

# SHOULDER PAIN: SHOULD I HAVE SURGERY?

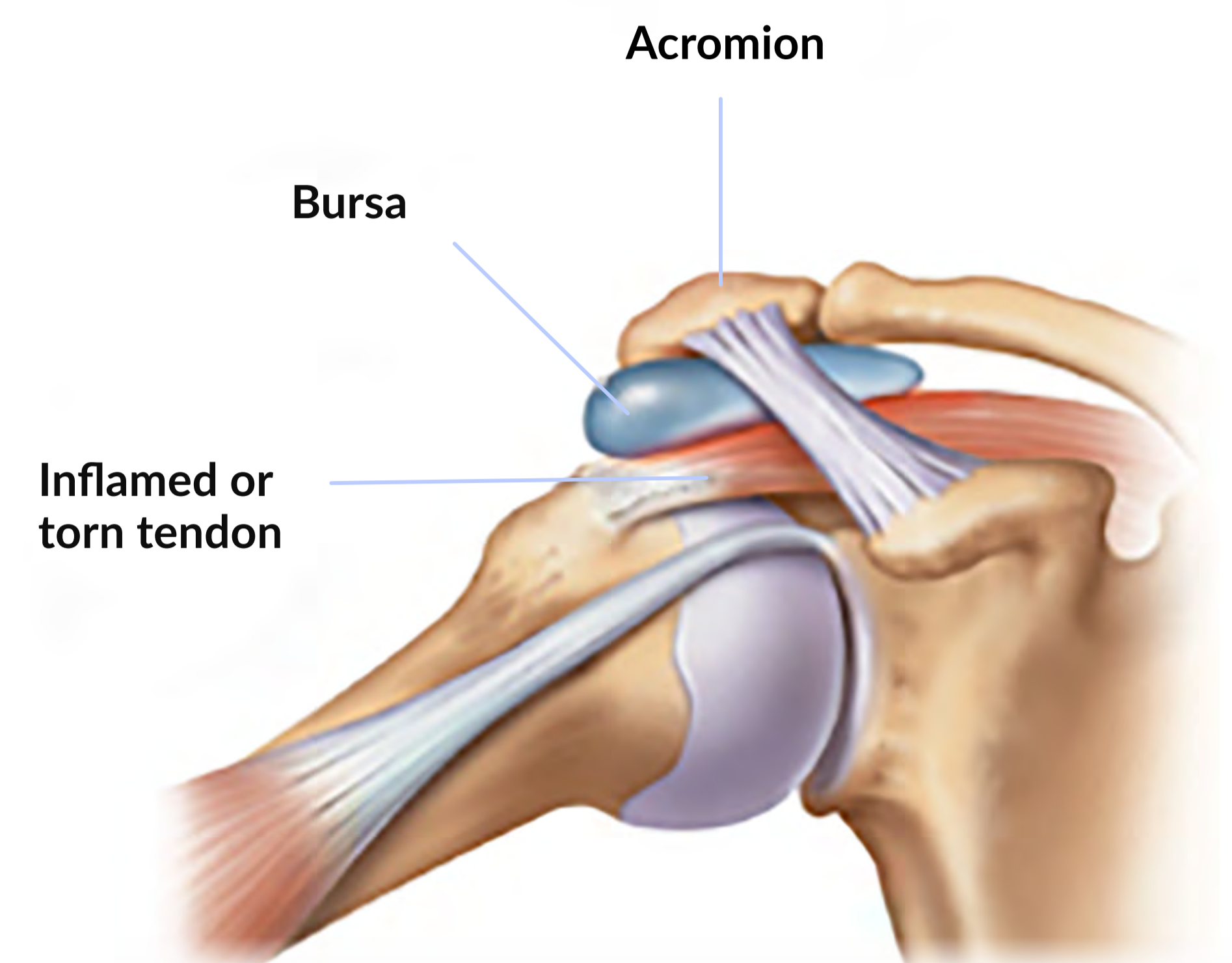
All information in this decision aid should be discussed with a health professional

## + Who should read this decision aid?

This decision aid is for people with persisting shoulder pain that is likely due to issues with rotator cuff tendons that move and support the shoulder (eg. inflammation, tears).

This type of pain often occurs around the shoulder. It makes it difficult to do simple tasks that involve lifting your arm above your head (eg. washing hair).

**This decision aid does not apply to people who have other causes of shoulder pain** like frozen shoulder (which causes pain and severe stiffness), osteoarthritis, or shoulder pain that begins after trauma immediately resulting in loss of movement or strength (eg. sudden rotator cuff tear, fracture, dislocation). If you're unsure of the cause of your pain, see a health professional.

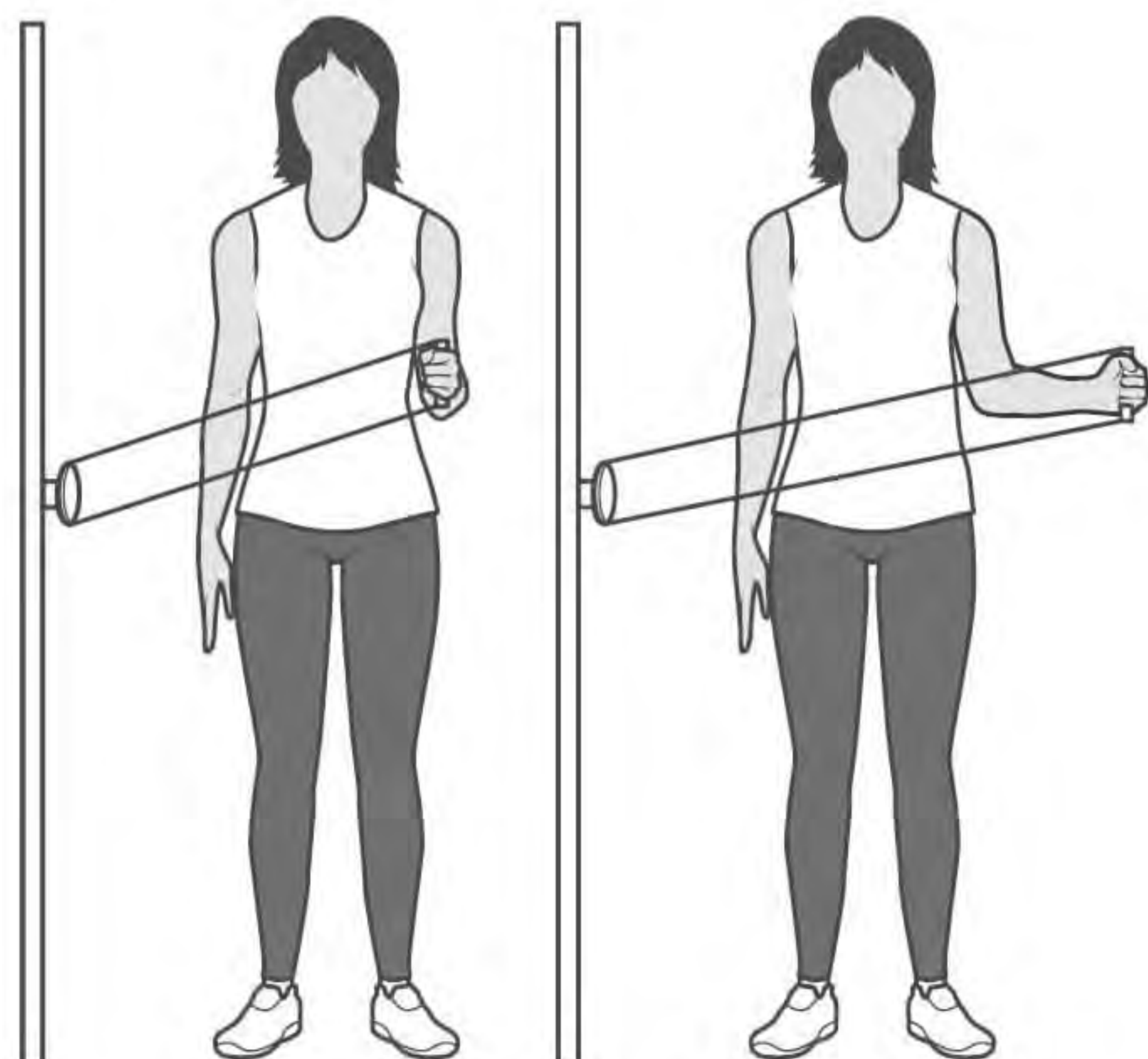


## + What are the treatment options covered in this decision aid?

### NON-SURGICAL OPTIONS

Trying the following non-surgical options is recommended before considering surgery:

- Wait to see if your symptoms improve by themselves (roughly half of all people with these symptoms will recover within 6 months) and/or change your activities until the pain settles (eg. avoid carrying heavy grocery bags or take a break from sport if these activities cause pain)
- Take simple pain medicine (eg. paracetamol, anti-inflammatories)
- See a health professional (eg. physiotherapist) for advice on changing some daily activities and/or some muscle strength and endurance exercises
- See a health professional (eg. doctor) for a corticosteroid injection



### SURGERY FOLLOWED BY 3-12 MONTHS REHABILITATION

You may consider surgery if the non-surgical options do not work and you can no longer put up with the pain. Typically surgery is not performed unless you have had symptoms for at least 3-6 months.

Surgery requires staying in hospital, having an anaesthetic and small skin cuts in your shoulder so the surgeon can perform one or both of the following:

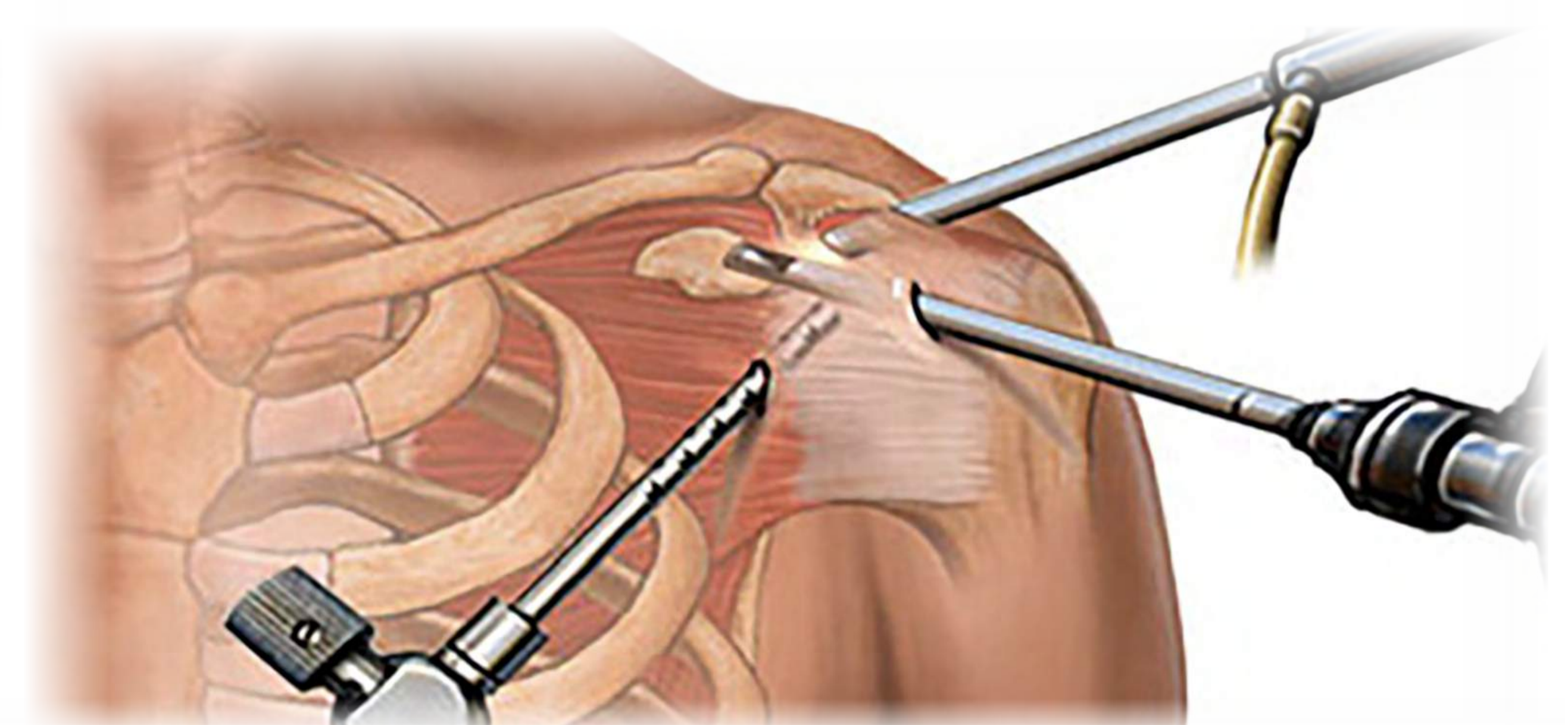
#### ✓ Subacromial decompression surgery

Increase the space under the acromion by either shaving back some bone, trimming some ligament and/or removing a bursa

#### ✓ Rotator cuff repair surgery

Reconnecting torn rotator cuff tendons

You will need to have rehabilitation involving exercises for at least 3 months following surgery. Much of this rehabilitation can be done at home.



## + What are the likely benefits of surgery compared to non-surgical options?

The figures on this page are based on the most up-to-date medical research as of 2020 (see references at the bottom of this page)

### KEY MESSAGE

On average, patients report that surgery **improves pain and function by less than 10%** (ie. an improvement in pain or function of less than a 1 point on a 0-10 pain scale) compared to non-surgical options in the short term (6 months after) and longer term (1-2 years after) <sup>c</sup>. Because most patients do not notice these improvements, research concludes:

- Subacromial decompression surgery is not better than placebo or non-surgical options (ie. injections, exercise, medication or no treatment) for people with shoulder pain and no full-thickness rotator cuff tears <sup>A</sup>
- Rotator cuff repair surgery is little-to-no better than non-surgical options for people with full-thickness rotator cuff tears <sup>B</sup>

These results are averages. Surgery improves pain and function by more than 10% for some patients. But other patients have either **no improvements or worse** pain and function after surgery.

#### Further information:

<sup>A</sup> For subacromial decompression surgery, we are very confident about this key message because research on this surgery is high-quality. This research was mostly conducted on people aged in their 40s, 50s and 60s, but is the best evidence we have for all ages.

<sup>B</sup> For rotator cuff repair surgery, we are somewhat confident about this message because there is lack of high-quality research on this surgery. This research was mostly conducted on people aged in their 50s and 60s but is the best evidence we have for all ages. Research on rotator cuff repair surgery does not apply to people who tear a tendon following trauma, or people with a full-thickness tear of the subscapularis tendon.

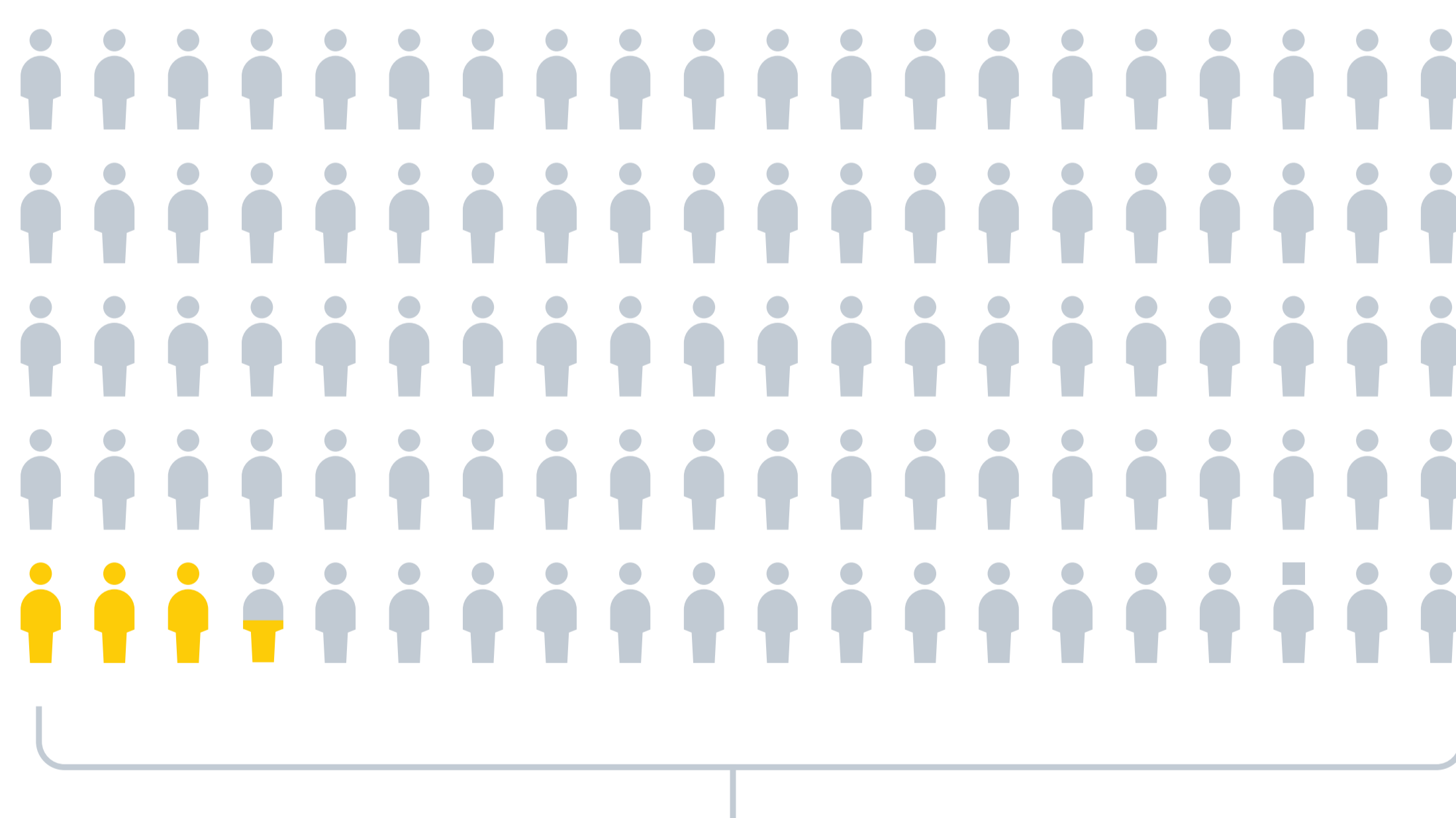
<sup>C</sup> Research suggests exercise or activities that you can do yourself at home may be just as helpful as a supervised exercise program.

## - What are the likely harms of surgery?

Think of each figure as 1 person. We can't predict if you will be one of the people who is harmed. Harms are more common among people with other health conditions (e.g. diabetes, heart disease).

● has frozen shoulder or minor harms

● has serious problems



**About 3 people per 100**

that have surgery will develop frozen shoulder (which may cause shoulder pain and stiffness for up to 2 years) or minor harms with surgery.



**About 1 person per 100**

that has surgery will have serious (and potentially life-threatening) problems like infection, nerve injury, heart attack, stroke and pneumonia.

**Important information:** The information in this decision aid is not intended as medical advice and should not be used as a substitute to seeing a qualified health professional who can determine your medical needs.

**References:** 1) Karjalainen TV, et al. Cochrane Database Syst Rev. 2019, Issue 1. Art. No.: CD005619;  
2) Karjalainen TV, et al. Cochrane Database Syst Rev. 2019, Issue 12. Art. No.: CD013502;  
3) Page MJ, et al. Cochrane Database Syst Rev. 2016, Issue 6. Art. No.: CD012224.

## + Summary of benefits, harms, and other practical issues

### NON-SURGICAL OPTIONS

#### ✓ Potential benefits

- May **improve by itself** (within 6 months half of people will recover) or with non-surgical options (ie. injections, exercise, or medication)
- **Avoid surgery**

#### − Potential harms

- May decide to **have surgery later**
- **Cost of non-surgical options** (eg. injection, physiotherapy)
- **Time to attend health appointments** (eg. for physiotherapy)
- Regardless of what treatment you have, your symptoms **may not improve**

### SURGERY FOLLOWED BY 3-12 MONTHS REHABILITATION

#### ✓ Potential benefits

- May provide **slight improvement in pain and function** compared to non-surgical options

#### − Potential harms

- Possible **surgical harms** (eg. frozen shoulder, infection)
- Your symptoms **may not improve** with surgery
- **Symptoms will temporarily be worse after surgery** due to the operation (eg. pain when sleeping or moving your arm)
- **Rehabilitation for 3-12 months** after surgery and time to attend rehabilitation
- May take up to **6 weeks** after subacromial decompression and **12 weeks** after rotator cuff repair to perform daily activities (eg. reach above your head, lift heavy objects)
- May take **3-4 months** after subacromial decompression and **6-12 months** after rotator cuff repair to return to heavy manual work, exercise, or sport
- **Out-of-pocket costs** are generally higher for surgery than non-surgical options. There may be **costs for rehabilitation** after surgery and due to **time needed off work**

## + Questions to consider when talking with a health professional...

- 🔍 Do I need surgery? What happens if I don't have surgery? What happens if I do nothing?
- 📊 Is surgery suitable for me? Which surgery is suitable for my diagnosis?
- 👤 Can I have surgery later? If so, how long should I wait before considering surgery?
- 🗨️ Have I considered my situation before making any decisions (eg. age, pain severity, activity levels, job demands, insurance coverage, caring responsibilities, involvement in sport, etc)?
- 📋 Do I understand enough about my condition and the benefits and harms of having surgery and not having surgery?



**Discloser:** Arthritis Australia provided funding to develop this tool but had no involvement in the development process. The developers of this decision aid include orthopaedic surgeons, rheumatologists, physiotherapists, psychologists and occupational therapists, who have a range of views on the information in this decision aid. 8/11 developers have a PhD. None of the developers will gain or lose anything based on the choices that people make. Feedback from people with shoulder pain and health professionals practicing in various countries was used to refine the information presented in this decision aid.

**Last reviewed:** 27/05/21. Update due 27/05/23.

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