Cheshire and Wirral Partnership NHS
NHS Foundation Trust

Document level: Clinical Service Unit (CSU)
Code: CC15
Issue number: 1

Clinical Guideline to standardise the conservative management of shoulder impingement syndrome

Lead executive	General Manager
Author and contact number	Advanced Musculoskeletal Physiotherapist - 01244 362971

Type of document	Guidance
Target audience	Physiotherapy Staff
Document purpose	The aims of the guideline are to establish a consistent approach to the clinical management of shoulder impingement.

Document consultation		
AMH – Wirral	Yes	Jan Pye; Rashmi Parhee; Jose Ferran; Geraldine Swift; Joanne Hurley; Neal Fenna; Linda Friend; Iain Wells; June Thornton;
AMH – West	Yes	Joanne Knowles; Joy Fenna; Daniel Carlson; Dave Appleton;
AMH – East	Yes	Sally Sanderson; Jane Tyrer; Kate Chapman; Karen Millard; Laura Draper; Mark Grey; Nichola Spinney;
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CAMHS	Yes	Carys Jones; Karen Phillips; Gwen Jones; Catherine Phillips;
LD services	Yes	Jan Patton; Janet Lomas; Suzanne Cottier; Jean Brennan; Sarah Evans; Susan Rawson; Christina Theobald; Alison Woodhouse;
CCWC services	Yes	Cathy Hones; Sally Kass; Helen Thornley-Jones
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Staff side	Yes	AngelaE. Edwards; Dave Donal; Terry Unwin;
Other –	Yes	Sally Bestwick; Amanda Miskell; Helen Pilley;

Approving meeting	West Locality Governance and Risk Meeting	3-Dec-12
Original issue date	Dec-13	
Implementation date	Dec-13	

CWP documents to be read in conjunction with	HR6 MH13 CP3	Mandatory Employee Learning (MEL) policy Part IV and IVA – MHA 1983 Consent to treatment Health Records policy

Training requirements	No - Training requirements for this policy are in accordance with the CWP Training Needs Analysis (TNA)

Financial resource implications	No

Equality Impact Assessment (EIA)

Initial assessment	Yes/No	Comments
Does this document affect one group less or more favourably than another on the basis of:		
• Race	No	
• Ethnic origins (including gypsies and travellers)	No	
• Nationality	No	
• Gender	No	
• Culture	No	
• Religion or belief	No	
• Sexual orientation including lesbian, gay and bisexual people	No	
• Age	No	
• Disability - learning disabilities, physical disability, sensory impairment and mental health problems	No	
Is there any evidence that some groups are affected differently?	No	
If you have identified potential discrimination, are there any exceptions valid, legal and/or justifiable?		
N/A		
Is the impact of the document likely to be negative?	No	
• If so can the impact be avoided?	N/A	
• What alternatives are there to achieving the document without the impact?	N/A	
• Can we reduce the impact by taking different action?	N/A	
Where an adverse or negative impact on equality group(s) has been identified during the initial screening process a full EIA assessment should be conducted.		

If you have identified a potential discriminatory impact of this procedural document, please refer it to the human resource department together with any suggestions as to the action required to avoid / reduce this impact.

For advice in respect of answering the above questions, please contact the human resource department.

Was a full impact assessment required?	No	
What is the level of impact?	Low	

Document change history

Changes made with rationale and impact on practice
1.

External references

References
1. A clinical guideline for the use of injection therapy by physiotherapists (1999), Association of physiotherapists in Orthopaedic Medicine, Chartered Society of Physiotherapy, London, UK
2. Australian Acute Musculoskeletal Guidelines Group (2003). Acute shoulder pain. Canberra: National Health and Medical Research Council
3. Hanchard N, Cummins J and Jeffries C (2004) Evidence-based guidelines for the diagnosis, assessment and physiotherapy management of shoulder impingement syndrome. Chartered Society of Physiotherapy, London UK
4. Department of Health (2004), Standards for Better Health. Department of Health: London
5. Sills, Ruth. (2007). Outpatient physiotherapy management of subacromial Syndrome. Western Cheshire Primary Care Trust Audit Identification Number 114.
6. http://map of medicine.com/evidence/map/shoulder_pain7.htm.
7. Oxford Shoulder Questionnaire. www.shoulderdoc.co.uk.
8. Shoulderdoc Shoulder Exercise Book (2008), www.shoulderdoc.co.uk.

Monitoring compliance with the processes outlined within this document

Please state how this document will be monitored. If the document is linked to the NHSLA accreditation process, please complete the monitoring section below.	The document will be monitored by the Lower Limb Special Interest Group who have been involved in developing the guideline. Any changes in light of new evidence will be made by the group and reported to the wider team in the general staff meeting or via in-service training. The guideline will be audited after 5 years by the team.

Content

1. Introduction

Patients with shoulder pain and / or dysfunction are referred to physiotherapy musculoskeletal services within CWP West Physical Health by their GP, consultant or via the Adult Musculoskeletal Assessment and Management Service. All these patients will have an initial clinical assessment as per Clinical Guideline to aid diagnosis and decision making. Following assessment, those patients who are diagnosed with shoulder impingement are generally managed conservatively as physiotherapy is often the first line of treatment for this patient group. The upper limb working party reviewed evidence from extensive literature searches and information from recent shoulder courses as a basis for this guideline.

The aims of the guideline are:

- To establish a consistent approach to the clinical management of shoulder impingement;
- To discuss other treatment options available and provide indications on when these options should be considered, e.g. injection;
- To introduce a validated outcome measure for patients in this group;
- To demonstrate an improvement in clinical outcomes with treatment;
- 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

Subacromial impingement syndrome refers to the symptoms of pain and dysfunction from any pathology which either decreases the volume of the subacromial space or increases the size of its contents (Bigliani, 1991).

It occurs most commonly when the tendons of the rotator cuff and the subacromial bursa become pinched in the sub-acromial space. This causes the tendons to become inflamed and swollen. Impingement may develop as a result of overuse, poor blood supply to the rotator cuff (which occurs with increasing age), or an injury to the shoulder (e.g. a fall) or a new overhead activity.

Rotator cuff tear refers to a tear of one or more of the rotator cuff tendons. Sometimes this is caused by continual irritation to the bursa and tendons but it can also be caused by traumatic injury to the shoulder. The supraspinatus tendon is most commonly affected as it is the most vulnerable to pinching.

3. Scope

This guideline should be followed by all CWP West Physical Health musculoskeletal physiotherapists employed by CWP West Physical Health who are responsible for the assessment and diagnosis of patients presenting with shoulder pain within the CWP West Physical Health area.

4. Indications for use of the clinical guideline

This guideline should be used by all musculoskeletal physiotherapists when assessing and treating patients with shoulder impingement syndrome.

5. Qualifications and training

Physiotherapists using this guideline are qualified Chartered Physiotherapists who are registered with the Health Professions Council.

All musculoskeletal physiotherapy staff will receive training on this guideline prior to use, arranged within the Physiotherapy Service. Additional training can also be provided for any individual member

of the physiotherapy staff, if a development need is identified during the Personal Development Review process or in their Clinical Reflection Sessions.

6. Equipment required

Elasticated resistance band (theraband), Swiss gym ball, Shoulder Doc Shoulder Exercise Book.

7. Procedure

No.	Action	Rationale
1	Assess patient following the Clinical Guideline to Standardise the Assessment and Diagnosis of common Musculoskeletal Shoulder Conditions.	- To obtain a correct diagnosis of the patient's condition; - To agree realistic treatment goals.
2	Patients undergoing conservative management to complete initial outcome measure (appendix 5).	- To establish a baseline measurement; - To quantify effectiveness of treatment in the long term; - To allow future audit of effectiveness of the guideline.
3	Explain treatment plan to patient and obtain informed consent for treatment / management (appendix 1).	- To ensure patient understanding and compliance; - To comply with the consent to examination and treatment policy.
4	Provide patient with an information sheet about their condition (appendix 6).	- To comply with health records policy; - To help patients gain a better understanding of their condition and hence improve compliance with treatment.
5.	Follow treatment pathway (appendix 1, appendix 2, appendix 3 and appendix 4).	- 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.
6.	Following their course of treatment complete final outcome measure (appendix 5).	- To ensure patient is referred for an orthopaedic opinion as soon as possible to enable further investigations and management.
7.	If patient is better, discharge home with advice.	- To ensure patients improvement is maintained.
8.	If patient has not reached functional potential, discuss the patient with a senior physiotherapist or advanced physiotherapy practitioner.	- To ensure diagnosis is correct; - To ensure all treatment options have been explored; - To discuss further management options e.g. investigations, Orthopaedic opinion.

8. Key performance indicators

The number of musculoskeletal physiotherapy staff trained in the use of this guideline which will be collected and documented in the in-service training folder at Ellesmere Port Physiotherapy Department.

The number of patients presenting with subacromial impingement who have been managed using this guideline. Audit of Clinical Outcome measures pre and post conservative management based on this guideline.

9. Duties and responsibilities

9.1 Author(s)

- The responsible committee or officers are alerted of any necessary review to be undertaken;

- All amendments are completed subsequent to the findings of any review.

9.2 Responsible group

- Undertaking any review of the document:
  - In response to any recommendation(s) made following an audit of the document;
  - In line with the agreed review date;
  - As a result of changes to national or local guidance and policy.

- Ensuring that if the author of the clinical guideline leaves, or their responsibilities change in relation to the guideline, that the Chair of the responsible group is informed to whom responsibility is transferred for the relevant document.

9.3 The Head of Corporate Services and Business

- Maintaining copies of impact assessments and the action(s) necessary to ensure documents meet statutory requirements and other guidance.

9.4 The 'receiver', as identified by their Director

- Updating the paper copy of the document in the paper files for which they are responsible;
- Informing relevant staff of an amended existing document or the introduction of a new one.

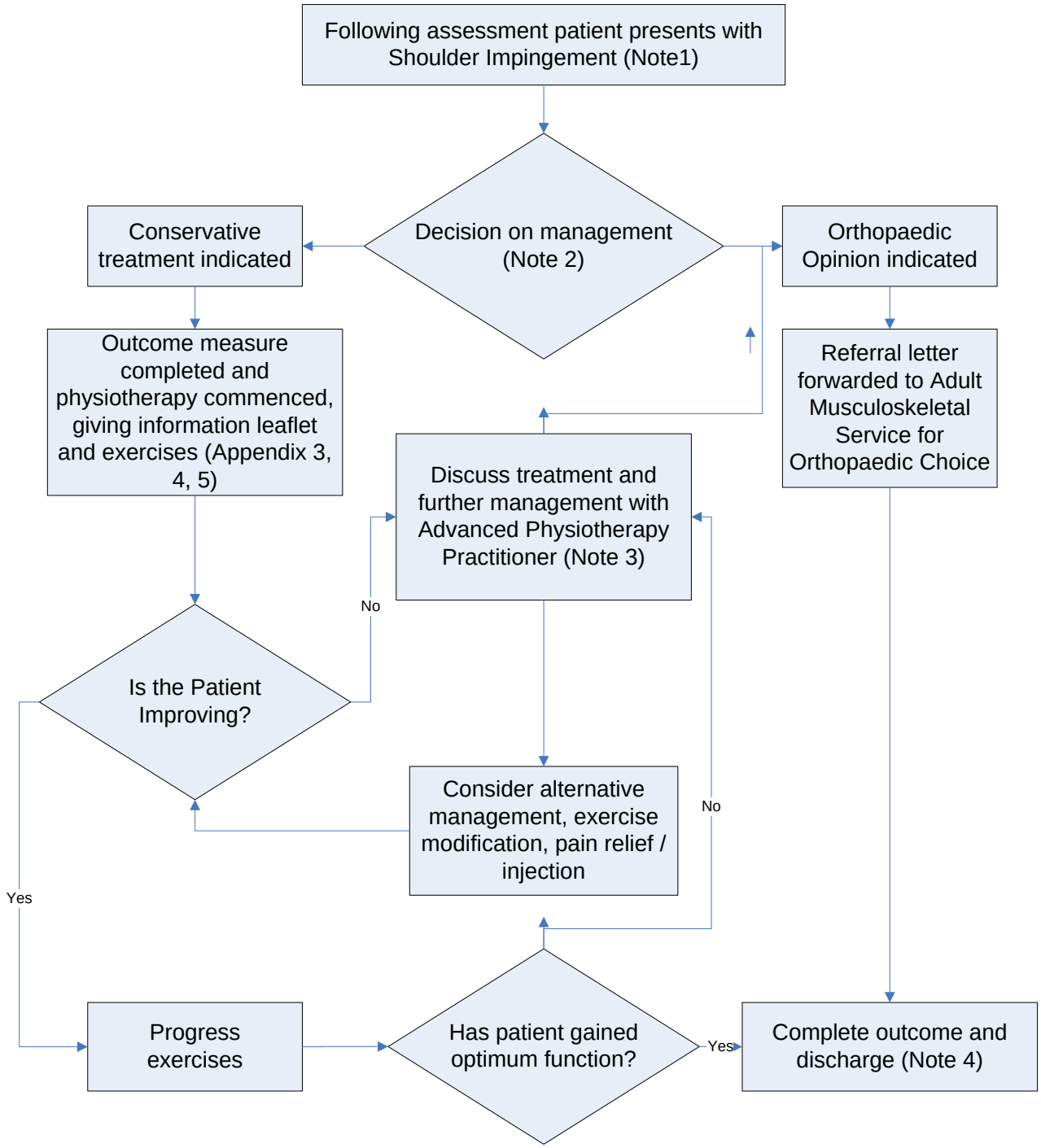
9.5 Heads of Service and line managers

- Bringing the attention of their staff to the publication of a new document;
- Providing evidence that the document has been cascaded within their team or department;
- Where appropriate, ensuring the new document is effectively implemented;
- Ensuring that their staff attend all training identified in respect of a new documents.

9.6 Employees

- Ensuring that the guidance contained herein is adhered to and followed;
- Attend any relevant training sessions associated with the implementation of the guideline;
- Reporting any accidents, incidents and near misses in relation to the processes and procedures contained herein.

Appendix 1 – Treatment pathway for conservative management of shoulder impingement syndrome

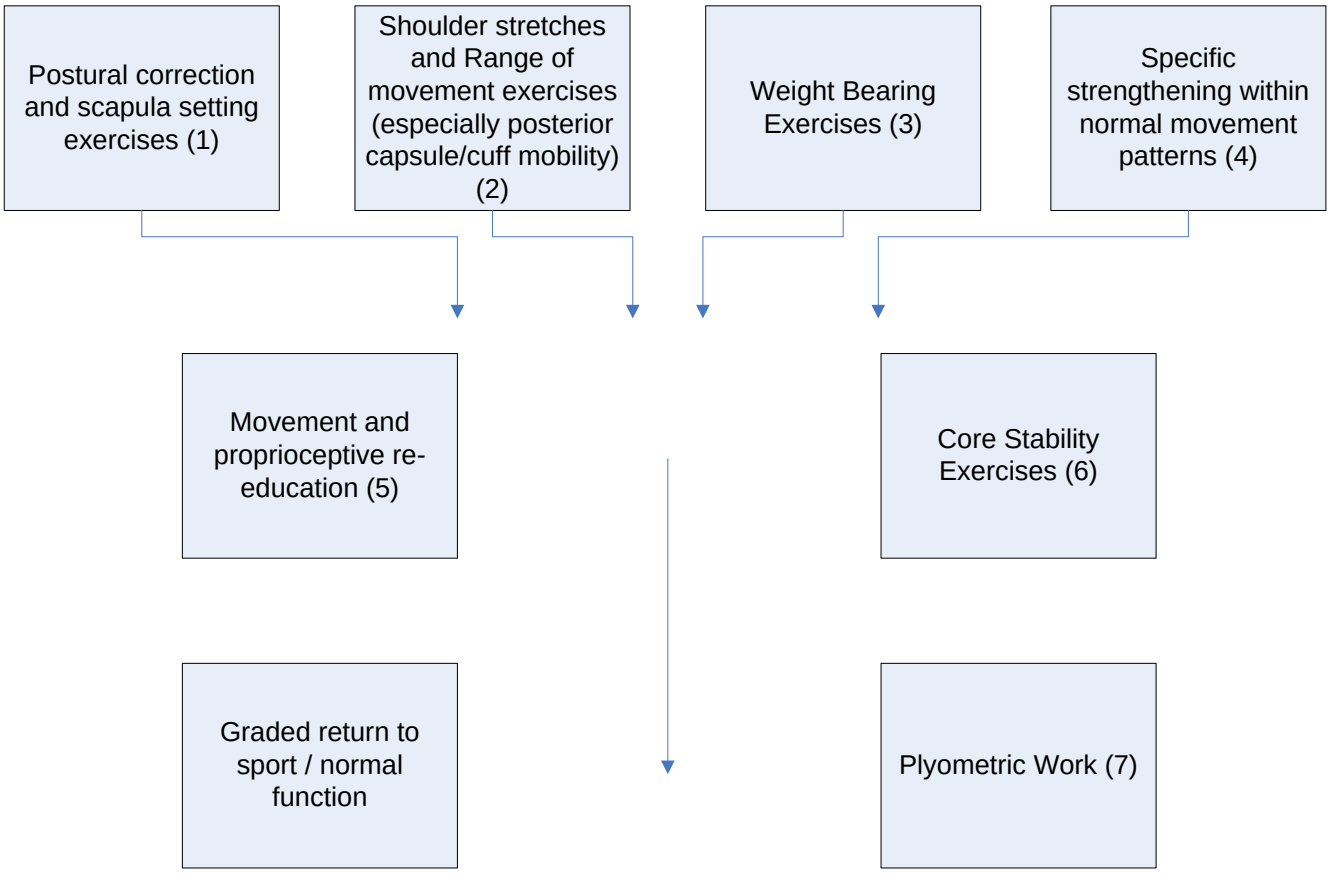


Appendix 2 - Notes for treatment pathway

Note 1	See Guideline to Standardise the Assessment and Diagnosis of Common Shoulder Problems. Subjective signs of subacromial impingement may include pain in the upper arm and lateral deltoid, pain with reaching the arm overhead or across the body, and weakness in the presence of a rotator cuff tear. Objective signs may include a painful arc of shoulder elevation, positive impingement tests, reduced active range of shoulder movement and loss of cuff strength in the presence of a rotator cuff tear, and / or reduced range of passive movement in the presence of a capsulitis / stiff shoulder. If correcting a patient's scapula position improves their symptoms it gives a good indication that they are likely to respond well to physiotherapy rehabilitation
Note 2	A decision on further management is made following a discussion with the patient. Factors which influence this decision are the functional needs of the patient, co-morbidities existing which may influence anaesthetic, surgery and healing, the patients shoulder function before the onset of their present symptoms, duration since onset, nature of onset and whether or not the patient wants to consider surgery. If surgery is indicated (see map of medicine guidelines) then a referral to an orthopaedic consultant is made.
Note 3	If the patient is not improving with the exercise programme then a review of treatment with a senior physiotherapist or advanced physiotherapy practitioner is considered. If pain is the limiting factor then a review of analgesia or a therapeutic injection can be considered. Liaison with the GP regarding analgesia is recommended. If surgery is not being considered then an injection can be considered provided there are no contraindications (see Patient Group Directive for the Administration by a Physiotherapist of Corticosteroid Injection Therapy for Peripheral Intra or Peri-articular Lesions, October 2008.) If pain is not controlled with analgesia and injection is contraindicated then a referral to an Orthopaedic Surgeon is indicated to consider further management. If lack of function is the limiting factor then a review of exercises can be considered. If this does not improve the patients function then an orthopaedic opinion may be required to discuss further management.
Note 4	Outcome measure is completed following assessment and on discharge. The difference between the two scores reflects the improvement in function.

Appendix 3 - Physiotherapy rehabilitation pathway

The following options should be considered; patient education, advice to avoid activities that increase symptoms, simple analgesia or none steroidal anti-inflammatories unless contraindicated, and exercises (see flowchart below):



Appendix 4 - Notes to accompany physiotherapy rehabilitation pathway

Note 1	Re-educate correct scapula position in functional positions e. g sitting and standing as soon as possible. Add in active shoulder flexion and abduction to 90 degrees. Progress to using light weight in hand.
Note 2	Consider stretches and / or active assisted exercises with particular emphasis on the posterior capsule / cuff
Note 3	Commence weight bearing exercises in sitting / standing with hands on a surface. Shift weight from side to side. Progress to performing weight shifts in four point kneeling and then in 3 and 2 point kneeling. Add in wall slides in standing with hands against a wall, progressing to press ups and press ups with hands on a gym ball against a wall.
Note 4	Commence isometric rotator cuff exercises using theraband ensuring a good scapula position is maintained throughout and emphasising the importance of eccentric control throughout. Progress to performing in step standing / with step up. Progress to through range flexion / abduction with the theraband (diagonal patterns).
Note 5	Advance to stability exercises standing on a wobble board or trampet. Increase the speed at which the exercises are preformed
Note 6	Consider pelvic stability work in conjunction with the above exercises.
Note 7	Consider throwing / catching a ball in sitting / standing maintaining good scapula position. Advance to performing these exercises sitting on a gym ball. **The physiotherapist should also refer to the shoulder doc exercise booklet when teaching the exercises.**

Appendix 5 - Oxford shoulder score questionnaire

http://www.ouh.nhs.uk/shoulderandelbow/information/documents/OxfordShoulderScore.pdf

Appendix 6 – Physiotherapy patient information leaflet - shoulder Impingement

What is impingement syndrome?
Shoulder Impingement syndrome is the commonest shoulder problem and mainly affects people between the ages of 45 and 65.

It occurs when the tendons of the rotator cuff and the subacromial bursa become pinched in the sub-acromial space. This causes the tendons to become inflamed and swollen. Impingement may develop as a result of overuse, poor blood supply to the rotator cuff (occurs with increasing age), or an injury to the shoulder (e.g. a fall) or a new overhead activity.

Sometimes continual irritation to the bursa and tendons can lead to a tear of one or more of the rotator cuff tendons. The supraspinatus tendon is most commonly affected as it is most subject to pinching. Traumatic injury to the shoulder can also cause a rotator cuff tear.

What are the main symptoms of impingement?
Pain is often felt in the tip of the shoulder and upper and outer arm. The pain may be aggravated by poor posture, overhead movements, taking the arm across the front of the body, and lying on the affected side so it is important to try and avoid these positions whenever possible. If there is a rotator cuff tear, the arm may be weak as well as painful.

Diagnosis
Impingement syndrome is diagnosed from your history, symptoms and physical examination. Sometimes a x-ray or ultrasound scan is performed.

What are your treatment options?
Your physiotherapist will discuss your treatment options with you . The aim of physiotherapy is to improve your pain, movement, and function.

Name of physiotherapist
Contact number. This leaflet has been written to help you understand more about the problem with your shoulder. **This leaflet is not a substitute for professional medical advice and should be used in conjunction with verbal information and treatment given by Physiotherapist within Community Care Western Cheshire**

What do I do when I think I have finished my leaflet?
Please email your leaflet over to Rebecca who will check it through with you and talk to you about how you can get it printed, either internally or with an external company. Please note that if you wish to have your leaflet printed externally due to the volume you need, you will need to identify a budget for this beforehand.

The shoulder joint is a ball and socket joint. It is formed from a ball on the top of your arm bone and a shallow socket which is part of the shoulder blade.

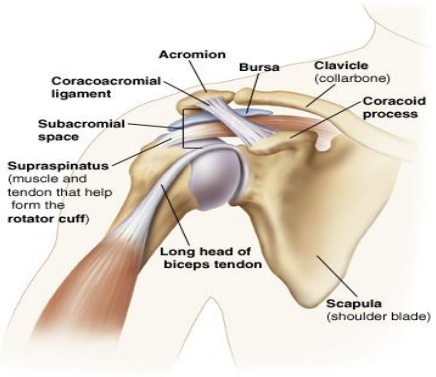
Above the ball and socket joint is a ligament **(the coraco-acromial ligament)** attached to a bony prominence called the **acromion.** This forms an **arch**. The area between the shoulder joint and the arch is known as the **sub-acromial space.**

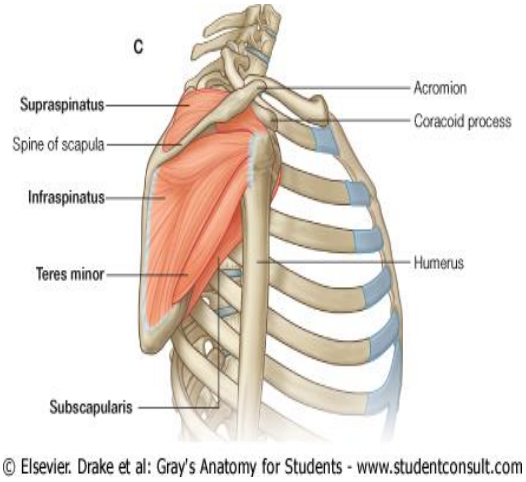
To move your shoulder and control the position of your shoulder joint you have a group of muscles and tendons known as the **rotator cuff.**

These are named supraspinatus, infraspinatus, teres minor, and subscapularis

The rotator cuff tendons pass through the subacromial space and form a cuff around the top of the arm bone. The supraspinatus tendon sits in the middle of the subacromial space. A small sack of fluid called the subacromial bursa sits over the supraspinatus tendon.

When you move your arm away from your side, the rotator cuff works to keep the ball of the shoulder joint centred in the socket. When the arm reaches above shoulder height (horizontal), the sub-acromial space is narrowed. The space is larger above and below shoulder height.





Appendix 7 - Musculoskeletal Physiotherapy Service

Upper Limb Working Group - Terms of Reference

1. Statement of Intent

The Upper Limb Working Group will be responsible for the development of clinical guidelines and protocols pertinent to the physiotherapy assessment and management of musculoskeletal upper limb conditions in line with evidence based practice. The aim is to improve the quality of care for patients referred into the musculoskeletal service.

2. Membership

- Cathryn Woodall : Advanced Musculoskeletal physiotherapy Practitioner;
- Ruth Court : Advanced Musculoskeletal physiotherapy Practitioner;
- Anne Oliver : Highly Specialised Physiotherapist;
- Cheryl Hughes : Clinical Specialist;
- Rotating physiotherapist (temporary member during placement).

3. Attendance

The following will be in attendance:

- Nominated Secretary;
- Other staff or health care professionals may be invited to meetings to discuss agenda items as required by the group.

4. Quorum

A quorum shall be at least 5 members of the Group, including the Chair. The chair will be an Advanced Practitioner or Highly Specialised Physiotherapist (as listed) and will alternate between these staff every 6 months.

5. Frequency of meetings

Meetings shall normally be held monthly and there should be no less than 6 meetings per year. Extraordinary meetings can be arranged if necessary with the approval of the Chair. Staff should attend 75% of the meetings, unless there are if mitigating circumstances.

6. Authority

The Group is authorised to:

- Carry out the duties within these Terms of Reference.

7. Duties

The duties of the Group shall be to:

- Aim is to improve the quality of care for patients referred into the musculoskeletal service with upper limb conditions;
- Develop guidelines which will assist all musculoskeletal physiotherapist working within the service in assessing and managing patients with upper limb musculoskeletal conditions most appropriately;
- Develop clinical guidelines in accordance with the Policy Standard;
- Develop clinical guidelines using agreed template;
- Identify roles for members of the group in development process. This will include undertaking library searches for evidence of best practice;
- Critically appraise relevant literature on upper limb conditions;
- Agree who will peer review clinical guideline during development;
- Ensure scrutiny of guideline for typos, spelling errors, formatting etc before submission of guideline for ratification;
- Submit the completed guideline to the Physiotherapy Service Manager for feedback prior to completion;
- Submit completed clinical guideline to chair of clinical guideline ratification group for ratifying;

- Agree with Head of Service electronic storage of master copy of clinical guideline;
- Develop a programme of review for existing clinical guidelines (within the Western Cheshire musculoskeletal physiotherapy service) relating to the Physiotherapy assessment and management of Musculoskeletal upper limb conditions;
- The group will form links wherever possible with other local and Regional Upper Limb Services for additional peer support and liaison regarding current guidelines in use by other services.

8. Reporting

The Upper Limb Working Group will have the following reporting responsibilities:

- Service Head

9. Responsibility of staff attending

Members of the Group have a responsibility to:

- Ensure clinical guideline under review or development has restricted circulation and is only shared with agreement of the group;
- Attend meetings and complete agreed actions;
- Individuals keep updated and share any recent literature, evidence, courses etc surrounding upper limb conditions assessment and treatment.

10. Administrative arrangements

As we have no administrative cover, the secretary will rotate and be decided at the previous meeting:

- Attending to take minutes of the meeting and circulate to members appropriately;
- To circulate agenda items in a timely fashion prior to meeting;
- Keeping a record of matters arising and issues to be carried forward;
- Providing appropriate support to the Chair and Group members;
- Ensuring the papers of the Group are filed in accordance with the Primary Care Trust policies and procedures.

11. Review

Terms of Reference will normally be reviewed annually.