

Establishing consensus on key elements and implementation enablers of community-based pain programs to support primary health network decision making: an eDelphi study

Pippy Walker ^{A,B,C}, Simone De Morgan^{A,B}, Andrew Wilson^{A,B} and Fiona M. Blyth^A

^AMenzies Centre for Health Policy and Economics, School of Public Health, Faculty of Medicine and Health, University of Sydney, Charles Perkins Centre D17, Camperdown, NSW 2006, Australia.

^BThe Australian Prevention Partnership Centre based at the Sax Institute, Level 3, 30C Wentworth Street, Glebe, NSW 2037, Australia.

^CCorresponding author. Email: pippy.walker@sydney.edu.au

Abstract. To address the growing burden of chronic pain, there is a need for national scale-up of community-based pain programs. Primary health networks (PHNs) are best placed to support this scale-up as commissioning bodies of health services. The aim of this eDelphi study was to establish expert consensus on best practice key elements of community-based pain programs and enablers important for program implementation and sustainability to support PHN decision making. A panel of experts was invited to complete three online survey rounds as part of a reactive eDelphi approach to provide feedback on the relevance and importance of proposed key elements and implementation enablers of community-based pain programs. Consensus of 70% agreement by experts was required for each survey round for items to remain, with comments from experts considered by the research team to agree on wording changes and the addition of new items. Ten experts (62.5%) completed all three survey rounds. Expert feedback resulted in a list of 18 best practice key elements of community-based pain program design and 14 program implementation enablers. Changes suggested by experts included the moving of items between lists, rephrasing of items and the addition of new items. The eDelphi results will serve as a resource for PHNs considering the commissioning of community-based pain programs and inform future research to assess the suitability and scalability of existing programs.

Keywords: chronic pain, preventive health services, primary health care, secondary prevention.

Received 6 July 2021, accepted 1 November 2021, published online 16 December 2021

Introduction

The global burden of chronic pain is significant and growing. Estimates indicate that by 2050, 5.23 million Australians (16.9%) will be living with chronic pain at a cost of A\$215.6 billion, which largely includes productivity costs as a result of the negative impact of chronic pain on individual health and well-being (Deloitte Access Economics 2019). Barriers to reducing the burden of chronic pain include limited access to pain services and limited awareness of multidisciplinary treatment options, with an over-reliance on pain medications (Australian Government Department of Health 2019). There is wide acknowledgement that investing in research and health service improvement in the primary care setting is needed to address these issues (Smith and Torrance 2011; Australian Government Department of Health 2019).

Best practice secondary prevention and management of chronic pain involves a multidisciplinary, biopsychosocial approach to support patient self-management (Kamper *et al.*

2015). Australia's primary healthcare system supports patient self-management via community-based chronic disease self-management education programs and financial incentives (via Medicare Benefits Schedule (MBS) items) for health professionals to develop care plans and provide multidisciplinary care (Jordan *et al.* 2008). While evidence continues to emerge for community-based pain programs (Kawi 2014; Turner *et al.* 2018; Hurstak *et al.* 2019; Joypaul *et al.* 2019), the absence of sufficient MBS support to implement this model of care has hindered the provision of these programs (Jordan *et al.* 2008; Painaustralia 2019).

Primary health networks (PHNs) are well placed to address this gap in service provision as federally funded commissioning bodies tasked with identifying and responding to local health service needs (Australian Government Department of Health 2016). However, despite widespread service access and opioid prescribing issues, currently only approximately one-quarter (8/31) of PHNs are commissioning community-based pain programs

(De Morgan *et al.* 2019). Recent consultation with PHN representatives found that most were unaware of what other PHNs are doing to support better prevention and management of chronic pain, and that most would be interested in this information and the opportunity to discuss resource and capacity requirements for implementation with other PHNs (De Morgan *et al.* 2019).

Although there is guidance for program facilitators on the clinical aspects of community-based pain programs (Torrance *et al.* 2011; Sharpe *et al.* 2020), guidance for commissioning bodies on the design and implementation of these programs is needed. Commissioning has been recognised as a complex process that requires the commissioning body to establish a clear and evidence-based vision for service design (Robinson *et al.* 2016). Given commissioning primary care services in Australia is a relatively new responsibility of PHNs (Robinson *et al.* 2016) and chronic pain programs to date have largely been provided in the tertiary setting (Tardif *et al.* 2021), drawing on local expertise to establish consensus on the key considerations for the delivery of this model of care in the community would support PHNs to address this service gap.

The aim of this study was to establish expert consensus on best practice key elements of community-based pain programs, as well as enablers important for program implementation and sustainability. These findings will serve as a foundation for research and the synthesis of information to support PHN decision making concerning the commissioning of pain programs.

Methods

Study design

This study used an adapted method of the traditional Delphi approach to derive consensus known as the 'reactive Delphi', where a predeveloped list of items was proposed in the first survey (McKenna 1994). This approach has been preferred over a qualitative first round where a list of items is generated by the expert panel for three reasons: (1) the researchers had compiled a list of key community-based pain program features based on a previous review of primary care chronic pain initiatives that identified Australian pain programs (Walker *et al.* 2020) and extensive consultation with PHN representatives regarding the design and implementation enablers of initiatives currently being commissioned by PHNs (De Morgan *et al.* 2019, 2020); (2) to reduce the time commitment of the expert panel; and (3) to minimise the amount of data to consolidate for the second survey so that this research could be completed in a timely manner.

This online Delphi process (eDelphi) involved the commonly adopted three survey rounds (Diamond *et al.* 2014), which were administered via REDCap (Harris *et al.* 2009) to a panel identified with expertise in pain programs in Australia. The process aimed to reach consensus on what was originally called a list of principles and a list of enablers of community-based pain programs by iteratively collecting and synthesising expert opinion. Based on expert feedback, this changed to a list of key elements and enablers of community-based pain programs, which is explained in more detail in the study results.

This eDelphi study followed the stages outlined by Mead and Moseley (2001), namely expert panel selection, formulating the questions, statement generation, reduction and categorisation,

rating and analysis and iteration, and the reporting guidelines and checklist provided by Hasson *et al.* (2000) for the design and reporting of Delphi surveys.

Ethics approval to conduct this study was obtained from the University of Sydney Human Research Ethics Committee (Project no. 2020/342) and consent was implied if the survey was completed.

Survey rounds and data collection

The initial list of best practice principles and implementation enablers was developed for the first survey by drawing on author knowledge from experience working in the field of pain and the previously mentioned literature (De Morgan *et al.* 2019, 2020; Walker *et al.* 2020). An initial draft was developed by one author (SDM) and discussed and refined over several meetings with another two authors (PW and FB).

The first survey was piloted by three colleagues of the research team before implementation in line with best practice (Hasson *et al.* 2000; Powell 2003; Gill *et al.* 2013), focusing on the clarity and language used in the instruction and questions, survey length and platform accessibility. Only small formatting changes resulted from piloting the survey.

In the first survey, experts were asked to indicate their opinion on the relevance of each of the 10 proposed best practice principles and 22 proposed implementation enablers (categorised into five themes). Experts were asked to indicate whether items should: remain in the list (unchanged), be removed from the list (not relevant to pain programs), be rephrased, be merged with another principle (because they refer to the same thing) or be included in the other list because they were an enabler rather than a principle or vice versa.

Experts could provide a rationale regarding any responses and add any additional (up to five) principles or enablers they felt should be included in each list. Demographic information was also collected in the first-round survey to describe the expert panel, including level of education, their pain-related roles, years of experience, Australian jurisdiction and area (metropolitan/regional).

The second and third surveys used a five-point Likert scale to establish the importance of each item in the list of key elements and implementation enablers. Experts were asked to indicate whether items were considered essential (must be part of community pain programs), very important (should be there but not essential), of average importance (an important part of community pain programs, but its absence will not change the program dramatically), of little importance (nice to have it, but it will not be missed if it is not included) or not important at all (remove from the list). Experts were again offered the opportunity to provide a rationale for their responses or suggest any changes at the end of each list, and any other comments at the end of the survey.

Study sample

Purposive sampling was used to identify and invite experts to participate in this process. Experts of interest included academics with expertise in pain research, clinicians specialising in pain management, developers and/or commissioned providers of pain programs, executive-level staff members of a peak pain agency and consumer advocates.

All invited participants were based in Australia, were already known to the researchers and represented a range of relevant disciplines (e.g. pain specialists, GPs, psychologists, physiotherapists, pharmacists and nurses). Sixteen experts were invited to participate in line with the literature, which recommends 10–18 experts on a Delphi panel (Okoli and Pawlowski 2004).

Survey distribution

This eDelphi process was conducted between June and September 2020. Individual survey links were sent to participants via email through REDCap, except for the third survey, which was sent from one of the researchers with the individual survey link copied from REDCap so that an individualised report could be attached.

Participants received brief feedback regarding changes that had been made to the list of key elements and enablers based on survey results on the first page of Surveys 2 and 3, with the addition of an individualised report to allow participants to review their responses from Round 2 against the average response of the group before completing the final survey (Hasson *et al.* 2000).

In line with the Delphi approach, participant identifiers were used so that researchers could remind non-responders and seek any necessary clarification on individual responses (Okoli and Pawlowski 2004). Each survey was live for 2 weeks, with a reminder sent out 1 week before the closure date to prompt participants to complete the survey. Subsequent surveys were only sent to those who participated in the previous survey round.

Analysis and iteration

Consensus of 70% agreement was used, as recommended in the literature (Sumsion 1998) and in line with other studies (Suris and Akre 2015; Arblaster *et al.* 2018; Williams *et al.* 2018), to retain a best practice key element or implementation enabler in the list (for Round 1, 70% responding ‘it should remain in the list’ or ‘it should be rephrased’; for Rounds 2 and 3, 3.5/5 on the importance rating scale).

Results were analysed using SAS version 9.4 to report on the number of respondents, the mean \pm s.d. for responses and the percentage of responders indicating that each principle and enabler should remain unchanged or be rephrased (Round 1) and is essential (5/5 rating) or very important (4/5 rating; Rounds 2 and 3).

The list of best practice key elements and implementation enablers were refined for Surveys 2 and 3 based on the results from the previous survey. This involved one author (PW) synthesising expert feedback and proposing areas for improvement for review and discussion with another two authors (SDM and FB) to come to an agreement on modifications to each list.

Results

Expert panel

The first survey achieved a 69% (11/16) response rate. One of these responses was a nominated proxy in place of an invited expert who also met the inclusion criteria to participate (involved in at least one pain-related role of interest). Only one expert did not go on to complete the second and third surveys due to time commitments. The proportion of experts that felt the survey was very easy or easy to complete increased with each survey (45% for Survey 1, 80% for Survey 2), with all participants

finding the survey easy to complete by Round 3. Table 1 presents the demographics of the expert panel that completed all three survey rounds.

Survey Round 1

All 10 proposed best practice principles of community-based pain programs achieved at least 70% agreement in Round 1 and remained in the list. Three of the 22 proposed implementation enablers fell below the 70% agreement, but the four (100%), four (80%) and two (50%) experts that did not agree indicated that these three enablers should be moved to the list of principles.

Reduction and categorisation

The research team reflected on expert feedback that some enablers were seen to be better suited to the list of principles. Over the three survey rounds it became clear that what were initially thought of as principles were better described as elements of community-based pain programs that focused on what PHNs could practically apply when selecting or designing their own programs. These elements included ensuring program facilitators were trained in pain management, including a pre-program session, incorporating activities in addition to education in group sessions, tailoring programs for different population groups (e.g. Aboriginal and Torres Strait Islander peoples) and items concerning program monitoring, evaluation and continuous improvement.

Table 1. Demographics of the expert panel that participated in all three survey rounds ($n = 10$)

| | <i>n</i> (%) |
|--|--------------|
| Highest level of education | |
| PhD | 2 (20) |
| Postgraduate degree/diploma | 6 (60) |
| Tertiary | 2 (20) |
| Pain-related roles ^A | |
| Academic with expertise in pain research | 3 (30) |
| Clinician specialising in pain management | 7 (70) |
| Developer and/or commissioned provider of pain programs | 3 (30) |
| Executive-level staff member of a peak pain agency | 2 (20) |
| Consumer advocate | 2 (20) |
| Other (Health Service Manager – Pain Management ^B) | 1 (10) |
| Years of experience | |
| 0–5 | 2 (20) |
| 5–10 | 0 |
| 10–15 | 1 (10) |
| 15–20 | 3 (30) |
| ≥20 | 4 (40) |
| Australian jurisdiction | |
| New South Wales | 6 (60) |
| Victoria | 1 (10) |
| Queensland | 2 (20) |
| Western Australia | 1 (10) |
| Area where professional activity is conducted | |
| Metropolitan area | 1 (10) |
| Regional area | 2 (20) |
| Metropolitan and regional areas | 7 (70) |

^AExperts could indicate more than one role.

^BExpert was previously involved in the commissioning of pain programs.

Table 2. Changes made to items proposed in Survey 1

| | Best practice principles (<i>n</i> = 10) | Implementation enablers (<i>n</i> = 22 under 5 themes) |
|---|---|---|
| No. items remaining the same | 3 | 4 |
| No. items rephrased | 6 (including 2 merged together) | 9 |
| No. items moved from the list of enablers to the other list | | 9 (including 2 enablers merged with a principle, and 1 being rephrased) |
| No. new items added | 2 | 1 |
| Total no. items for Survey 2 | 18 key elements (under 4 themes) | 14 implementation enablers (under 4 themes) |

In addition to moving items between lists, some rephrasing and the addition of new items to the list were necessary to incorporate feedback from the expert group relating to the importance of incorporating behaviour change principles, including family members or carers to support consumers, engaging experienced consumers to help validate participating consumers' lived experience with pain and to consider using multiple funding streams to support program implementation and sustainability.

The number of changes made to the two lists and the resulting number of items for Survey 2 are detailed in Table 2. This resulted in a list of 18 key elements and 14 implementation enablers, which were grouped under subheadings to break these longer lists into smaller coherent sections and to give a sense of the overall themes of best practice program design and implementation (Tables 3, 4).

Table 3. Final list and ratings of importance for each key element from survey rounds 2 and 3 (with 1 being not important at all and 5 being essential) (*n* = 10)

Unless indicated otherwise, data are presented as the mean \pm s.d. CALD, culturally and linguistically diverse

| Key element | Round 2 | Round 3 | % Rating 4 or 5/5 (Rounds 2/3) ^A |
|---|-----------------|-----------------|---|
| Multidisciplinary care | | | |
| 1. Apply the biopsychosocial model of pain using a multidisciplinary approach | 4.90 \pm 0.32 | 5 \pm 0 | 100/100 |
| 2. Focus on active self-management strategies and apply behaviour change principles | 5 \pm 0 | 5 \pm 0 | 100/100 |
| 3. Incorporate exercise and mood/stress management strategies in addition to education in group sessions ^B | 4.90 \pm 0.32 | 4.80 \pm 0.42 | 100/100 |
| 4. Provide education about safe and effective use of pain medicines, including opioids and complementary medicines | 4.80 \pm 0.63 | 4.70 \pm 0.67 | 90/90 |
| Led by health professionals | | | |
| 5. Be facilitated by primary healthcare professionals trained in pain management | 4.20 \pm 1.14 | 4.20 \pm 1.03 | 70/80 |
| 6. Provide education, training and support for healthcare providers involved in programs | 4.60 \pm 0.70 | 4.80 \pm 0.42 | 90/100 |
| Consumer focused | | | |
| 7. Be tailored to consumers with persistent pain (subacute or chronic) to address key issues and focus on awareness and prevention of pain-related disability ^C | 4.00 \pm 1.49 | 4.70 \pm 0.67 | 70/90 |
| 8. Provide group-based sessions with (or referrals to) individual consultations tailored to consumer needs | 4.60 \pm 0.52 | 4.60 \pm 0.52 | 100/100 |
| 9. Engage consumers who have previously completed the program, or other experienced consumers, to validate the lived experience with pain | 4.10 \pm 0.74 | 4.10 \pm 0.74 | 80/80 |
| 10. Address consumers' needs for support, which may involve the inclusion of family members and carers in aspects of the program ^D | 4.00 \pm 0.94 | 4.00 \pm 0.67 | 80/80 |
| 11. Include a pre-program session to provide education to consumers and their families/carers about the program | 4.40 \pm 0.97 | 4.50 \pm 0.71 | 70/90 |
| Accessible and appropriate | | | |
| 12. Ensure access for consumers of different backgrounds and locations | 4.60 \pm 0.52 | 4.80 \pm 0.42 | 100/100 |
| 13. Be tailored to Aboriginal and Torres Strait Islander people and CALD groups with persisting pain, acknowledging language, cultural norms and appropriate engagement pathways ^E | 4.60 \pm 0.52 | 4.50 \pm 0.53 | 100/100 |
| 14. Provide consumer resources that are tailored to the local context and consumer needs (e.g. acute vs chronic pain, Aboriginal, Torres Strait Islander and CALD consumers) | 4.50 \pm 0.85 | 4.50 \pm 0.71 | 80/90 |
| Continuous improvement and evaluation | | | |
| 15. Include a plan for monitoring and evaluation, which may involve the adoption of standardised data collection systems and partnerships with local universities | 4.50 \pm 0.53 | 4.70 \pm 0.48 | 100/100 |
| 16. Have key indicators to evaluate impact, and routinely collect data from consumers before, during and after the program | 4.50 \pm 0.71 | 4.80 \pm 0.42 | 90/100 |
| 17. Collect regular feedback from consumers, commissioned providers and other health professionals involved in the delivery of the program to evaluate program acceptance | 4.60 \pm 0.52 | 4.60 \pm 0.52 | 100/100 |
| 18. Include standardised processes for continuous improvement and adaptation based on evaluation findings | 4.60 \pm 0.52 | 4.60 \pm 0.70 | 100/90 |

^AWhere a rating of 5 = essential to pain programs and 4 = very important.

^BModified from 'Incorporate exercise or other active component (e.g. meditation) in addition to education in group sessions' after Round 3.

^CModified from 'Be tailored to consumers with acute, subacute and chronic pain' after Round 2.

^DModified from 'Be inclusive of family members and carers to help support consumers' after Round 3.

^EModified from 'Be tailored to Aboriginal and Torres Strait Islander people and CALD groups' after Round 2.

Table 4. Final list and ratings of importance for each enabler from Survey Rounds 2 and 3 (with 1 being not important at all and 5 being essential; $n = 10$)Unless indicated otherwise, data are presented as the mean \pm s.d.

| Implementation enabler | Round 2 | Round 3 | % Rating 4 or 5/5 (Rounds 2/3) ^A |
|--|-------------|-------------|---|
| Program commissioning, governance and management | | | |
| 1. Consider adaptation of an existing program that incorporates the key elements of community-based pain programs | 4.20 (0.63) | 4.10 (0.32) | 90/100 |
| 2. Identify a local champion | 4.40 (0.70) | 4.40 (0.84) | 90/80 |
| 3. Establish an advisory group of program providers and other key advisors to help plan, implement and monitor programs | 3.80 (0.79) | 3.90 (0.57) | 80/80 |
| Health professional engagement, communication and support | | | |
| 4. Establish links with local health districts, other relevant agencies, primary healthcare providers and commissioned providers to establish health professional networks and generate program referrals | 4.70 (0.48) | 4.40 (0.70) | 100/90 |
| 5. Promote the program widely through PHN, health professional and other local agency communications | 4.60 (0.52) | 4.70 (0.48) | 100/100 |
| 6. Establish standardised processes for referral into the program | 4.40 (0.70) | 4.50 (0.53) | 90/100 |
| 7. Establish standardised communication processes, including feedback of outcome data back to the referring doctor and other involved primary healthcare providers | 4.50 (0.71) | 4.60 (0.52) | 90/100 |
| 8. Facilitate and/or support the setup of health professional training and support to deliver the program (e.g. links with hospital pain specialists for clinical support) | 4.50 (0.53) | 4.60 (0.70) | 100/90 |
| Consumer engagement, communication and support | | | |
| 9. Ensure group sessions include regular breaks for participants | 4.70 (0.48) | 4.60 (0.70) | 100/90 |
| 10. Ensure resources provided to patients are accessible and user friendly (e.g. via multiple media sources, such as printed materials, emails, online videos, telephone or interactive videoconferencing) | 4.80 (0.42) | 4.70 (0.48) | 100/100 |
| 11. Consider the use of technology to expand access for patients that cannot attend group sessions (e.g. telehealth-based programs) | 4.40 (0.52) | 4.60 (0.52) | 100/100 |
| 12. Consider linking participants with or establishing local support groups facilitated by a healthcare provider to promote long-term behaviour change and patient engagement | 3.70 (0.82) | 3.80 (0.92) | 70/70 |
| Costs, funding and other resource considerations | | | |
| 13. Where possible, minimise costs to the consumer to participate in the program | 4.40 (0.70) | 4.50 (0.71) | 90/90 |
| 14. Consider a range of funding streams or combining funding from multiple streams, including chronic disease, mental health and alcohol and other drugs, in addition to co-commissioning opportunities with in-kind support from other agencies | 4.50 (0.53) | 4.60 (0.52) | 100/100 |

^AWhere a rating of 5 = essential to pain programs and 4 = very important.

Survey Rounds 2 and 3

All 18 key elements and 14 implementation enablers reached the minimum 70% agreement to remain in the list in both Surveys 2 and 3. The only change made to items included in Survey 2 was slight wording changes to two elements (see Elements 7 and 13 in Table 3) after Round 2 and rewording of two elements (see Elements 3 and 10 in Table 3) after Round 3. These changes were based on feedback from three experts in Round 2 and two experts in Round 3, who were consulted between survey rounds via email and contributed to the rewording of these elements. The three surveys with the three sets of lists that were provided to participating experts are available as Supplementary Material. The final list and mean scores with the percentage of the group that indicated items were either essential or very important from Surveys 2 and 3 for key elements and implementation enablers are presented in Tables 3 and 4 respectively.

Discussion

This research has demonstrated a high level of consensus among Australian-based experts in the field of pain for the key elements and enablers for implementation of community-based pain programs. The final response rate of 62.5% falls short of the recommended 70% (Sumson 1998), but this aligns with the

recommendation of having at least 10 experts in a panel (Okoli and Pawlowski 2004) and we found no notable difference in the type of pain-related roles of the invited experts that did and did not participate in the study.

The value of this approach, despite opting for the time-saving method of providing predetermined items in the first survey, was realised in the contribution of experts in identifying important additional items. This included consumer-focused items, such as the engagement of consumers in the delivery of programs and the inclusion of family members and carers for consumer support, which emulate priorities reported by consumers in research on international pain programs (Wainwright *et al.* 2014) and other health promotion programs (Middleton *et al.* 2016).

Another important enabler identified by experts was the consideration of multiple funding sources to support program implementation and sustainability. Although the benefits of co-design and co-commissioning in the context of service design by PHNs have been identified (Australian Government Department of Health 2018), a recent review of the PHN program has highlighted the need for more government support to build capacity in coordinated commissioning (The Evaluation Team 2018).

The overarching goal of conducting this research is to promote scale-up of community-based pain programs by compiling evidence to support PHN decision making as part of their population

health planning and commissioning cycles. However, it must be emphasised that this evidence is one piece of what is required to achieve this goal. As highlighted by Robinson *et al.* (2016), commissioning is a complex process and requires technical information in addition to critical relationships to work with local providers to tailor programs to the local context. Achieving this goal also relies on PHNs identifying a local need to address the secondary prevention and management of chronic pain, which currently is not the case for all PHNs (Walker *et al.* 2021).

We also recognise that although the focus of this research is to support PHNs, our findings largely reflect best practice primary health care and could be applied to pain management service delivery more broadly, regardless of funding and delivery arrangements.

Limitations

Although done purposively to address our aim of supporting PHNs, this research included Australian-based field experts and was specific to the Australian context, and therefore may not be applicable to the design and implementation of pain programs in other primary care settings and in other population settings. We also acknowledge the potential for biased responses or limited resulting items by providing a predetermined list in the Round 1 survey (Hasson *et al.* 2000).

Conclusion

This eDelphi process has successfully derived consensus among field experts on the key elements of community-based pain program design and enablers important for program implementation and sustainability. The resulting lists will serve as a resource for PHNs considering the commissioning of community-based pain programs and be used in future research working to synthesise information about currently available programs to further support national scale-up and address the increasing burden of chronic pain.

Data availability statement

The datasets generated and analysed during the present study are available from the corresponding author on reasonable request.

Conflicts of interest

The authors declare that they have no competing interests.

Declaration of funding

Funding for this research has been provided from the Australian Government's Medical Research Future Fund (MRFF). The MRFF provides funding to support health and medical research and innovation, with the objective of improving the health and well-being of Australians. MRFF funding has been provided to The Australian Prevention Partnership Centre under the MRFF Boosting Preventive Health Research Program. Further information on the MRFF is available at www.health.gov.au/mrff. This research was also supported by the Sydney Medical School Foundation, University of Sydney.

Acknowledgements

The authors acknowledge and sincerely thank the members of the expert panel for contributing their time to participate in this eDelphi study.

References

- Arblaster K, Mackenzie L, Matthews L, Willis K, Gill K, Hanlon P, Laidler R (2018) Learning from consumers: an eDelphi study of Australian mental health consumers' priorities for recovery-oriented curricula. *Australian Occupational Therapy Journal* **65**, 586–597. doi:10.1111/1440-1630.12518
- Australian Government Department of Health (2016) Primary Health Network Grant Programme Guidelines. Commonwealth of Australia, Canberra, ACT, Australia.
- Australian Government Department of Health (2018) Co-design in the PHN commissioning context.
- Australian Government Department of Health (2019) National Strategic Action Plan for Pain Management. Commonwealth of Australia, Canberra, ACT, Australia.
- De Morgan, S, Walker, P, Blyth, FM (2019) Review of Primary Health Network Chronic Pain Initiatives: Summary of findings from the consultation with Primary Health Networks. University of Sydney, Sydney, NSW, Australia. Available at https://preventioncentre.org.au/wp-content/uploads/2020/11/Review-PHN-chronic-pain-initiatives_Summary-of-findings-Jun-2019.pdf [Verified 17 May 2021]
- De Morgan, S, Walker, P, Blyth, FM (2020) Opportunities for Primary Health Networks to improve the management and secondary prevention of chronic pain: An updated information resource for Primary Health Networks. The Australian Prevention Partnership Centre and the University of Sydney, Sydney, NSW, Australia. Available at https://preventioncentre.org.au/wp-content/uploads/2020/11/1_Opportunities-for-PHNs-to-improve-prevention-of-chronic-pain-Aug-2020.pdf [Verified 5 September 2021]
- Deloitte Access Economics (2019) The cost of pain in Australia. Deloitte Access Economics, Canberra, ACT, Australia. Available at <https://www2.deloitte.com/au/en/pages/economics/articles/cost-pain-australia.html> [Verified 22 May 2021]
- Diamond IR, Grant RC, Feldman BM, Pencharz PB, Ling SC, Moore AM, Wales PW (2014) Defining consensus: a systematic review recommends methodologic criteria for reporting of Delphi studies. *Journal of Clinical Epidemiology* **67**, 401–409. doi:10.1016/j.jclinepi.2013.12.002
- Gill FJ, Leslie GD, Grech C, Latour JM (2013) Using a web-based survey tool to undertake a Delphi study: application for nurse education research. *Nurse Education Today* **33**, 1322–1328. doi:10.1016/j.nedt.2013.02.016
- Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, Conde JG (2009) Research electronic data capture (REDCap)—a metadata-driven methodology and workflow process for providing translational research informatics support. *Journal of Biomedical Informatics* **42**, 377–381. doi:10.1016/j.jbi.2008.08.010
- Hasson F, Keeney S, McKenna H (2000) Research guidelines for the Delphi survey technique. *Journal of Advanced Nursing* **32**, 1008–1015.
- Hurstak E, Chao MT, Leonoudakis-Watts K, Pace J, Walcer B, Wismer B (2019) Design, implementation, and evaluation of an integrative pain management program in a primary care safety-net clinic. *Journal of Alternative and Complementary Medicine* **25**, S78–S85. doi:10.1089/acm.2018.0398
- Jordan JE, Briggs A, Brand C, Osborne R (2008) Enhancing patient engagement in chronic disease self-management support initiatives in Australia: the need for an integrated approach. *Medical Journal of Australia* **189**, S9–S13. doi:10.5694/j.1326-5377.2008.tb02202.x
- Joy Paul S, Kelly FS, King MA (2019) Turning pain into gain: evaluation of a multidisciplinary chronic pain management program in primary care. *Pain Medicine* **20**, 925–933. doi:10.1093/pm/pny241
- Kamper SJ, Apeldoorn AT, Chiarotto A, Smeets RJ, Ostelo RW, Guzman J, van Tulder MW (2015) Multidisciplinary biopsychosocial rehabilitation for chronic low back pain: Cochrane systematic review and meta-analysis. *BMJ (Clinical Research Ed.)* **350**, h444. doi:10.1136/bmj.h444
- Kawi J (2014) Influence of self-management and self-management support on chronic low back pain patients in primary care. *Journal of the American*

- Association of Nurse Practitioners **26**, 664–673. doi:10.1002/2327-6924.12117
- McKenna HP (1994) The Delphi technique: a worthwhile research approach for nursing? *Journal of Advanced Nursing* **19**, 1221–1225. doi:10.1111/j.1365-2648.1994.tb01207.x
- Mead D, Moseley L (2001) The use of the Delphi as a research approach. *Nurse Researcher* **8**, 4–23. doi:10.7748/nr2001.07.8.4.4.c6162
- Middleton R, Moxham L, Parrish D (2016) Diabetes, older people and exercise: recommendations for health promotion programs *The Australian Nursing Journal* **23**, 32.
- Okoli C, Pawlowski SD (2004) The Delphi method as a research tool: an example, design considerations and applications. *Information & Management* **42**, 15–29.
- Painaustralia (2019) Painaustralia Medical Benefits Schedule review: draft report from the pain management clinical committee. Available at <https://www.painaustralia.org.au/static/uploads/files/mbs-taskforce-painmanagementcommitteerec-submission-from-painaustralia-wfctpqkfmyyf.pdf> [Verified 14 May 2021]
- Powell C (2003) The Delphi technique: myths and realities. *Journal of Advanced Nursing* **41**, 376–382. doi:10.1046/j.1365-2648.2003.02537.x
- Robinson S, Dickinson H, Durrington L (2016) Something old, something new, something borrowed, something blue? Reviewing the evidence on commissioning and health services. *Australian Journal of Primary Health* **22**, 9–14. doi:10.1071/PY15037
- Sharpe L, Jones E, Ashton-James CE, Nicholas MK, Refshauge K (2020) Necessary components of psychological treatment in pain management programs: a Delphi study. *European Journal of Pain* **24**, 1160–1168. doi:10.1002/ejp.1561
- Smith BH, Torrance N (2011) Management of chronic pain in primary care. *Current Opinion in Supportive and Palliative Care* **5**, 137–142. doi:10.1097/SPC.0b013e328345a3ec
- Sumsion T (1998) The Delphi technique: an adaptive research tool. *British Journal of Occupational Therapy* **61**, 153–156. doi:10.1177/030802269806100403
- Suris JC, Akre C (2015) Key elements for, and indicators of, a successful transition: an international Delphi study. *The Journal of Adolescent Health* **56**, 612–618. doi:10.1016/j.jadohealth.2015.02.007
- Tardif H, Hayes C, Allingham SF (2021) Opioid cessation is associated with reduced pain and improved function in people attending specialist chronic pain services. *The Medical Journal of Australia* **214**, 430–432. doi:10.5694/mja2.51031
- The Evaluation Team (2018) Evaluation of the Primary Health Networks Program. Available at <https://www.health.gov.au/resources/publications/evaluation-of-the-primary-health-networks-program> [Verified 9 December 2021]
- Torrance N, Smith BH, Elliott AM, Campbell SE, Chambers WA, Hannaford PC, Johnston M (2011) Potential Pain Management Programmes in primary care. A UK-wide questionnaire and Delphi survey of experts. *Family Practice* **28**, 41–48. doi:10.1093/fampra/cmq081
- Turner BJ, Liang Y, Simmonds MJ, Rodriguez N, Bobadilla R, Yin Z (2018) Randomized trial of chronic pain self-management program in the community or clinic for low-income primary care patients. *Journal of General Internal Medicine* **33**, 668–677. doi:10.1007/s11606-017-4244-2
- Wainwright D, Boichat C, McCracken LM (2014) Competing patient and professional agendas in service development. *Journal of Health Organization and Management* **28**, 777–794. doi:10.1108/JHOM-08-2013-0157
- Walker P, De Morgan S, Sanders D, Nicholas M, Blyth FM (2020) Primary care initiatives focused on the secondary prevention and management of chronic pain: a scoping review of the Australian literature. *Australian Journal of Primary Health* **26**, 273–280. doi:10.1071/PY20092
- Walker P, Cornell S, De Morgan S, Bonner C, Blyth FM (2021) Chronic pain and cardiovascular disease prevention in primary care: a review of Australian Primary Health Network needs assessments. *Australian Health Review*. doi:10.1071/AH21058
- Williams KE, Sansoni J, Morris D, Thompson C (2018) A Delphi study to develop indicators of cancer patient experience for quality improvement. *Supportive Care in Cancer* **26**, 129–138. doi:10.1007/s00520-017-3823-4