general practitioners (GPs) concerning the risk of opioid misuse in people with cancer and pain and related clinical considerations.

**Design** A qualitative approach using semistructured telephone interviews. Analysis used an integrative approach.

### Setting Primary care.

Participants Australian GPs with experience of prescribing opioids for people with cancer and pain. **Results** Twenty-two GPs participated, and three themes emerged. Theme 1 (Misuse is not the main problem) contextualised misuse as a relatively minor concern compared with pain control and toxicity, and highlighted underlying systemic factors, including limitations in continuity of care and doctor expertise. Theme 2 ('A different mindset' for cancer pain) captured participants' relative comfort in prescribing opioids for pain in cancer versus non-cancer contexts, and acknowledgement that compassion and greater perceived community acceptance were driving factors, in addition to scientific support for mechanisms and clinical efficacy. Participant attitudes towards prescribing for people with cancer versus non-cancer pain differed most when cancer was in the palliative phase, when they were unconcerned by misuse. Participants were equivocal about the risk-benefit ratio of long-term opioid therapy in the chronic phase of cancer, and were reluctant to prescribe for disease-free survivors. Theme 3 ('The question is always, 'how lazy have you been?') captured participants' acknowledgement that they sometimes prescribed opioids for cancer pain as a default, easier option compared with more holistic pain management.

**Conclusions** Findings highlight the role of specific clinical considerations in distinguishing risk of opioid misuse in the cancer versus non-cancer population, rather than diagnosis per se. Further efforts are needed to ensure continuity of care where opioid prescribing is shared. Greater evidence is needed to guide opioid prescribing in disease-free survivors and the chronic phase of cancer,

### Strengths and limitations of this study

- This is the first study to explore the perspectives of Australian general practitioners (GPs) regarding the risk and context of opioid misuse in people with cancer and pain.
- Emerging themes were discussed with specialists in palliative medicine and oncology to identify avenues for exploration in subsequent GP interviews.
- GPs were purposively sampled to include those practising in regional as well as metropolitan Australia.
- Generalisability is likely to be reduced by the fact that participants were paid for time spent being interviewed, were mostly from New South Wales and included some with specialty qualifications.

especially in the context of new treatments for metastatic disease.

### **INTRODUCTION**

In the USA, a marked increase in prescribing opioids for chronic non-cancer pain and associated harms<sup>1</sup> has been referred to as a 'crisis',<sup>2</sup> with many other high-income countries following a similar, though less exaggerated, trend.<sup>3-6</sup> In Australia, for example, opioid dispensing episodes increased 15-fold between 1992 and 2012, opioid-related hospitalisations increased from 605 to 1464 cases (1998-2009) and the death rate due to accidental poisoning increased from from 0.78 to 1.19 deaths/100000 population (2002-2011).<sup>3</sup> There has been a substantial body of research aimed at understanding factors underlying the opioid crisis and the best ways to address these in policy and practice.<sup>78</sup>

Drug misuse is defined as 'the use of a substance for a purpose not consistent with

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Correspondence to Dr Tim Luckett; tim.luckett@uts.edu.au legal or medical guidelines'.<sup>9</sup> As such, it is partly defined by the clinical context in which a medication is prescribed. Compared with the non-cancer pain context, relatively little emphasis has been placed on opioid misuse in people with pain and cancer. Due to the greater number of people with chronic pain, a smaller overall volume of opioids is prescribed for the cancer population,<sup>5</sup> and more evidence is available that opioids are effective in managing cancer<sup>10</sup> than non-cancer<sup>11</sup> pain. At least in the USA, people with cancer have also been less likely to die from opioids than other members of the general population.<sup>12</sup> Opioids are on WHO's list of essential medicines, but access for people with cancer is already limited in many parts of the world-an alternative 'crisis' that sees millions suffer unnecessarily each year.<sup>13 14</sup> Even in highincome countries, almost a third of people with cancer have unrelieved pain.<sup>15</sup> There have been calls to ensure that policies aimed at reducing opioid misuse in the noncancer pain context do not compromise access for people with cancer pain.<sup>16–21</sup>

A limited focus on risk of opioid misuse in the cancer pain context extends to the clinical as well as policy environment. Cancer pain guidelines are primarily concerned with opioid-related problems relating to toxicity rather than misuse.<sup>22–25</sup> Where addiction and dependence are considered, this is primarily in the context of education to allay disproportionate fears among patients and providers that pose an important barrier to effective opioid therapy.<sup>26</sup> Although newer US guidelines are increasingly concerned with screening for misuse,<sup>27</sup> screening tools have received only limited validation in the cancer context.<sup>28</sup>

What little research is available about physician beliefs and attitudes suggests that they are less concerned about misuse when prescribing opioids for cancer versus noncancer pain, at least in the end of life context.<sup>29–31</sup> Only two studies have directly compared physician perspectives on cancer versus non-cancer pain,<sup>30–31</sup> with results suggesting that key considerations may include the shorter duration of therapy towards the end of life, differences in therapeutic intent (maximum comfort vs optimising function) and guidance from WHO Cancer Pain Ladder.<sup>32</sup> A further study in the palliative care setting which included both patients with and without cancer found that concerns about misuse were primarily centred on inadvertent misuse (eg, repeating a dose due to cognitive impairment) or diversion by families.<sup>33</sup>

At the same time, however, a growing number of voices have cautioned against complacency in the cancer context.<sup>27 34-41</sup> A recent systematic review concluded that up to one in five people with cancer may be at risk of opioid misuse.<sup>42</sup> Little is known about prescribing patterns and long-term effectiveness during the chronic phase or in disease-free survivors.<sup>27 34 38-40 43</sup> The small number of studies available on disease-free survivors suggest that opioid prescribing may sometimes continue many years after treatment, with questionable benefit.<sup>44-46</sup> There have also been concerns that surgical patients discharged from

hospital may be overprescribed quick-release opioids to ensure adequate short-term pain management.<sup>41</sup> Also, many people living with cancer pain have pain from other causes, such as treatment or comorbid conditions, for which opioids may be less effective.<sup>35 47</sup> Finally, a smaller proportion of people living with cancer may have a history of misusing opioids or other substances prior to their diagnosis that may influence (but should not exclude) future opioid therapy.<sup>21</sup> Currently, no evidence is available on how physicians consider these issues when balancing benefits against risks from opioids in the cancer pain context. Also, most research has focused on the US experience of the opioid crisis, with relatively little being conducted in other countries following a similar pattern of opioid overprescribing.

The current study aimed to explore the experiences, beliefs and attitudes of general practitioners (GPs) concerning the risk of opioid misuse in people with pain and cancer and related clinical considerations. We focused on GPs rather than oncology or palliative care specialists because of the greater potential afforded for examining how experiences, beliefs and attitudes might differ between cancer versus non-cancer pain and end of life versus chronic and disease-free contexts.

### **METHODS**

A qualitative approach was considered best suited to exploring GP experiences, beliefs and attitudes and their relationship to clinical decision-making.<sup>48</sup> A pragmatic integrative approach (ie, both deductive and inductive<sup>49</sup>) was taken to balance the need for an exploratory approach warranted by the paucity of previous research on problematic use of opioids in the cancer context with the opportunity to build on findings from a large number of studies in the non-cancer pain context.<sup>30 31 33 50-62</sup>

The study was conducted between April 2018 and January 2019. All participants gave written informed consent to participate. The study has been reported in accordance with Consolidated Criteria for Reporting Qualitative Research.<sup>63</sup>

### Patient and public involvement

The design of this project was informed by members of the Consumer Advisory Panel of the Improving Palliative, Aged and Chronic Care through Clinical Research and Translation Centre at the University of Technology Sydney, who attended an initial meeting to shape the research questions and draft the interview topic guide.

### **Participants**

Eligible participants were GPs with experience of prescribing opioids to people with cancer and pain. GPs were recruited via email listservs and conferences/forums of GP organisations (eg, Royal Australian College of General Practitioners) and groups concerned with cancer and/or pain involving GPs among others (eg, the NSW Translational Cancer Research Centres). We also directly

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approached GP practices in the researchers' local state of New South Wales (NSW) via telephone and email. Practices were selected using a quasi-randomised approach using Google Maps, with practices stratified according to the Australian Bureau of Statistics remoteness structure<sup>64</sup> to purposively sample from metropolitan and regional areas. Sample size was determined by saturation of major themes against the conceptual framework used for analysis. Saturation was defined as no new themes emerging over five consecutive interviews.

### **Data collection**

We conducted semistructured telephone interviews with participants over the telephone to capture a geographically diverse sample and enable a standardised approach regardless of location. Interviews were conducted by a single investigator (TL), a male allied health professional and social scientist with a doctoral degree and experience in qualitative methods. The interviewer had no relationship with any of the GP participants prior to the interviews. Written and verbal information about the study identified that it was exploring similarities and differences between opioid-related problems in people with cancer versus non-cancer pain.

An initial question asked physicians 'what (if any) problems have you encountered when prescribing opioids to people with cancer and pain?' to elicit their perspectives on the most common and/or important issues with minimal influence from the interviewer. Further questions explored a range of micro (patient, physician), meso (local practice) and macro (policy) factors found to influence physician perceptions of risk of misuse by previous research in the non-cancer pain context. These factors were located within a framework for prescriptionrelated decision-making by Raisch,65 which divides influences into patient factors, prescriber and practice factors, and internal processing (including attitude towards the medication in question, perceived subjective norms and cognitive biases). Participants were asked to comment on the construct of 'chemical coping', which has been used in the cancer literature in various ways that approximate more or less to addiction.<sup>66</sup> The interview guide was expanded as necessary to pursue additional points raised by interviewees and to test the authenticity of themes that emerged from previous interviews (see online supplementary file). No field notes were taken.

GP interviews were audio recorded, transcribed and deidentified, and managed using NVivo V.11 (QSR) software. Neither transcripts nor findings were not returned to participants for verification.

### **Analysis**

Analysis of initial interviews followed a process of familiarisation and line-by-line open coding against the framework outlined above, with codes added as needed to capture unanticipated insights.<sup>49</sup> To enrich interpretation as well as enable reflection on bias,<sup>67</sup> analysis was conducted by two researchers independently who met afterwards to reach consensus around code application—the interviewer (TL) and a female palliative care nurse with more limited qualitative research experience working as a research assistant (BR).

Emerging themes were explored via discussion with small number of senior specialists in palliative medicine (n=3) and doctors working in oncology (one medical oncologist, one radiation oncologist and one pain medicine specialist working in a surgical oncology unit) among the authors' networks. Specialist perspectives were not used as data; instead, they identified avenues for further exploration in subsequent GP interviews.

As analysis approached saturation, the initial stages of analysis were omitted, and the two researchers (TL and BR) independently coded against themes and then met to reach consensus. During this stage, the researchers searched for insights that might require the generation of new themes to accommodate them, as well as nuances in the established themes. Themes were further refined through discussion with members of the authorship team, including a psychologist specialising in pain management (TN-J) and palliative care nurse (JP). No member checking was conducted with GPs.

### RESULTS

Twenty-two GPs were interviewed. Of these, 12 were recruited through email listservs and conferences/ forums, and 10 were recruited through direct approaches to medical centres. Two hundred and twenty-one medical practices had to be approached to recruit these 10 participants (each from a different medical centre). A response rate could not be estimated because the number of GPs at each medical centre was unknown. However, 10 medical centres represent less than 1% of the total 2731 in NSW.<sup>68</sup> Because direct approaches involved leaving messages with medical centre reception, no reasons could be ascertained for GPs declining.

Interviews lasted a median of 31 min (IQR 29.75– 36.50). GP participants had a mean age of 53 (SD 11.06). See table 1 for other sample characteristics.

Three major themes emerged and are discussed next.

### Misuse is not the main problem

When asked the initial question about what opioid-related problems they had encountered in the cancer context, nearly all participants referred to unrelieved pain, opioid toxicity or challenges in opioid selection and titration as being more pressing than risk of misuse. Opioid-related problems of all kinds were seen as arising, in large part, from systemic origins.

### Poor continuity of care

Opioid-related misuse and other problems were perceived to arise most often from a lack of communication between prescribers, either cancer specialists and GPs, or two or more GPs. Lack of communication was primarily reported by participants in metropolitan Table 1 Characteristics of general practitioners (GPs) participating in interviews about the risk and context of opioid misuse in people with cancer and pain (n=22)

Characteristic	N (%)	
Male	11 (50)	
State		
NSW	18 (82)	
ACT	2 (9)	
QLD	1 (4)	
SA	1 (4)	
Remoteness		
Metropolitan	13 (59)	
Regional	9 (41)	
Also trained in other specialties		
No other specialty	16 (73)	
Addiction medicine	2 (9)	
Pain medicine	1 (4)	
Palliative care	1 (4)	
Forensic medicine	1 (4)	
Orthopaedics	1 (4)	
Also work in other settings		
Primary care only	16 (73)	
Drug and alcohol	2 (9)	
Hospice	1 (4)	
General medical	3 (14)	
Conjoint academic appointment	2 (9)	
Years practising as GP*		
< 5 years	2 (10)	
5–10 years	4 (20)	
11–20 years	5 (10)	
21–30 years	3 (15)	
> 30 years	6 (30)	
How often, on average, have you initiated opioids f patient with cancer pain over the past year?*	or a	
Daily	0	
Daily to weekly	0	
Weekly to monthly	7 (35)	
Less frequently than monthly	11 (55)	
Not at all	2 (10)	
How often, on average, would you see patients with cancer pain who have been prescribed opioids by another physician over the past year?*		
Daily	0	
Daily to weekly	2 (10)	
Weekly to monthly	7 (35)	
Less frequently than monthly	10 (50)	
Not at all	1 (5)	

Continued

Table 1 Continued		
Characteristic	N (%)	
How often, on average, have you initiated opioids for a patient with non-cancer pain over the past year?*		
Daily	0	
Daily to weekly	0	
Weekly to menthly	0 (40)	

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Weekly to monthly	8 (40)
Less frequently than monthly	11 (55)
Not at all	1 (5)
Authorised methadone prescriber*	2 (10)

\*Data missing for two GPs; percentages reflect N=20. ACT, Australian Capital Territory; NSW, New South Wales; QLD, Queensland; SA, South Australia.

areas, with rural participants enjoying clearer shared prescribing arrangements with their medical colleagues. Poor communication resulted in a lack of shared understanding about the goals and plan for opioid therapy, as well as limited knowledge transfer regarding important patient-level factors (eg, history of substance misuse). Most participants reported that discharge letters from cancer services often suffered lengthy delays and rarely if ever included information about opioid therapy, instead focusing on cancer treatment.

You get a discharge letter saying they've been sent home on it [the opioid]. And that's all you get. They [the patient] get a list of their medication. Nobody ever gives you a plan for getting off it. (GP24, regional)

Many participants reported seeing patients who they suspected had been initiated on suboptimal opioid types and/or doses by another prescriber but lacked a complete medical history to interrogate this clinical decision. While participants would sometimes contact the initial prescriber to clarify, this was made more difficult where initiation was a long time ago or GPs lacked the confidence to question a prior decision, especially where this had been made by a specialist.

GP registrars, younger doctors, people are not so used to not being comfortable maybe thinking, "Well is this a situation where dare I interrupt specialist X and check with them?" Patient's saying to me, "Oh they said I should be on this dose or this dose," and there's no written information. It's about enabling other primary health care physicians to understand when it is appropriate to be a bit more assertive in terms of taking more responsibility for the communication process and not assuming that someone is going to ring you. (GP11, metropolitan, addiction specialist)

Many participants emphasised that opioid therapy was best undertaken within the context of an established therapeutic relationship, especially where 'difficult conversations' were required that involved either questioning

another prescriber's decision or raising concerns about risk of misuse.

Sometime it's very difficult for them [patients], as to counsel them "look, how about this? And just, can you try this little bit lower dose and we'll see you in twoweeks?" Sometimes they're really reluctant to do that [but] we have a good relationship and do really well. (GP20, regional)

Sharing care between primary and specialist providers was seen as potentially disruptive to the doctor-patient relationship, reducing clarity about which prescriber was better placed to lead opioid therapy.

I think the patients become quite attached and feel quite secured to the [oncology] department, and I know in the past I've felt I've really lost touch with people. (GP17, regional)

### Routine overprescribing on discharge from hospital

Participants voiced particular concern over what they saw as indiscriminate and often unnecessary prescribing of short acting, strong opioids on discharge from hospital, especially oxycodone. Such overprescribing on discharge was considered to be common regardless of whether pain occurred in cancer versus non-cancer context. Participants reported illustrative cases where patients had continued to request short-acting opioids after postoperative pain had resolved and been resistant to weaning or switching to a long-acting opioid where pain was from residual disease.

A little factor is the hospitals dish out Endone [brand name for oxycodone] like it is a Smartie [brand name for a popular confectionary]. (GP12, metropolitan)

If someone is using regular Endone, I'm going to try and convert them to a longer acting opioid to try and manage it better. But people try and put up a—they are resistant to that. (GP15, regional)

### Lack of prescriber expertise

Many participants perceived shortcomings in opioidrelated expertise either in themselves or their colleagues. Education and training in opioid therapy were considered to be suboptimal both during medical training and post qualification.

I find it a little bit challenging sometimes to know when to stop or how to reduce the dose of the opioids ... We had one or two lectures that talked about opioids but, apart from that, it is from day to day when we see the patients that we learn more about our prescriptions. (GP22, metropolitan)

Many participants reported illustrative cases where they perceived a colleague had made an inappropriate choice regarding opioid type or dose due to lack of expertise, resulting in either overprescribing or underprescribing. When I took over, he [the patient] was already on 80[mg] of oxycodone and a fentanyl patch, but the pain was not controlled. And within the last week or so, when the doctor seen him, he told him categorically, "oh, you're on the highest dose—we cannot give you anything more." He had a red line of thinking of, "this is my maximum dose—I'm not going to give you anything more." (GP20, regional)

Several participants also highlighted the limited opportunity that their primary care caseload afforded them to develop expertise in opioid therapy.

Because we don't do [opioid therapy] very often ... I used to work in the palliative care team [and at] that time I was really good at calculation ... we need to just revise notes again and it takes time. (GP26, metropolitan)

### Primary care constraints

Many participants emphasised the time required to engage in high-quality, person-centred pain management and how this was constrained by the business model of contemporary primary care. Participants also highlighted constraints on titrating opioids in the primary care versus inpatient setting due to the more limited opportunity for rapid review.

If we prescribe opioids for pain, it's good to follow up within 24 to 48 hours to make sure we've got the dose right. But in general practice, that's often difficult. (GP21, regional)

Lack of alternatives to strong opioids for safe, effective pain relief Several participants reported the lack of alternatives to strong opioids for effectively managing cancer pain. While useful for some patients, non-pharmacological strategies were considered to be limited in addressing severe cancer pain and to make high demands on patients' time, effort and finances, especially where allied health referral was required.

They [allied health referrals for non-pharmacological management) still have their limitations in terms of number of sessions, in terms of location of where they are, in terms of whether your knowledge of the therapists and whether they're any good or not (you don't want to send anyone to just any old person). So there's all these limitations—system limitations, your own limitations. Sometimes limitations that the patient might put on it too, that they just don't want to go to that effort, to that time; they want a quick fix. (GP11, metropolitan, addiction specialist)

Partial agonists (eg, tramadol) were highlighted by one participant as being effective alternatives to full agonist opioids that were associated with a lower risk of misuse. Limited uptake of partial agonists was blamed partly on aggressive marketing from the pharmaceutical industry of opioids of other kinds, most notably oxycodone. While often used in conjunction with opioids, nonopioid medications were considered to have limited effectiveness for some cancer pain, and also to confer different problems of their own.

Drugs like pregabalin, yeah they help a bit for certain types of pain. Amitriptyline is a useful adjunct. But take away the opioids, there's not a real lot left. (GP21, regional)

### 'A different mindset' for cancer pain

Participants generally reported aberrant behaviours (eg, 'doctor shopping') to be rarer in patients with cancer versus non-cancer pain. However, nearly all had encountered at least some patients with cancer where these behaviours had been of concern.

### Opioids are more effective for cancer pain

Several participants referred to research evidence and experience indicating opioid therapy to be more effective for cancer versus non-cancer pain. Some suggested that opioids for cancer versus chronic non-cancer pain could be more targeted to specific underlying causes, and delineated effectiveness for different types of cancer pain, most notably nociceptive versus neurological.

I think, well, it's all just pain [both cancer and noncancer], but I do tend to see probably more people who are hard to budge who have chronic back pain or chronic musculoskeletal stuff, more than cancer pain. (GP28, metropolitan)

In cancer pain, sometimes we've actually gotten more up our sleeves than in our more functional pain syndromes because often you've got anatomical problems. You've got really cellular pathological issues that you could put a finger on more easily than, for example, something like fibromyalgia or essential pain processing disorder ... some of the other chronic pain syndromes, we're saying, "we have no idea why everything hurts all the time, but here's a drug." ... [in cancer pain] we can do these various things

with these various terminologies that we can really nail down management to. And in that context, use of opioids becomes very specific, if you know what I mean? (GP23, metropolitan)

The difference with the cancer pain as opposed to some of the other pains, is that there is something actually going on, whereas sometimes with these pain syndromes where people have just got sore backs all the time and musculoskeletal pain, the actual benefit to the pain can be vaguer. (GP28, metropolitan)

At the same time, there was widespread recognition among participants that patients with cancer might present with pain from comorbidities rather than or as well as their tumour, sometimes predating their diagnosis.

## .....

### Opioids have reduced stigma in the cancer pain context

Several participants expressed a belief that the community showed greater acceptance of opioids as an appropriate medication for managing cancer versus non-cancer pain. Some participants expressed concern that, in the noncancer pain context, media attention and monitoring in response to the opioid crisis had led to stigmatisation of patients and a growing reluctance among many GPs to prescribe, even when opioids were indicated. By comparison, people with cancer pain were considered unlikely to suffer poor pain control as a result of these factors.

They're not the people who will miss out because cancer patients are easy for me to justify [prescribing opioids to]. (GP32, metropolitan, orthopaedic specialist)

# Differences in misuse-related concerns are dependent on cancer stage

Misuse-related concerns appeared to rest more on prognosis than diagnosis; misuse was considered of low priority in managing both cancer and non-cancer pain where prognosis was poor, due to the shorter duration of therapy and the focus on maintaining comfort rather than functioning. In this context, all participants indicated they were willing to prescribe as liberally as was required to manage pain.

If it's palliative, definitely, we don't really worry about if he gets addicted. (GP20, regional)

Interviewer: would you be thinking in similar terms between somebody with cancer and somebody with a non-malignant condition if their life expectancy was similar—that would be a critical element for you?

GP10: Yeah—I think that makes a difference because obviously the questions in long term addiction and dependency are different than [for] somebody who will not live very long. (GP10, metropolitan)

In the palliative context, reluctance to take opioids (on the part of patients) or prescribe opioids (on the part of doctors) were considered to be of greater concern than the risk of misuse.

They don't want morphine, because morphine equals death ... we have to convince people to have opioids in the hospice. Because we know they've got pain, and they're terrified of having the opioids. So [misuse] that's never seen, and I've worked there for years. (GP12, metropolitan, forensic specialist)

Somebody not being given the dose of oxycodone that they need ... and this is someone who's in the last, probably, two or three months of life. To me, it's just—it's ludicrousness, and I am someone who is very cautious in terms of prescribing drugs of addiction. (GP13, metropolitan)

Participants expressed only one concern specific to the palliative context, namely that patients might stockpile opioids as a recourse for ending their own life if suffering became unbearable.

I've had an instance where there's been hoarding going on in case they've had enough one day and they just take the whole lot in one go. (GP30, metropolitan, pain specialist)

Participants were much more concerned about risk of misuse in disease-free cancer survivors, who were generally regarded as being no different to people with noncancer pain. Several participants reported that patients with early stage disease were often keen to stop opioid therapy because of its association with being ill.

I think that [weaning] would also tie in with their belief that they're putting things behind them and moving forward. (GP17, regional, palliative care specialist)

However, a few participants cited examples of patients who were slow to weaned off opioids following curative treatment, including one who took 2 years.

I can think [of] two people off the top of my head at the moment where there's been diagnosis of cancer, they've been treated with opioids, gone into remission, and then their opioids become an issue. One of the people that I'm thinking about who ... [had] lots of pain, high dose opioids, probably on about, I don't know, 300 of morphine equivalents a day, and then went into remission and then found it really hard to cut down. And he was really committed to stopping. But it was really hard for him to stop. Needed lots of support. We did it over a two year period where he cut down and ceased completely. And that was with someone who was really committed and had a partner who was really supportive. (GP13, metropolitan)

The chronic phase of advanced cancer was considered by participants to occupy middle and more equivocal ground between the palliative phase and early stage disease when weighing up opioid-related risks versus benefits. Participants reported finding this phase especially challenging because patients had pain that required opioid analgesia but duration of therapy could be extended and uncertain.

The shorter prognosis is definitely much easier and so, if the patient hasn't seen palliative care and they've got cancer and they may live for a long time, it makes our lives a tiny bit more difficult because there's all these articles being published about how bad GPs are and the specialists are prescribing S8's for patients which should be short-term only, they must be more aware because everybody gets hooked on their S8's [Australian classification for drugs of addiction] ... often what we do after a long time is the patient seems to have no pain, is sometimes try and decrease their dose. But one's got the dilemma if you decrease the dose and the patient starts getting more pain then people gonna ask you, "Doc, if the patient was stable why did you make him uncomfortable?" (GP25, metropolitan)

### The role of cognitive bias

Several participants reflected on the possibility that prescribers could be 'blinded' to the risk of opioid misuse in people with advanced cancer due to their feelings of compassion and focus on relieving suffering. Cognitive bias of this kind was perceived both to make prescribers more willing to prescribe at high dose and frequency, and also to be associated with reduced monitoring of warning signs related to misuse.

That person was taking from the same prescription of fentanyl patches from two different doctors for the last six months ... We always have a soft heart for the cancer patients as well, like, we don't really go into their details—so that's what happened [in this case]. (GP20, regional)

Having the opioid conversation with anyone is a hard conversation because no one likes to be told to reduce the medication that they think helps their pain ... it's even harder to have the difficult conversation with someone who has a shortened life expectancy. (GP15, regional)

You know—it's the big C, it's soul-consuming. It's so terrible that this is happening to my patient, I gotta get them some extra opioids to make sure they're okay. So, there's a bit of a different mindset, I think. (GP13, metropolitan)

### Chemical coping

Not all participants were familiar with the construct of chemical coping, and those who were brought varying interpretations. For two participants, chemical coping served as a 'softer' synonym for addiction in people with advanced cancer that avoided conferring stigma to people who were unwell. For another, however, it differed from addiction in stemming from a fear of pain rather than dependence on opioids. On this view, chemical coping could be addressed by reassuring patients that the pain would not return if opioids were reduced or by substituting opioids with other forms of pain control.

I think the 'chemical coper' is a really nice term. It's a bit of a softer way of talking about someone who's actually using medicines to manage their complex life, I guess. But because they've got a legitimate condition, they're called a 'chemical coper' rather than someone who's running around the streets grabbing Oxycontin and injecting. (GP13, metropolitan)

I don't view it as addiction, which I see as more of a physiological phenomenon rather than a psychological one. (GP21, regional)

### **Open access**

### **Risk of diversion**

Diversion was considered to be of greater concern than misuse by patients, either through the patient intentionally procuring opioids in order to give or sell to others, or through family/friends diverting opioids without the patient's consent.

It's a very common story ... obtaining opioids from family members ... If you're in Sydney on the minimum wage ... oxycodone is a dollar a milligram on the streets (GP13, metropolitan)

Although participants reported diversion also to be common in non-cancer contexts, a small number worried that people with cancer might be used as a 'gateway' for opioids because of prescribers' greater willingness to initiate opioids for cancer pain.

### 'The question is always, 'how lazy have you been?"

A recurring theme among interviews was that opioidrelated problems most commonly arose when pain management lacked a comprehensive assessment, shared decision-making and communication among members of the care team. Several participants highlighted how much easier and less time consuming it was to prescribe opioids than to explore more holistic approaches to pain control based on a comprehensive assessment, partnering with patients and involving a multidisciplinary team.

The question is always, "how lazy have you been?" You know, I saw this in the country all the time, that it is so much simpler to write doses, you know, 80 mg Oxycontin b.d. ... than it is to get people involved in multi-disciplinary team. (GP23, metropolitan)

For a GP out there in the community, it's quick and easy to write a script, be that for whatever. When it comes to pain patients, they need a lot more support, because I'll have to actually look first at the psychosocial aspects, because I presume with the cancer diagnosis, the bio part of that biopsychosocial model has already been elucidated ... opioids can be helpful, but it can also be a hindrance. (GP30, metropolitan)

Demands on time and effort were reported to be even greater where prescribing was shared between two or more doctors. In these instances, participants highlighted the need to maintain regular communication between prescribers to clarify roles and the management plan. There was also an emphasis on the need for each prescriber to independently review pain management plans rather than defer responsibility to the initiating doctor.

It was always important to be in close contact with the oncologist and if there was a palliative care team involved to be crystal clear about that we were working together we all need to know what each other's doing and we need to have our roles very clearly defined in terms of who is the person who is managing the analgesia. (GP11, metropolitan, addiction specialist) Every time you're thinking about writing a script, you are responsible for that script ... even if the oncologist said, "Oh, yes I would give them this." They haven't written a script—you are legally responsible for the script. And so, you need to make an assessment and satisfy yourself that this is an appropriate, safe treatment. (GP13, metropolitan)

### DISCUSSION

This is the first study to explore the perspectives of Australian GPs on the risk of opioid misuse in people with cancer versus non-cancer pain and related clinical considerations. Consistent with studies from the UK and USA,<sup>30 31</sup> participants were less concerned about misuse in the end of life context, due to a likely shorter duration of therapy and priority afforded pain control. Participants were less at ease with opioid therapy for cancer pain where duration of therapy and prognosis were uncertain. Participants viewed risk of misuse as arising substantially from systemic and prescriber limitations, including shortcomings in continuity of care and prescriber expertise and the demands on time/effort required for safe, holistic pain management.

Our results lend support to concerns that opioids may sometimes be overprescribed in the cancer context because doctors feel an imperative to help and perceive there to be few management alternatives.<sup>37</sup> Our findings suggest that compassion towards patients with cancer may sometimes cause GPs to be slower to associate opioidrelated behaviours with misuse or addiction in favour of softer constructs like 'chemical coping'. Participants in our study admitted being less alert to risk of misuse in people with cancer versus non-cancer pain, consistent with a survey study that found pain specialists to be less likely to screen for misuse in this population.<sup>69</sup> While participants reported encountering misuse less often in cancer versus non-cancer pain contexts, this might, in part, have been due to lower case identification. This is consistent with a systematic review which found studies using subjective methods underestimated risk of misuse in people with cancer compared with objective methods.<sup>42</sup> Participants' emphasis on the goal of comfort care as a justification for liberally prescribing opioids towards the end of life should also be interpreted within the context of research suggesting that doctors sometimes overestimate patients' desire to be pain free at the expense of mental clarity.<sup>70</sup> GPs in our study also seemed to have lower levels of concern regarding addiction and misuse in the palliative context than has been reported for palliative care physicians.<sup>71</sup>

Our study is also consistent with limited evidence that opioid prescribing may sometimes continue longer than is optimal for disease-free survivors.<sup>34 37 44 45</sup> Canadian and Norwegian studies of population-based data found opioid use to be higher in cancer survivors than the general population even 5 or 10 years after diagnosis.<sup>44 46</sup> A third or more of Norwegian cancer survivors taking opioids were prescribed short-acting only, consistent with participant perceptions in the current study that weaning or transitioning to long-acting opioids from short acting is sometimes challenging. Participants commonly expressed a concern that short-acting opioids are overprescribed on discharge from hospital-a concern that has prompted recent Australian research aimed at reducing oxycodone prescribing in this setting.<sup>72</sup> Guidelines for managing pain in long-term cancer survivors recommend that initiating opioid therapy should be treated with the same caution as in the non-cancer pain context-that is, only trialled where other options have failed and accompanied by proactive efforts to taper and cease and minimise risk of addiction and misuse.<sup>27</sup> More guidance is needed for pain management in the early months of diseasefree survivorship.<sup>27</sup> In the meantime, our results suggest that helping survivors see tapering opioids as a means of 'moving on' from their cancer experience more generally may support the transition for some patients.

GPs in our study also faced a dilemma in deciding when to trial weaning of opioids in people during the chronic phase of cancer. Limited evidence and guidance are available to inform opioid therapy in this population. Prescribing for this group may be even more complex in the context of emerging cancer treatments,<sup>34–37</sup> which lengthen the chronic phase of advanced disease and increase prognostic uncertainty for some tumour types.

In addition to worrying less about misuse in the context of poor prognosis, participants' relative comfort with prescribing opioids in the palliative versus disease-free or chronic cancer phases related to confidence in the mechanisms by which pain was being caused and that opioids might work. Confidence that a patient was experiencing pain as a result of cancer faced further challenges in the context of comorbidities that might be causing pain or when addiction or the similar construct of chemical coping was suspected.

Poor continuity of care has long been identified as a barrier to pain control for people with cancer.<sup>73</sup> However, our study is the first to elucidate its potential to contribute to opioid misuse in this population. Addressing this problem may require standardised processes for communication that go beyond discharge letters and are embedded within systems as non-discretionary. Electronic health records pose special potential for enabling communication of this kind but have been slow to overcome privacy concerns and structural barriers between primary and acute care in Australia.<sup>74</sup>

Participant perceptions that opioid use by patients with cancer versus non-cancer is relatively free of stigma contrasts with findings from a US study that people with cancer face similar attitudinal barriers as patients with non-cancer pain, resulting in undertreatment.<sup>75</sup> The opioid crisis is more severe in the USA, with proportionate government and media attention. However, given increasing attention on opioid prescribing in the Australian context, policy may need to be proactive to avoid access barriers for people with cancer in the future.<sup>19</sup>

Finally, participants perceived that partial agonists (eg, tramadol) might pose less risk of misuse. However, recent evidence suggests that this difference may have been overestimated.<sup>76</sup>

### Limitations

Our results are unlikely to represent the perspectives of Australian GPs in general. Most participants worked in NSW, limiting insights into jurisdictional variation. Direct approaches to medical centres were intended to reduce the volunteer effect and ensure inclusion of regional as well as metropolitan GPs. However, we had a very low response rate from this sampling method. It seems likely that the controversial nature of the topic and reimbursement offered for GP time may have attracted GPs with stronger held views and lighter patient caseloads than the population from which they were sampled. Inclusion of four GPs with specialty training in addiction medicine, pain medicine or palliative care, and two with conjoint academic appointments is indicative of a greater than average interest in opioid-related practice and research. Finally, having interviews conducted by a social scientist rather than a doctor may have meant some avenues of enquiry were missed, while at the same time posing less risk of confirmation bias compared with an interviewer with prescribing experience.

### CONCLUSION

The current study suggests that misuse may not be the most pressing concern for GPs prescribing opioids to people with cancer, and highlights the role of specific clinical considerations in distinguishing risk of misuse for pain in the cancer versus non-cancer population, rather than diagnosis per se. Further efforts are needed to ensure continuity of care where doctors share prescribing for a given patient, especially between primary and acute care settings. Greater evidence is needed to guide opioid prescribing in disease-free survival and the chronic phase of advanced cancer, especially in the context of new targeted treatments for metastatic disease that lead to greater uncertainty regarding prognosis.

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**Contributors** All authors contributed to the design of this study. TL collected the data. TL, BR, JP, SH and WL contributed to recruitment. TL, BR, TN-J, JP and SH contributed to the analysis. All authors contributed to interpretation of results and writing of the manuscript. The design of this project was informed by the Consumer Advisory Panel of the Improving Palliative, Aged and Chronic Care through Clinical Research and Translation Centre at the University of Technology Sydney.

**Funding** This study was funded by a competitive research grant received from the University of Technology Sydney's Faculty of Health.

**Disclaimer** The views expressed in the submitted article are his or her own and not an official position of the institution or funder.

Competing interests None declared.

Patient consent for publication Not required.

Ethics approval This study was approved by the University of Technology Sydney Faculty Low Risk Ethics Panel (ETH18-2399). All participants gave written informed consent to participate.

Provenance and peer review Not commissioned; externally peer reviewed.

**Data availability statement** No data are available. The datasets generated and/or analysed during the current study are not publicly available to protect the privacy of those who participated.

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