

## QUICK REFERENCE GUIDE

# Post-operative rehabilitation after rotator cuff tear surgery or shoulder arthroplasty: Inpatient or outpatient care?

January 2008

## OBJECTIVES

- To help doctors make the right decision when prescribing physiotherapy after rotator cuff surgery or shoulder arthroplasty by enabling them to assess whether the patient should be hospitalised in order to receive post-operative rehabilitation.
- To specify what information needs to be exchanged between the surgeon and the physiotherapist in order to implement the patient's rehabilitation, regardless of where it is performed.

**Issue:** To avoid inappropriate hospitalisation in rehabilitation centres, in accordance with the Social Security Funding Act No 2005-1579 of 19 December 2005 amending Article L. 162-2-2 of the Social Security Code.

## KEY POINTS

- Rehabilitation is recommended for all patients after shoulder arthroplasty or rotator cuff surgery, regardless of the surgical technique proposed (grade C).
- After shoulder arthroplasty, the proposal should be made to the patient to be hospitalised in a physical and rehabilitation medicine (PRM) department.
- Surgery for shoulder rotator cuff tears does not generally require hospitalisation for follow-up care and rehabilitation in patients for whom physiotherapy is indicated.
- Rehabilitation after rotator cuff surgery can take the form of self-rehabilitation (grade C) only when certain conditions are met (figure 1).

# REFERRAL CRITERIA

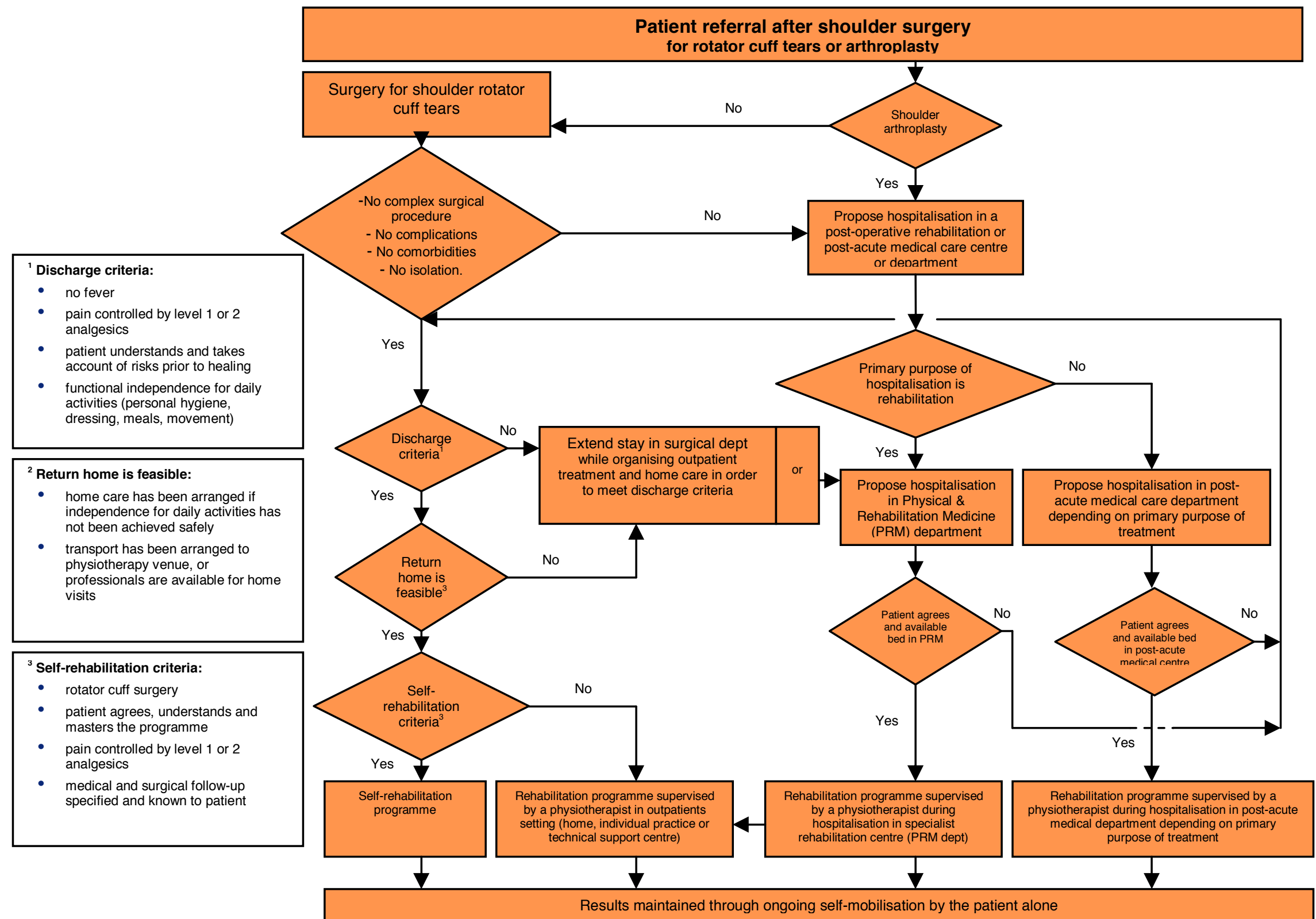


Figure 1. Criteria for rehabilitation and for referring the patient to outpatient or rehabilitation centre care

# INDICATIONS AND REHABILITATION PROGRAMMES

## Indications for post-operative rehabilitation

- For all patients after rotator cuff surgery or shoulder arthroplasty.
- In the form of a rehabilitation programme supervised by a physiotherapist, including training in self-mobilisation, or in the form of self-rehabilitation performed by the patient alone with medical and surgical follow-up, only if certain conditions are met (see figure 1).
- Rehabilitation techniques used, in accordance with the medical prescription: massage, cryotherapy, balneotherapy, manual mobilisation and self-mobilisation, technical aids and environmental adaptations should be combined with therapeutic patient education and chosen on the basis of the treatment goals agreed on with the patient after clinical assessment.

They should be adjusted to the patient’s individual characteristics and personal goals, the surgical technique, the postoperative arm support device (sling or thoracobrachial orthosis), any intraoperative or postoperative complications, and the stage of rehabilitation.

## Rehabilitation programmes

Rehabilitation stage	Primary objectives	Indications	Expected outcomes and end criteria
<b>Preoperative</b>	Inform Restore passive mobility Learn to perform self-mobilisation	Planned surgery Preoperative stiffness	Restoration of subnormal ranges of motion Patient’s adaptation to postoperative conditions
<b>Initial postoperative</b> Immediately following the intervention Duration depends on the anatomical structures repaired (surgical decision)	Restore passive mobility Solicit contraction of unrepaired muscles Supervise clinical evolution (support device, pain, complications)	All patients	Subnormal passive mobility gradually improving
<b>Secondary postoperative</b> From the end of the period of relative immobilisation, with the surgeon’s or PRM specialist’s agreement to start active work	Wean off wearing arm support device Restore active mobility against gravity By 3 months restore arm function for all sedentary activities of daily living, excluding resistance activities	All patients	Pain-free passive and active ranges of motion in a physiological pattern, resulting in functional independence, bearing in mind the patient’s context and goals  Stop at the end of the 4th month at the latest, unless there are complications
<b>Tertiary postoperative</b> After the end of the 4th month in cases of tendon repair	Gradually restore previous physical and working activities, including load-bearing activities Readjust the patient to stress and specific work or sport-related movements	Only if resuming previous activities demands maximum physical fitness	Resumption of the working, sport or leisure activity is possible No further progress in muscle functions or movement-related functions Stop at the end of the 6th month at the latest.

# CLINICAL PATIENT ASSESSMENT AND FOLLOW-UP

## Medical and surgical follow-up

- By the surgeon or the PRM doctor in collaboration with:
  - primary care general practitioner and any doctors who were monitoring the patient before the operation
  - specialist in medicine and health in the workplace if patient agrees and if severe, lasting effects on working life are likely after rehabilitation programme ends.

## Clinical assessment and monitoring by the physiotherapist

- Depending on the prescription, the following elements of the International Classification of Functioning, Disability and Health (ICF) should be taken into account in monitoring the patient, based on validated tools if possible:
  - ▶ body functions and body structures (pain, functions of the skin, sensory functions, functions of the joints and bones, muscle functions, movement functions, functions of the cardiovascular and respiratory systems, general signs suggesting complications)
  - ▶ activities, participation and quality of life before and after the operation, in connection with the patient's personal goals (e.g. DASH self-report outcome measure, grade B).
- The surgeon or PRM specialist should be consulted when:
  - ▶ pain is not controlled, is increasing or is reappearing although the patient is complying with the prescribed medication
  - ▶ the global passive ranges of motion of the shoulder at 6 weeks are less than 90° elevation in the plane of the scapula or show a deficit of more than 30° in lateral rotation compared with the opposite side, and are making no further progress
  - ▶ global active antigravity elevation at 3 months is less than 90° and making no further progress
  - ▶ the joint is unstable (clinically detectable subluxation or luxation following arthroplasty)
  - ▶ signs of secondary complications (fever, inflammation phenomena, oedema of the hand, neurological signs, weeping or opening of the surgical scar, etc.) appear.

## INFORMATION TO BE EXCHANGED BY PROFESSIONALS

It is recommended that:

- the prescribing doctor send the physiotherapist the prescription and other information needed to implement the treatment safely:
  - ▶ date and type of the surgical intervention, particularly the structures repaired
  - ▶ duration of relative immobilisation with the arm support device
  - ▶ what movements are forbidden and for how long
  - ▶ timetable for implementing passive, active and active resistive mobilisation
- the physiotherapist send a summary of the updated physiotherapy diagnostic assessment:
  - ▶ to the colleague in charge of carrying out outpatient care
  - ▶ to the doctor or surgeon for each surgical or medical consultation connected with the rehabilitation postoperative care.

Model documents (prescription, follow-up letter, summary of diagnostic assessment and DASH questionnaire) are appended to the guideline.



This document presents the essential points of the clinical practice guideline:

**Post-operative rehabilitation follow-up and referral to outpatient or inpatient rehabilitation centre care after rotator cuff tear surgery or shoulder arthroplasty- January 2008.**

This guideline and the scientific evidence review may be consulted in full at <http://www.has-sante.fr>