

Arthritis Australia 2024 National Research Program

Project Grant

Final report

Living clinical practice guidelines for management of shoulder pain in primary care: Priority questions

Principal Investigator:

Dr Romi Haas

Musculoskeletal Health and Wiser Health Care Units, School of Public Health and Preventive Medicine, Monash University

Level 4, 553 St Kilda Rd,

Melbourne, VIC, 3004

T: +61 409 010 626

E: romi.haas@monsh.edu

Research team:

Professor Rachelle Buchbinder

Dr Samuel Whittle

Professor Ilana Ackerman

Professor Richard Page

Dr Danielle Berkovic (consumer representative)

Lay Summary:

Many people experience shoulder pain, which can interfere with daily life, sleep, work and mental wellbeing. It is one of the most common musculoskeletal problems seen in primary care. Yet current clinical guidelines for managing shoulder pain are often outdated, low in quality, and developed without enough input from clinicians or people with lived experience.

This project was the first step in creating a high-quality, continuously updated (“living”) clinical guideline for people with shoulder pain in Australia. Living guidelines are regularly updated as new research emerges, ensuring that recommendations remain current, evidence-based, and relevant to clinicians and patients.

We used a structured two-phase Delphi survey to identify the most important clinical questions. Nearly 200 participants took part, including general practitioners, physiotherapists, rheumatologists, shoulder surgeons, researchers, and people living with shoulder pain.

Together, they identified priority areas such as: how to distinguish between different shoulder conditions, which clinical tests are most useful, when imaging or specialist referral is needed, the role of medicines and steroid injections, benefits of exercise and other non-drug treatments, and what types of surgery are effective. People with shoulder pain also highlighted the importance of self-management, education, functional aids, and complementary therapies like acupuncture, cupping, and herbal medicine.

This project provides the foundation for national living guidelines on shoulder pain. These guidelines will focus on what matters most, helping people and their healthcare providers make better decisions. They will also ensure new evidence is used quickly, with the aim of improving quality of life and avoiding unnecessary healthcare costs.

Background:

Shoulder pain is a common and disabling condition, affecting nearly one in four adults¹. It can result in persistent pain, functional limitations, sleep disturbance, psychological distress, and reduced work participation, and is the third most frequent musculoskeletal presentation in primary care^{2, 3}. Current clinical practice guidelines for shoulder pain are mostly outdated, of low quality, and developed with limited clinician and consumer input^{4, 5}. ‘Living’ clinical practice guidelines offer an innovative approach by continuously updating recommendations as new evidence emerges, ensuring care remains current, evidence-based, and aligned with consumer values. This project represents the first critical step in developing a high-quality ‘living’ clinical practice guideline for shoulder pain in primary care.

Aim:

To identify the most relevant clinical questions to prioritise for the development of Australian Living Guidelines for the management of shoulder pain in primary care.

Methods:Study Design

This project used a modified two-phase Delphi method, a structured approach for eliciting and refining group judgements, adapted from previous work identifying priority questions for Australian living guidelines in inflammatory arthritis^{6, 7}.

Participant Selection

Participants consisted of clinicians involved in shoulder pain management (general practitioners, physiotherapists, rheumatologists and shoulder surgeons), as well as shoulder researchers and people with lived experience of shoulder pain. Recruitment was conducted via

direct email from the principal investigator, professional or consumer associations, snowballing and social media advertising.

Delphi Procedure

In Phase 1, participants completed a web-based free-text survey to generate an exhaustive list of potential clinical questions, submitting 3–10 questions each. Submitted questions were independently coded and refined into a list of unique items. In Phase 2, participants ranked the refined list to identify the highest-priority questions, scoring each from 10 (most important) to 1 (least important). Scores were summed to determine overall priorities and compared across stakeholder groups.

Project Outcomes:

The project successfully identified and prioritised the most relevant clinical questions to guide the development of Australian living clinical practice guidelines for shoulder pain in primary care. Using a modified two-phase Delphi process, we obtained input from 192 participants, including 83 consumers, 27 general practitioners, 44 physiotherapists, 36 rheumatologists, 6 shoulder surgeons, and 8 shoulder researchers (with some respondents identifying across multiple categories).

This process highlighted priority questions related to imaging, diagnostic examination tests, differential diagnosis, pharmacological and non-pharmacological interventions (particularly exercise), steroid injections, referral pathways, and surgery. Consumers also emphasised priorities around self-management, education, functional aids and complementary non-pharmacological options such as acupuncture, cupping, and herbal medicine.

These priorities provide a clear evidence-informed foundation for developing a high-quality living guideline for shoulder pain that reflects clinician and consumer perspectives, supports evidence-based decision-making, and facilitates rapid translation of emerging evidence into clinical practice.

Next Steps

The next stage will determine which of these questions are best suited to a ‘living’ mode, including those with uncertainty in the existing evidence base and for which emerging evidence is likely to change practice.

Impact and Translation:

This project directly supports evidence-based care for people with shoulder pain, ultimately aiming to improve their quality of life. By focusing on the questions most important to clinicians and consumers, the resulting guideline will be tailored to user needs, increasing the likelihood of implementation in primary care. Meaningful stakeholder engagement from the outset further supports guideline uptake. Overall, this project addresses a well-documented evidence–practice gap, with the potential to reduce the burden of disease and unnecessary healthcare costs.

Consumer Involvement:

This project actively involved consumers both investigators and research participants, aligning with Research Australia’s recommendation that Arthritis Australia support consumer-driven research. Dr Danielle Berkovic, a consumer-led researcher, guided survey design and interpretation of consumer-submitted questions. Contributions from the Australia and New Zealand Musculoskeletal (ANZMUSC) Clinical Trials Network Consumer Advisory Group

and the participation of 83 consumers in the Delphi survey ensured findings reflected lived experience.

Research Outputs:

- **Publications:** Manuscript underway
- **Presentations:** Abstract planned for submission to the Australian Rheumatology Association 2026 Annual Scientific Meeting.
- **Ongoing Reporting:** The research team will update Arthritis Australia on future outcomes, including publications, media coverage and national funding applications.

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