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Clinical guideline to standardise the clinical assessment and diagnosis of common musculoskeletal shoulder conditions

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Type of document	Guidance
Target audience	Other - Physical Health Physiotherapists
Document purpose	The guideline will cover the assessment and differential diagnosis of patients with Shoulder conditions and it will give guidance regarding the management and rehabilitation pathway of those patients. The in depth management of such patients will be covered in subsequent guidelines.

Approving meeting	West Locality Governance and Risk Meeting	Date 8-Sep-14
Implementation date	Sep-14	

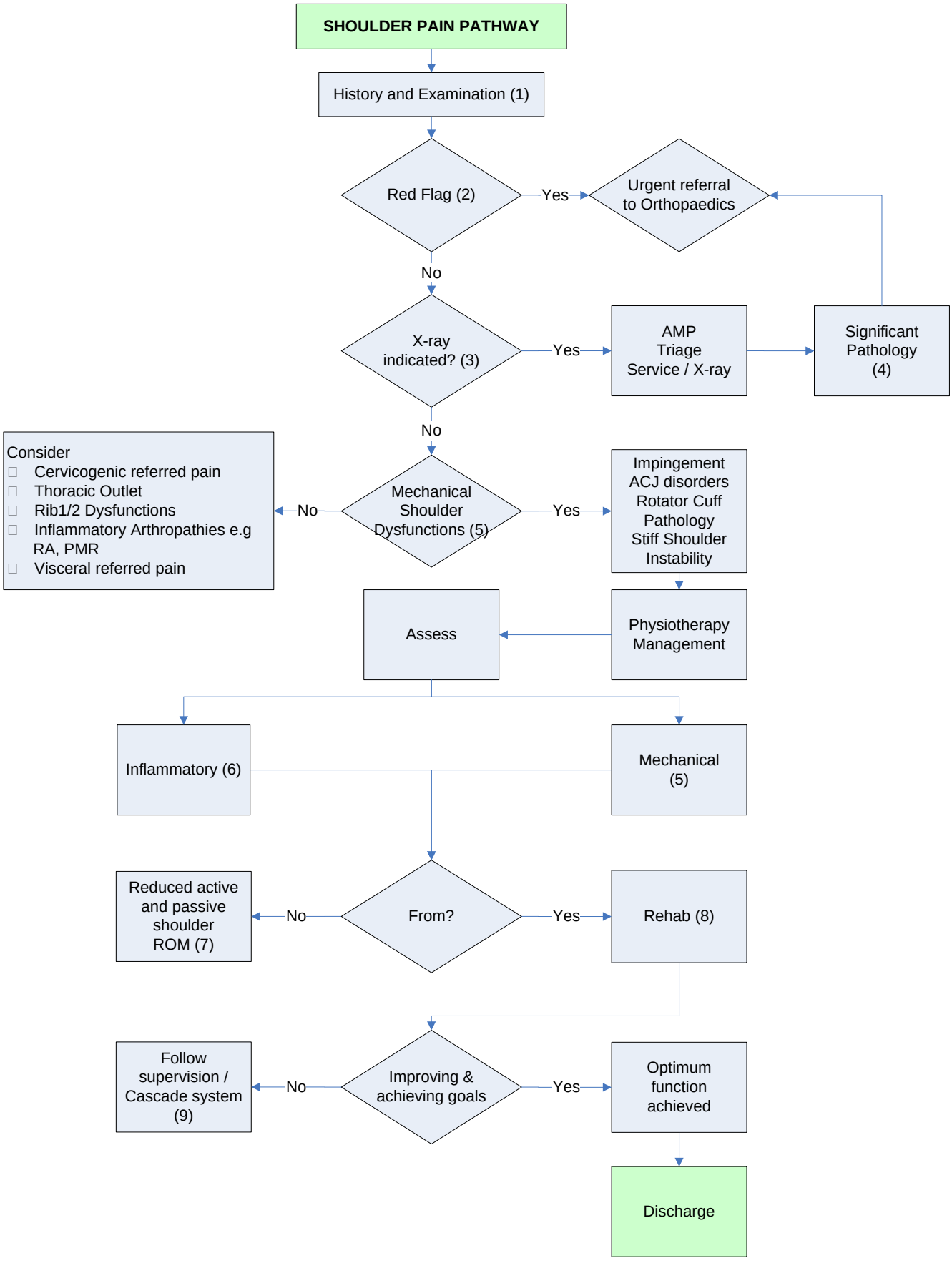
CWP documents to be read in conjunction with	
MH13	Part IV and IVA- Mental Health Act 1983 – Consent to treatment

Document change history	
What is different?	New Document
Appendices / electronic forms	New Document
What is the impact of change?	New Document

To view the documents Equality Impact Assessment (EIA) and see who the document was consulted during the review please click here

Content

Quick reference flowchart for shoulder pain pathway
For quick reference the guide below is a summary of actions required.



1. Introduction

Patients with shoulder pain referred into the Musculoskeletal Physiotherapy Service are often complex and can easily be misdiagnosed, leading to inappropriate or ineffective treatment. An audit of 'Outpatient physiotherapy management of subacromial Syndrome', looked at documentation of shoulder assessments and showed a lack of consistency in the assessment of shoulder pain and dysfunction, and variation in treatment principles, together with the types and duration of treatment provided.

Accurate assessment and diagnosis of shoulder pain is essential in establishing its effective management. The aim of the guideline is to provide a consistent approach to the assessment and diagnosis of common shoulder conditions, which is supported throughout by evidence based practice, to improve the quality of patient care. The upper limb working group reviewed evidence from extensive literature searches and information from recent shoulder courses as a basis for this guideline.

The guideline will cover the assessment and differential diagnosis of patients with Shoulder conditions and it will give guidance regarding the management and rehabilitation pathway of those patients. The in depth management of such patients will be covered in subsequent guidelines.

The aims of the guideline are:

- To establish a consistent approach to the clinical assessment of common shoulder problems;
- To provide a more accurate diagnosis of the common shoulder conditions;
- To enable the clinician to provide the most appropriate treatment intervention;
- To improve clinical outcomes;
- To contribute to Standards for better health D2d: Patients receive effective treatment and care, delivered by health care professionals who make clinical decisions based on evidence-based practice (DoH2004);
- To contribute to Standards for better health C5c: Clinicians continually update skills and techniques relevant to their area of clinical work (DoH2004);
- To contribute to Standards for better health C5d: Clinicians participate in regular clinical audit and reviews of services (DoH2004).

2. Definitions

Common musculoskeletal shoulder conditions include osteoarthritis of the Acromio-clavicular joint and shoulder, capsulitis or frozen shoulder, Rotator Cuff pathology, Impingement syndrome and Shoulder Instability.

The following terms/ abbreviations are used in this document

Abbreviations	Terms
ACJ	Acromio-clavicular Joint
ABD	Abduction
AMP	Advanced Musculoskeletal Practitioner
AROM	Active Range of Movement
EBP	Evidenced Based Practice
EOR	End of Range
F	Flexion
FROM	Full range of movement
GHJ	Glenohumeral Joint
GP	General Practitioner
LHB	Long head of Biceps
LR	Lateral Rotation
MR	Medial Rotation
OA	Osteoarthritis
PROM	Passive Range of Movement
RA	Rheumatoid Arthritis
ROM	Range of Movement

Abbreviations	Terms
RC	Rotator Cuff
SLAP	Superior Labrum, anterior, posterior
TOTS	The Orthopaedic Triage Service

3. Procedure

No	Action	Rationale
1	Take a detailed and thorough case history (appendix 1)	- To establish nature of the condition; - To rule out red flags, (notes); - To provide a framework for the objective examination; - To establish patients expectations.
2	Obtain documented informed consent for clinical examination	- To comply with the consent to treatment policy.
3	Ensure patient is comfortable and relaxed	- To aid examination.
4	Undertake clinical examination of the patient	- To establish and aid diagnosis; - To identify patients with shoulder pathology; - To rule out red flags not previously identified (notes); - To establish a baseline for rehabilitation; - To establish if further investigations are required.
5	Complete assessment sheet (appendix 1)	- To comply with health records policy; - To record baseline assessment details.
6	If red flags identified, liaise with an Advanced Practitioner or referring GP regarding an urgent orthopaedic referral directly to secondary care.	- To ensure patient is referred for an orthopaedic opinion as soon as possible to enable further investigations and management.
7	Formulate a diagnosis of the patient's condition (differential diagnosis chart)	- To ensure patient's condition is managed most effectively.
8	Explain treatment plan to patient and obtain informed consent for treatment / management	- To ensure patient understanding and compliance; - To comply with the consent to treatment policy.
9	Follow treatment pathway (flowchart for shoulder pain pathway and the notes)	- To ensure treatment is of good quality and is evidence based; - To ensure that treatment is standardised across the trust; - To ensure effective progression of exercises.

4. Notes to accompany shoulder pain pathway

Note 1
Refer to assessment sheet in appendix 1.

Note 2
Upper limb red flags

- Age < 20 and > 60;
- Constant unremitting pain;
- Previous cancer history- breast, lungs, prostate, kidney, Pancoast tumour, thyroid;
- Night pain- constant, unremitting pain;
- Systemic signs and symptoms (e.g. weight loss);
- Swollen shoulder (non-traumatic);
- Pulmonary or vascular compromise.

Note 3
Indications for x-ray

Used only to detect or to exclude pathology when diagnosis is obscure and thus contribute to decisions regarding further management in line with IRMER Regulations

Consider an x-ray and discuss with AMP / G.P if patient has:

- Exquisite pain- to exclude acute calcific tendonitis;
- Impingement (ONLY if suspect a structural deformity or is unresponsive to treatment);
- History of trauma to exclude fracture and / or dislocation / subluxation;
- **Possibility of metastases, particularly in patients with a previous history of breast or lung cancer** (see note 2)
- AC joint pain –persistent pain with continued functional impairment;
- Elderly with a stiff, painful shoulder +/- crepitus.

Note 4
Significant pathology warranting referral to orthopaedics / rheumatology

- Red flags -urgent (see note 2);
- Impingement syndrome- unresponsive to >1 injection and physiotherapy (and discussed with AMP);
- Capsulitis (unresponsive to physiotherapy / injection, consider earlier referral if diabetic);
- Traumatic dislocations in the young (<25);
- Recurrent subluxations +/- trauma (in the absence of abnormal muscle / scapula patterning);
- Large rotator cuff tears (usually in the young medically fit, at surgeons discretion);
- Calcific tendonopathy (discuss with AMP);
- Un-investigated significant trauma;
- Inflammatory joint signs.

Note 5
Mechanical shoulder disorders - consider:

- Impingement, Rotator cuff tears, Calcification, Long head of biceps pathology;
- ACJ Disorders;
- Stiff Shoulder e.g. capsulitis, OA;
- Instability +/- Labral / SLAP lesions.

Note 6
Inflammatory mechanical - consider:

- NSAID's;
- Advice re relative rest, avoiding overhead/cross body positions, sleeping positions, posture;
- Taping;
- Pain relieving modalities (EBP);
- Injection.

Note 7
Reduced active and passive shoulder ROM - consider:

- Passive stretches, accessory mobilisations, mobilisations with movement, self-stretches, functional exercise.

Note 8
Rehabilitation - consider:

- Scapula stability exercises with positioning as functionally appropriate as possible;
- Glenohumeral joint control exercises;
- Rotator Cuff strengthening;
- Close and open chain exercises;

- Proprioceptive work;
- Pelvic stability rehabilitation / recruitment;
- Functional / sports specific rehabilitation incorporating whole kinetic chain as appropriate.

Note 9
Follow supervision / cascade system

- TOTS referrals will be reviewed in an AMP clinic if necessary and referred to orthopaedics or for further investigations if appropriate;
- Physiotherapy referrals will be reviewed in department and referred back to the GP for TOTS / other referral if further investigations are indicate.

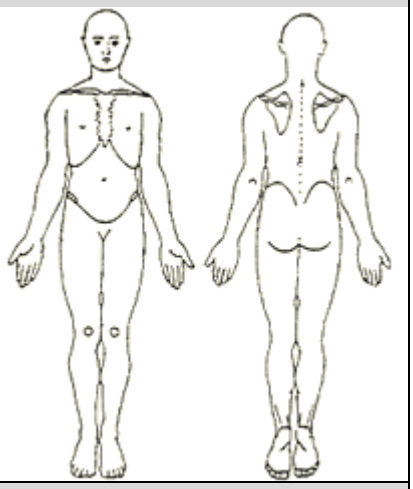
6. Differential diagnosis chart

Refer to contents section for abbreviations of terms

	Acromioclavicular Joint (ACJ)	Stiff Shoulder	Impingement	Instability
Key Assessment Findings	- Pain localised to ACJ - Pain on horizontal - adduction - Pain EOR GHJ F/ABD - Pain on palpation ACJ	- ↓ROM GHJ (Active and Passive) - Capsular Pattern i.e. LR>ABD>MR	- Painful Arc@90-120 Full passive GHJ ROM - +ve impingement tests - Pain +/- weakness on resisted tests (RC/LHB)	- Shifting pain - Clunking/clicking - H/o shoulder Dislocating / subluxing - Full ROM GHJ - Positive instability tests +/- Positive labral tests
Differential Diagnosis	- Traumatic - Degenerative - Often associated with impingement	- >60 yrs old ?OA - RA - Avascular Necrosis - True Primary Frozen - Shoulder (0 LR, <90 F) - 2ry capsular stiffness to impingement	- Traumatic vs Degenerative / overuse - ?Competent cuff Good active GHJ movement and shoulder function - ?Incompetent cuff Gross ↓AROM and cuff - Weakness/wasting. Exquisite pain on mvts ?calcification of RC / Bursa	- Stanmore Classification: **Type 1**:Traumatic Structural **Type 2**: Atraumatic Structural **Type 3**: Muscle patterning Instability Labral/SLAP lesion
Management	- See note 6, note 7 and note 8 - Inject if no progress? X-ray (see note 3)	- See note 6 and note 7 - ?X-ray (see note 3)	- See note 6 and note 8 - ?X-ray (see note 3)	- See and note 8 - Traumatic dislocations likely to require surgery especially in those aged under 25)

Appendix 1 - Shoulder assessment sheet

Name: NHS no:

Present Complaint (main problem, area, nature and severity of pain /symptoms)
Associated symptoms e.g. clicking, subluxation, p+n, numbness
History of onset (e.g. traumatic or insidious)
Previous investigations / surgery / treatment 
Symptom behaviour
Aggravating Factors
Easing Factors
Functional limitations (c/s, shoulder)
Diurnal pattern

Medication	Red Flags
PMH	
General	
Occupation	
Sports / Hobbies	

General observation posture sp, sh girdle, deformity, wasting
Cervical spine rom neurological exam

Range of movement (note pain, range and quality of movement)		
Active	**Right**	**Left**
Flexion		
Abduction		
Med. Rot.		
Lat. Rot.		
Horiz.Add		

Passive ROM Resisted tests (note pain or weakness)

	Right	Left		Right	Left
Flexion			Supraspinatus		
Abduction			Infraspinatus		
Med. Rot.			Subscapularis		
Lat. Rot.			Biceps		
Horiz.Add			Triceps		

Impingement tests (as indicated)
Hawkins
Empty/ full can
Speeds

Instability tests (as indicated)		
Instability tests	Laxity tests	Labral tests
Apprehension	Anterior Drawer	Crank
Relocation (Jobe)	Posterior Drawer	O' Briens
	Sulcus	Biceps Load 1

ACJ	
Scarf Test	ACJ Palpation

Length and control	
Pecs	Lat Dorsi
Rhomboids	Scalenes
SCM	Lev Scap
Post Capsule / Cuff	Upper Traps
Lower Traps	Serratus Anterior

Palpation