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Health and service needs, priorities and initiatives of primary health networks related to chronic pain

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ABSTRACT

Background. Chronic pain is a major and growing public health issue. Multidisciplinary tertiary pain services cannot meet patient demand and greater involvement of primary care is needed. The aims of this study were to understand the needs and priorities of Australian primary health networks (PHNs) related to the management and secondary prevention of chronic pain; map current PHN chronic pain initiatives and identify gaps; highlight key enablers to implementation; and highlight solutions identified by PHNs to increase capacity to commission initiatives. **Methods.** Mixed methods were used, including: a review of PHN needs assessments; and consultation with PHN executive-level staff and program managers from 27 out of the 28 PHNs, and the WA Primary Health Alliance (WAPHA – a state alliance between three Western Australian PHNs) via telephone interviews, online surveys, a workshop, a deliberative dialogue and email consultation. **Results.** Chronic pain was identified as a health and/or service need by approximately half of PHNs. Barriers for PHNs to identifying chronic pain as a need or priority are highlighted. Gaps identified by the mapping included: initiatives related to the secondary prevention of chronic pain (post-surgery or post-injury), digitally enabled consumer and health professional chronic pain initiatives, and chronic pain initiatives for specific populations groups such as Aboriginal and Torres Strait Islander people. Among existing PHN practice, two exemplar evidence-based initiatives suitable for scale-up across PHNs in Australia were identified: multidisciplinary community-based pain programs, and an online health professional capacity-building initiative, Project ECHO (chronic pain). Solutions identified by PHNs to increase capacity to commission initiatives included: co-funding initiatives across different PHN funding streams, collaborative initiatives between PHNs, and co-commissioning with government and non-government partners. **Conclusions.** Chronic pain has been classified as a disease in itself through the World Health Organization. PHNs recognising chronic pain as a distinct condition in PHN needs analysis and data collection would lead to more dedicated funding. PHNs could do more to improve the secondary prevention and management of chronic pain. A self-identified need for greater collaboration across PHNs and co-commissioning with local and state governments and non-government partners would help to build PHN capacity.

Keywords: chronic disease, chronic pain, delivery of health care: integrated, health services: accessibility, health services: needs and demands, implementation, primary health care, secondary prevention.

Introduction

Chronic pain is a major public health issue and is increasing due to the aging population (Blyth *et al.* 2019). It has been classified as a disease in itself through the World Health Organization (WHO-ICD 11) (Treede *et al.* 2019).

Secondary prevention of chronic pain focuses on those at risk of developing chronic pain in the post-surgery and post-injury phase. Risk factors for poor recovery are well documented and often modifiable; for example, depression, pain catastrophising, avoiding movement or activity, lack of social support and poor job satisfaction (Glare *et al.* 2019).

Given that multidisciplinary tertiary pain services cannot meet patient demand, greater involvement of primary care is needed (Hogg *et al.* 2021). Furthermore, the upscheduling of codeine to a prescription-only medication by the Therapeutic Goods Administration in Australia in 2018 provided a greater focus on the over-reliance on pain medications and its negative consequences and a desire for alternatives based on non-medication, multidisciplinary options.

Australian primary health networks (PHNs) have an important role in strategic planning, commissioning services, supporting general practices and other healthcare providers and supporting the integration of local healthcare services (Australian Government 2018); however, little is known about the scope of work of PHNs related to the management and secondary prevention of chronic pain.

The aims of this study were to understand the needs and priorities of Australian PHNs related to the management and secondary prevention of chronic pain; map current PHN chronic pain initiatives and identify gaps; highlight key enablers to implementation; and highlight solutions identified by PHNs to increase capacity to commission initiatives.

Methods

This study comprised mixed methodologies and an emergent complexity-informed approach as a way of prioritising actionable knowledge linked to context that is appropriate to address practical questions for PHN decision-makers (De Allegri *et al.* 2020).

Phase 1 focused on understanding the needs and priorities of PHNs and mapping their current chronic pain initiatives, via the following methods:

1. A review of publicly available core PHN needs assessments 2017–18 ($n = 31$) to understand the issues of PHNs related to chronic pain. Methods and additional results are described in a recent paper (Walker *et al.* 2021).
2. Consultation with executive-level staff and program managers from PHNs, and one state PHN alliance (the WA Primary Health Alliance (WAPHA) – an alliance between Perth North PHN, Perth South PHN and Country WA PHN), via telephone interviews and online surveys (December 2018 to February 2019) to understand the priorities, needs and issues of PHNs related to chronic pain; map current PHN chronic pain initiatives; identify key enablers to implementation of these initiatives; and assess PHN representatives' awareness of chronic pain initiatives in other PHNs. All PHNs and WAPHA were invited to participate in the consultation. Potential participants were identified via the PHN Cooperative Executive Officer, and the networks of the research team and steering group. PHN representatives were also encouraged to forward the invitation to any other PHN representatives that they thought would be interested in participating in the consultation using a snowballing sampling approach. Telephone interviews were recorded and transcribed verbatim.
3. A face-to-face workshop for PHN executive-level staff and program managers was conducted (March 2019) to report the findings from the consultation (outlined above), provide an opportunity for PHN representatives to discuss their chronic pain initiatives and foster collaboration between PHNs. Invitees included PHN representatives involved in the consultation. PHN representatives were also encouraged to forward the invitation to any other PHN representatives that they thought would be interested in participating in the workshop. Data collection included: PHN representatives' presentation slides from the workshop; audio recording of the group discussion; authors' notes from the workshop; and participant evaluation surveys.

Phase 2 sought to address a gap identified in Phase 1 of the study, PHN initiatives related to the secondary prevention of chronic pain, via the following method:

1. A deliberative dialogue (Lavis *et al.* 2009) with PHN executive-level staff and program managers was conducted (October 2019) to discuss relevant initiatives related to the secondary prevention of chronic pain; to identify initiatives that may be feasible for PHNs to implement considering their needs, capacity and local context; and to foster collaboration between PHNs. A rapid evidence review developed by the authors was pre-circulated to participants before the deliberative dialogue. Invitees included PHN representatives involved in the consultation (outlined above). PHN representatives were also encouraged to forward the invitation to any other PHN representatives that they thought would be interested in participating in the deliberative dialogue. The deliberative dialogue included presentation of the rapid review evidence by the authors, whole group discussion and smaller group discussions. Data collection included: audio recording of the final whole group discussion; authors' notes from small group discussions and whole group discussions; butcher's paper notes taken by PHN representatives in small group discussions; and participant evaluation surveys.

The study also involved communication with PHN representatives who had participated in the study, via email, to provide study updates and exchange relevant information about PHN chronic pain initiatives.

Data analysis

Quantitative data in the online surveys were synthesised using descriptive statistics. Thematic analysis (Miles *et al.* 2014) of

the qualitative data was conducted by the authors (SDM and PW) across the study components related to the following themes: (1) PHN health and service issues related to chronic pain; and (2) key enablers to implementation of PHN chronic pain initiatives. The subthemes were derived from the data by the primary author (SDM) and reviewed by the second author (PW) for validation, resolving any disagreements by discussion and consensus.

Ethics approval

The contents of this published material are solely the responsibility of the individual authors and do not reflect the views of the National Health and Medical Research Council (NHMRC) or funding partners. The research was approved by the University of Sydney Human Research Ethics Committee (HREC) Phase 1 Project no 2018/885 and Phase 2 Project no 2019/765.

Results

Participation

The research team consulted with executive-level staff and program leaders from all PHNs, apart from one metropolitan PHN in Victoria, (N = 27/28 PHNs and one state PHN alliance, WA Primary Health Alliance (WAPHA)), via: (1) online surveys (N = 26 representatives from 25 PHNs and WAPHA); (2) telephone interviews (N = 30 representatives from 22 PHNs and WAPHA); (3) a workshop (N = 28 representatives from 20 PHNs and WAPHA); (4) deliberative dialogue (N = 21 representatives from 16 PHNs and WAPHA); and (5) email consultation (representatives across PHNs and WAPHA who had participated in the study). Overall, the majority of PHN representatives who participated in this study participated in all study components. Metropolitan PHNs have ≥85% of the population in 'major cities', as defined by the Australian Bureau of Statistics. All other PHNs are classified as 'regional PHNs'.

Findings

The needs and priorities of PHNs related to chronic pain

Chronic pain was reported as a health and/or service need by approximately half of PHNs; that is, 12 out of 25 PHNs and WAPHA; and a priority by 9 out of 25 PHNs and WAPHA who participated in the telephone interviews/online surveys. All states and territories in Australia apart from the Northern Territory and Tasmania identified chronic pain as a priority in at least one PHN. Only 2 out of 13 regional PHNs (excluding one regional PHN as part of WAPHA) identified chronic pain as a priority.

Supplementary File S1 outlines PHN health and service needs related to chronic pain and the supporting qualitative evidence across the study components (PHN needs assessments, telephone interviews, online surveys, workshop and deliberative dialogue).

PHN health and service needs related to chronic pain identified across the study components included high prevalence of chronic pain in the community due mainly to musculoskeletal conditions (e.g. arthritis and back pain); increasing prevalence of chronic pain due to the aging population; poor access to specialist pain clinics with workforce shortages and increasing demand, compounded by limited reach to regional areas; a need for greater involvement of primary care in chronic pain management using a multidisciplinary approach; high opioid prescribing especially in regional areas; poor understanding of chronic pain among consumers and the general community; a lack of community-based consumer pain programs; poor access to allied health providers due to workforce shortages, particularly in regional areas, and cost barriers; and a need for greater education and training for primary care providers related to chronic pain.

Reasons highlighted by PHN representatives for not identifying chronic pain as a need or priority are outlined in Fig. 1.

Mapping of PHN chronic pain initiatives and identification of gaps

The findings from the consultation with PHNs (including the telephone interviews, online surveys, workshop,

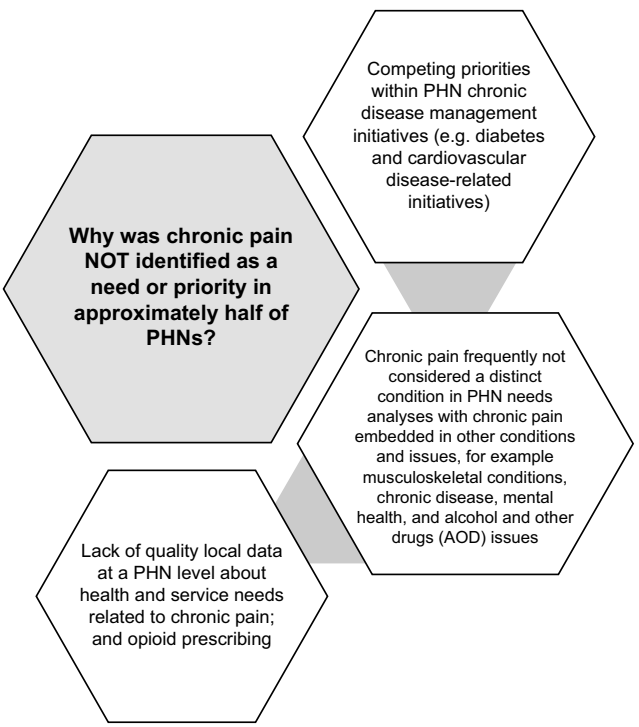

Fig. 1. Reasons highlighted by PHN representatives for not identifying chronic pain as a need or priority.

deliberative dialogue, and email consultation) informed the mapping of PHN chronic pain initiatives.

The map is based on three goals, adapted from the goals of the National Pain Strategy (Painaustralia 2010) and aligned with PHNs' remit (Australian Government 2018). Table 1 outlines the types of PHN chronic pain initiatives.

Among existing PHN practice, two exemplar evidence-based initiatives were identified: face-to-face multidisciplinary community-based pain programs implemented in six PHNs (including metropolitan and regional PHNs) and WAPHA, and an online health professional capacity-building initiative, Project ECHO (chronic pain), implemented in one regional PHN.

Gaps identified by the mapping included: initiatives related to the secondary prevention of chronic pain (post-surgery or post-injury), digitally enabled consumer and health professional chronic pain initiatives, and chronic pain initiatives for specific population groups such as Aboriginal and Torres Strait Islander people.

Implementation enablers identified by PHNs

A lack of shared knowledge among PHN representatives about chronic pain initiatives implemented by PHNs was demonstrated across the study components. Most PHNs rated their knowledge of chronic pain initiatives in other

Table 1. Map of primary health network (PHN) chronic pain initiatives.

Type of chronic pain initiative	Number of participating PHNs[B] implementing/commissioning type of chronic pain initiative
Goal 1: Access to multidisciplinary care and improving consumer health literacy and care navigation (consumer and community initiatives)	
A. Face-to-face multidisciplinary community-based pain programs (Jurisdictions[C]: NSW, Qld, SA, WA, NT; metro = 3, regional = 3, WAPHA[A])	7
B. Patient education events conducted during outreach visits by pain service (Jurisdiction: NSW; regional)	3
C. Telehealth-assisted pain management in partnership with NSW Agency for Clinical Innovation (Jurisdiction: NSW; regional)	4
D. Face-to-face consumer pain support groups (Jurisdiction: SA; metro)	1
E. Community pharmacist initiatives and non-dispensing pharmacist in general practices initiatives (Jurisdiction: Vic.; regional)	1
F. Community awareness campaigns related to pain – Pain Revolution (Jurisdictions: NSW, TAS; regional)	2
G. Community awareness campaigns related to pain – social media (e.g. Brainman; (Jurisdiction: NSW; regional))	1
H. Online information portals and distribution platforms for consumer pain information – excluding HealthPathways (Jurisdictions: NSW, Vic.; metro = 2, regional = 2)	4
Goal 2: Ensuring health professionals are skilled and provide best-practice evidence-based care (health professional capacity-building initiatives)	
A. Face-to-face pain education events for GPs and other primary care providers – frequency of education sessions vary by PHN, usually Royal Australian College of General Practitioner accredited, may be informed by GP surveys about topics of interest or policy changes (e.g. up-scheduling of codeine; Jurisdictions: all; metro and regional)	23
B. Face-to-face pain education (more than one session) for GPs and other primary care providers – Prescribed Drugs of Dependence Active Learning Modules – RACGP accredited (Jurisdiction: Vic.; regional)	1
C. Support for NPS MedicineWise educational visits to general practices (topics include low back pain and other conditions not related to chronic pain)	6
D. Support for Pain Revolution Local Pain Education (LPE) program (Jurisdictions: NSW, TAS; regional)	2
E. Digitally delivered pain education and training for GPs and other primary care providers – Project ECHO (Jurisdiction: Vic.; regional)	1
F. Digitally delivered pain education and training for GPs and other primary care providers – Webinar Skills Training in Pain Self-Management, Pain Management Research Institute, University of Sydney (Jurisdiction: NSW; metro = 1, regional = 3)	4

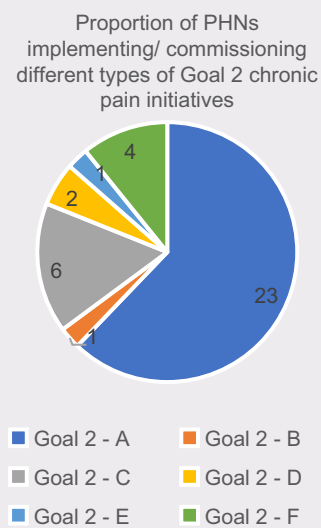

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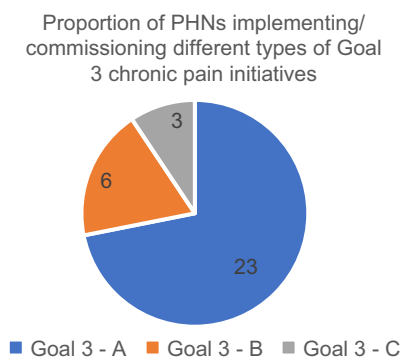
Table 1. (*Continued*).

Type of chronic pain initiative	Number of participating PHNs[B] implementing/commissioning type of chronic pain initiative
Goal 3: Quality improvement and health system support (health systems support initiatives)	
A. HealthPathways with relevant pain pathways (Jurisdictions: all; metro and regional)	23
B. Support for prescription drug monitoring systems (e.g. SafeScript:Jurisdiction: Vic.; metro and regional)	6
C. Evaluation of PHN community-based pain programs through Electronic Persistent Pain Outcomes Collaboration/ePPOC (Jurisdictions: NSW, WA; metro = 1, regional = 1, WAPHA)	3



[A]WAPHA/WA Primary Health Alliance – an alliance between Perth North PHN, Perth South PHN and Country WA PHN.
[B]For the purposes of the data analysis, WAPHA is represented as $N = 1$.
[C]Metropolitan PHNs have ≥85% of the population in 'major cities', as defined by the Australian Bureau of Statistics. All other PHNs are classified as 'regional PHNs'.

PHNs as *≤3 out of 10*. Furthermore, feedback following the workshop and deliberative dialogue highlighted that PHN representatives highly valued the opportunity to engage with each other:

> This is one of the few opportunities I have to talk to other PHNs about a problem that affects us all, and I really value it. (PHN representative, deliberative dialogue)

The key enablers to implementation of PHN chronic pain initiatives identified by PHNs are outlined in Table 2.

Solutions identified by PHNs to increase capacity to commission initiatives

PHN representatives identified limited resources as a barrier to commissioning chronic pain initiatives:

> We don't always have the resources to be able to do the stuff that maybe our region really needs. (PHN representative, interview)

Solutions proposed by PHN representatives are outlined in Table 3.

Discussion

Chronic pain as a distinct condition

Chronic pain has been classified as a disease in itself through the World Health Organization (WHO-ICD 11) (Treede *et al.* 2019) and our analysis indicates a widespread lack of recognition of this by PHNs, perhaps due to the lack of timely data related specifically to chronic pain available to PHNs to inform their PHN planning documents. PHNs recognising chronic pain as a distinct condition in PHN needs analysis and data collection would lead to more dedicated funding to support chronic pain initiatives and reduce the burden of chronic pain in their regions.

Secondary prevention of chronic pain

The mapping of PHN chronic pain initiatives in our study identified initiatives related to the secondary prevention of chronic pain as a gap, with no initiatives identified, despite evidence that these types of initiatives can be effective (Nicholas *et al.* 2011; Katz *et al.* 2015). Specifically, our study identified a gap related to upskilling primary care providers to identify people at risk of developing chronic pain after injury or surgery using risk-based assessments within the context of their own clinical reasoning and shared treatment decision-making with patients (Sowden *et al.* 2011). In addition, our study identified a gap related to initiatives to improve communication about pain care between hospital-based healthcare professionals and primary care providers in the transition of patients from hospital to home, with no initiatives identified. Australian data show that excess opioid supply at post-surgical discharge is widespread (Allen *et al.* 2020) and there is evidence that <10% of hospitals provide general practitioners with a pain management plan or an opioid de-escalation plan (SHPA 2018). Even among hospitals implementing opioid stewardship programs, there is inadequate communication between hospitals and general practice, occurring in only 18–22% of hospitals (Allen *et al.* 2019). PHNs are well placed to support better integration of primary and secondary care services (Javanparast *et al.* 2018; Swerissen *et al.* 2018) and to link to opioid

Table 2. Key enablers to implementation of Primary Health Network (PHN) chronic pain initiatives with supporting evidence across the study components.

Key enablers to implementation of PHN chronic pain initiatives	Example quotes from participants[A]	Study components				
		PHN NA[B]	Interviews	Online surveys	Workshop	Deliberative dialogue
Chronic pain identified as a priority, need or an issue in PHN needs assessments	Our needs assessment does outline that chronic pain is a need, and I don't think it's come up for the first time in this [needs] assessment. (PHN representative, interview)	✗	✗			
Local champions (clinician and non-clinical) within and outside of PHNs	I think it came about perhaps because during that commissioning cycle, there were people here at the PHN that said, 'This is something that could be of great value to support our population.' (PHN representative, interview)					
	Needs key person to drive it [the initiative]. (PHN representative, deliberative dialogue)	✗		✗	✗	
Sharing resources, expertise and governance through partnerships with state governments, Local Hospital Networks, local governments and non-government organisations	It started off with a governance group of both the hospital and the PHN and the community. So, it was established with that very strong co-joint sort of working group. And I guess because of that, then the relationships have continued. So that original governance, when it was determined as a need, and then resolving what that looked like, was very much done jointly, so very much along the lines of how PHNs are supposed to work. (PHN representative, interview)		✗		✗	✗
Government directives, policy windows and media coverage	Codeine up-scheduling, that was definitely the catalyst. (PHN representative, interview)	✗	✗			
Knowledge-sharing and collaboration between PHNs	Having the opportunity to collaborate with other PHNs about initiatives in their region. Looking at working together on pain initiatives, for example, a chronic pain community of practise, so that we can learn from each other and not re-invent the wheel. (PHN representative, deliberative dialogue)		✗		✗	✗
Adapting an initiative implemented in another PHN	It's just a nice straightforward thing and for me that was probably one of best decisions I think we made [to adapt their initiative]. There's also that consistency of being able to do something that X PHN is doing, Y PHN is doing, where that does help to build the evidence around these types of programs. (PHN representative, interview)		✗		✗	✗
Evaluation to provide rationale for continuing investment	Enablers, overall program evaluation is essential. (PHN representative, workshop)					
	We got permission from the Commonwealth to use some of our funding to look at our evaluation framework. One of the things that we are tasked with, of course, is making sure that the value for money, the patient experience. We know, with the pain program, from the feedback we get and from the evaluation results. (PHN representative, interview)	✗		✗	✗	

(*Continued on next page*)

Table 2. (*Continued*).

Key enablers to implementation of PHN chronic pain initiatives	Example quotes from participants[A]	Study components				
		PHN NA[B]	Interviews	Online surveys	Workshop	Deliberative dialogue
Linking with existing services	Link in/overlap with existing services, for example, with the integrated care team. (PHN representative, deliberative dialogue)					✗
Using established networks and referral pathways	In terms of one of the important considerations when we were setting it up was, the ex-Medicare Locals were delivering the pain program to certain areas, so they already had established networks and referral pathways, relationships in their local area. (PHN representative, interview)		✗			
Sufficient skilled workforce to deliver the initiative	When we first started there was no, there was very little allied health support in the area that we started it in. We were struggling to find allied health with specific interest in chronic pain. Whereas now, because the program has been running for a bit longer, it's been able to build up some local capacity to do that, so they now are able to be local community based. (PHN representative, interview)		✗		✗	✗
Committed, adequate funding	Enablers are committed, adequate funding. (PHN representative, workshop)		✗		✗	✗

[A]PHN names and any identifying features have been removed.
[B]PHN NA: Primary Health Network needs assessment.

stewardship programs to improve communication with general practitioners and ensure they are provided with a pain management plan. General practitioners also require skills to implement opioid tapering with patients using patient-centred communication (Darnall *et al.* 2019) and a self-management approach (Nicholas and Blyth 2016), and this training could be incorporated into current PHN education opportunities for primary care providers.

Digitally enabled health professional capacity-building initiatives

Digitally enabled health professional capacity-building initiatives such as Project ECHO have been implemented internationally to upskill health professionals in best practice pain care, particularly in regional areas to reduce healthcare disparities in the provision of pain care services between metropolitan and regional areas (Hassan *et al.* 2021). Our study identified two digitally enabled health professional capacity-building initiatives related to chronic pain, Project ECHO (chronic pain) implemented in one regional PHN and the Webinar Skills Training in Pain Self-Management (Pain Management Research Institute, University of Sydney) implemented in one metropolitan and three regional PHNs. Given that the COVID-19 pandemic has precipitated the rapid introduction of digitally enabled health professional education and increased confidence in using technology for education purposes (Shah *et al.* 2020), there is an even greater potential for PHNs to implement e-learning and hybrid education delivery models.

Initiatives for Aboriginal and Torres Strait Islander people with chronic pain

Our study identified a gap in PHN consumer initiatives and health professional capacity-building initiatives focusing on Aboriginal and Torres Strait Islander people with chronic pain, with no initiatives identified. Musculoskeletal pain is an important and poorly recognised issue in Aboriginal health care, and Aboriginal people are at higher risk of disabling musculoskeletal pain because pain conditions often co-exist with other health conditions and are associated with socioeconomic disadvantage (Lin *et al.* 2019). The experience of chronic pain and culturally appropriate management requires genuine engagement between patients and their healthcare professionals. There are benefits of adopting a culturally sensitive approach to improve health professionals' communication using, for example, a 'clinical yarning' approach (Lin *et al.* 2016). PHNs' remit is to support the health of Aboriginal and Torres Strait Islander people and to ensure cultural awareness and competency among primary care providers (Australian Government 2018). PHNs could provide education opportunities for primary care providers to upskill in appropriate communication with Aboriginal and Torres Strait Islander people with chronic pain.

Table 3. Solutions proposed by Primary Health Networks to increase capacity to commission initiatives with supporting evidence across the study components.

Solutions proposed by Primary Health Networks (PHNs)	Example quotes from participants[A]	Study components				
		PHN NA[B]	Interviews	Online surveys	Workshop	Deliberative dialogue
Using different funding pools within the PHN core flexible funding stream; and using different funding streams outside the core flexible funding stream such as Primary Mental Health Care, Drug and Alcohol (AOD) Treatment and Health Systems Improvement	[What I found most useful about the deliberative dialogue] was hearing about what other PHNs have tried, what funding buckets they are using. (PHN representative, deliberative dialogue) [We need] co-funding across the PHN in mental health, AOD and Care Pathways! (PHN representative, workshop) And if you got a clinical work group together, you could get your GPs engaged, and maybe you could use your HealthPathways budget, and it might not be 'your' [chronic disease] budget. So, looking at different pockets of money in your PHN. (PHN representative, deliberative dialogue) Unfortunately, our pain project didn't get up. We are wondering what funding streams PHN use to commission services? (PHN representative, workshop)				✗	✗
Co-commissioning initiatives with state governments, Local Hospital Networks, local governments, non-government organisations and the private sector (e.g. health insurers)	Seek co-funding by State government and insurers. (PHN representative, deliberative dialogue) We collaborate very closely. So, the PHN and LHD [Local Health District] own HealthPathways jointly so our team is half employees of both. (PHN representative, interview) So, the three regional pharmacotherapy area-based networks, have pooled their money to make this project work [Project ECHO-opioid management]. So, the PHN essentially pays for the hospital experts' hub time. (PHN representative, interview) Because the thing for us is, if it's a really effective program, then should we be looking at partnerships with the private insurers? Should we be looking at partnerships with the hospital and health service? I guess over time we really have to look and say, "How can this be made a sustainable model?'. (PHN representative, interview)		✗		✗	✗
Creating greater opportunities for PHN collaboration and co-commissioning of initiatives between PHNs	[The most useful aspect of the deliberative dialogue was] finding out what other 'like' PHNs are doing and what we could replicate or collaborate on. (PHN representative, deliberative dialogue) My team is quite involved in this idea of a national network for PHNs to stop the duplication. And that's part of this, we're three years old, so now we're ready to share a bit more. (PHN representative, interview) We have partnered with another PHN and our GP to put on an event. That was really successful. (PHN representative, interview)		✗		✗	✗

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Table 3. (*Continued*).

Solutions proposed by Primary Health Networks (PHNs)	Example quotes from participants[A]	Study components				
		PHN NA[B]	Interviews	Online surveys	Workshop	Deliberative dialogue
National PHN advocacy	Useful to share what works or challenges/ solutions. Useful to discuss national advocacy and links between PHNs. (PHN representative, deliberative dialogue)				✗	✗
	How do we work with government, federally, to get them to recognise, to fund Allied Health for pain, instead of funding medication for pain, which is currently the thing that they fund. (PHN representative, deliberative dialogue)					

[A]PHN names and any identifying features have been removed.
[B]PHN NA: Primary Health Network needs assessment.

Solutions identified by PHNs to increase capacity to commission initiatives

This study highlighted a lack of knowledge among PHN representatives about initiatives implemented in other PHNs and a desire for greater opportunities for communication between PHNs to improve knowledge-sharing, reduce duplication of processes and systems, and undertake collaborative initiatives. Although PHNs are constrained by a lack of a formal national PHN body (Russell and Dawda 2019), networking opportunities could be expanded for PHN executive-level staff and program leaders across PHNs in Australia. In addition, a central repository for evaluation reports (Russell and Dawda 2019) would help to facilitate knowledge-sharing among PHNs.

PHNs also identified a need to establish partnerships with stakeholders in government and non-government agencies to enable shared goals, joint planning and resource sharing. The implementation of HealthPathways in the Hunter New England area of New South Wales is an example of an initiative identified in this study involving successful partnerships and shared governance between the Hunter New England Central Coast PHN and the Hunter New England Local Health District (Gray *et al.* 2018). Co-commissioning has the potential to promote efficiency, overcome fragmentation and foster a more integrated primary healthcare system (Swerissen *et al.* 2018; Freeman *et al.* 2021; Koff *et al.* 2021); however, resources and support to PHNs are needed to encourage collaborative mechanisms (Freeman *et al.* 2021). The Ministry of Health, New South Wales state government, has recently developed a program to support co-commissioning between PHNs and Local Hospital Districts called patient-centred co-commissioning groups (PCCGs), jointly responsible for improving care for their communities, with the potential expansion of the program to include payers and providers from public, private, and non-government sectors to facilitate whole-of system integration (Koff *et al.* 2021).

Limitations

Our study represents the views and reporting of the PHN executive staff and program leaders who participated in the study only.

The primary focus of the study was to understand the scope of work currently being conducted by PHNs related to chronic pain. Further research would be useful to comprehensively explore the challenges, constraints and solutions identified by PHN representatives.

Conclusion

Few studies focus on Australian Primary Health Networks (PHNs) and little is known about the needs, priorities and scope of work of PHNs related to the management and secondary prevention of chronic pain. This paper describes the needs and priorities of PHNs; maps current PHN chronic pain initiatives and identifies gaps; and highlights key enablers to implementation. As commissioning bodies and supporters of primary care services, PHNs could do more to improve the secondary prevention and management of chronic pain to reduce the burden of chronic pain in their regions. Among existing PHN practice, two exemplar evidence-based initiatives were identified. Key enablers to implementation of PHN chronic pain initiatives have also been highlighted for PHN decision-makers. A self-identified need for greater collaboration across PHNs and co-commissioning with local and state governments and non-government partners would help to build PHN capacity.

Supplementary material

Supplementary material is available online.

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