

Scientific summary (Scientific report)

a. *What were the main scientific objectives of the grant?*

By eliciting the views of people with shoulder pain and health professionals, the aim of this project was to develop a decision-making tool that presents un-biased scientific information on the benefits and harms of shoulder surgery (e.g. subacromial decompression surgery and rotator cuff repair surgery) and non-surgical treatments for people with subacromial pain syndrome (the most common form of shoulder pain).

b. *What were the main scientific achievements of the grant? Your answer should be at least 200 words.*

By eliciting views of key stakeholders, we developed a patient decision aid that presents evidence-based information on the benefits and harms of subacromial decompression surgery and rotator cuff repair surgery for subacromial pain syndrome compared to non-surgical options. Most health professionals and people with shoulder pain rated all aspects of decision aid usability as adequate-to-excellent (e.g., length, amount of information, presentation, comprehensibility).

Interviews highlighted agreement among health professionals and people with shoulder pain on most aspects of the decision aid (e.g. treatment options, summary of benefits, harms and practical issues, questions to ask a health professional, graphics, formatting). However, some aspects of the decision aid elicited divergent views among health professionals (e.g. causes and symptoms of shoulder pain, evidence on benefits and harms).

Highly consistent feedback included praise for including the practical issues of surgery and non-surgical options (e.g. time off work, anaesthetic) and a global summary of the benefits and harms of each, and praise for including a section on 'questions to ask a health professional'. Health professionals and patients largely agreed with the presentation of non-surgical and surgical options, with some patients pleased to have 'wait and see' included as this aligned with their experience of pain that has resolved without treatment. Most health professionals and patients wanted non-surgical options listed before surgery to mimic treatment recommendations in real-life.

c. *What problems, if any, did you encounter in achieving the project's objectives, and how did you address them?*

We were slightly delayed in obtaining ethics and site-specific approval due to COVID-19. We had to change our protocol so all interviews were conducted via Zoom. However, by dedicating more time to this project once ethics was approved, we were able to complete the study on time.

d. *Have you disseminated, or plan to disseminate, the results of this research? Please tell us about:*

- *References for peer-reviewed papers that have been published (please provide pdf copies of papers if possible)*
- *Papers that have been submitted and/or accepted for publication*
- *Meetings/conferences at which you have presented this research, or are due to present it (please provide abstracts if possible)*
- *Any other ways in which you may have disseminated the research, including to the public and the media (please provide urls to relevant press releases or media articles)*

We are just about to submit the report of our findings to BMJ Open. We are yet to present the results at a scientific conference.