NHS
Lancashire and South Cumbria
Integrated Care Board

Policy for Carpal Tunnel Syndrome Surgery

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Purpose	This document is part of a suite of policies that the Integrated Care Board (ICB) uses to drive its commissioning of healthcare. Each policy in that suite is a separate public document in its own right but will be applied with reference to other policies in that suite. This policy is based on the ICB's Statement of Principles for Commissioning of Healthcare (version in force on the date on which this policy is adopted).
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Author (inc Job Title):	
Ratified by: (Name of responsible Committee)	LSCICB Board (Adopted 1 July 2022)
Cross reference to other Policies/Guidance	
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Document control:		
Date:	**Version Number:**	**Section and Description of Change**
November 2017	1.0	Pan-Lancashire and South Cumbria ratified policy
December 2017	1.1	OPCS and ICD codes added to appendices
September 2019	2.0	Updated policy ratified by Healthier Lancashire and South Cumbria's Joint Committee of Clinical Commissioning Groups (JCCCGs).
October 2019	2.1	Ordering of section 1 re-ordered to provide further clarity.
2021	2.2	After consideration of changes to the Carpal Tunnel Syndrome pathway, the Policy has been amended to require use of it. This included removal of reference to nerve conduction studies and neurophysiology and the insertion of standard anaesthetic approach. The word order of the title has been changed.
July 2022	2.3	Policy adopted by Lancashire and South Cumbria ICB – references to CCG replaced by ICB where relevant

1. Policy

1.1 To be eligible for the surgical release of the carpal tunnel patients must meet the requirements of section 1.2 below and:

a. The documented specialist opinion is that the likely benefit from surgery outweighs the risk of harm for the patient

AND

b. The patient must have followed the Carpal Tunnel Syndrome Pathway (see Appendix 1)

1.2 The ICB will commission the surgical release of carpal tunnel when ONE OR MORE of the following criteria are met:

1.2.1 The patient has sleep disturbance or limited ability to undertake activities of daily living due to symptom severity AND the patient's symptoms have not resolved despite 8 weeks of conservative treatment, including activity modification and either nocturnal wrist splinting or a single steroid injection (unless contraindicated)

OR

1.2.2 There is permanent reduction in sensation in the median nerve distribution

OR

1.2.3 There is muscle wasting or weakness of thenar abduction

OR

1.2.4 The patient has severe progressive carpal tunnel syndrome and the documented specialist opinion is that surgery is needed promptly to prevent irreversible median nerve/muscle damage

1.3 In the case of patients with mild to moderate carpal tunnel for whom symptom onset occurred during pregnancy, the patient must be at least 12 weeks post-partum.

1.4 The ICB recognises that the type of surgical procedure undertaken (endoscopic or open surgery) will depend both on clinical factors (including the presence of swelling over the carpal tunnel) and the experience of the surgeon.

1.5 Wide Awake Local Anaesthetic No Tourniquet (WALANT) should be the standard form of anaesthesia in the absence of patient specific factors

2. Scope and definitions

2.1 This policy relates to the surgical release of the carpal tunnel as a treatment for carpal tunnel syndrome.

2.2 Carpal tunnel syndrome (CTS) is a relatively common condition caused by compression of the median nerve within the carpal tunnel in the wrist. This can arise for a variety of reasons, including fluid retention, particularly in pregnancy. This gives rise to pain, numbness or tingling in the thumb, index and middle fingers. In severe cases it may cause nerve damage and weakness/wasting of the muscles of the hand, especially the thumb (thenar wasting). Patients often report their symptoms are worse at night and may disturb sleep.

2.3 Symptoms do not necessarily progressively worsen and, in up to a third of cases, will resolve without treatment or with simple self-care. Carpal tunnel syndrome in pregnancy often resolves within 12 weeks of delivery, but 50% of women have persisting symptoms at 1 year. Non-surgical treatments, such as steroid injections or wrist splints, are used to treat mild to moderate symptoms. Surgical release (decompression) of the carpal tunnel may be carried out if non-surgical approaches fail to relieve symptoms.

2.4 The scope of this policy includes requests for decompressing the carpal tunnel by either open or arthroscopic surgical techniques.

2.5 The ICB recognises that a patient may:

- suffer from carpal tunnel syndrome,
- wish to have a service provided for their condition,
- be advised that they are clinically suitable for surgical release of the carpal tunnel, and
- be distressed by their condition, and by the fact that they may not meet the criteria specified in this commissioning policy.

Such features place the patient within the group to whom this policy applies and do not make them exceptions to it.

3. Appropriate Healthcare

3.1 The ICB considers that the purpose of surgical release of the carpal tunnel is to improve the health of patients by reducing pain, discomfort and disability.

3.2 The ICB regards the achievement of this purpose as according with the Principle of Appropriateness. Therefore, this policy does not rely on the principle of appropriateness. Nevertheless, if a patient is considered exceptional in relation to the principles on which the policy does rely, the ICB may consider the principle of appropriateness in the particular circumstances of the patient in question when considering an application to provide funding.

4. Effective Healthcare

4.1 The ICB considers that there is some evidence for the effectiveness and cost effectiveness of non-surgical management options.

4.2 For some patients, a single local corticosteroid injection has been shown to be effective for short term symptomatic relief in mild to moderate cases, but evidence suggests repeat injections may not provide significant added clinical benefit.

4.3 For some patients, wrist splinting in the neutral position may alleviate the symptoms of carpal tunnel syndrome with few complications. One study in which patients were randomised to splinting or to surgery reported splinting provided symptom relief and avoided surgery for 37% of patients. However, there is limited evidence on its effectiveness in comparison with other methods of conservative management or for the effectiveness of different designs or regimes of splint wearing.

4.4 The ICB considers that there is sufficient evidence with which to draw firm conclusions regarding the effectiveness of surgical release of the carpal tunnel.

4.5 The ICB considers that surgical release of the carpal tunnel is more effective at relieving symptoms than splinting. However, splinting can provide relief of symptoms, particularly overnight, for patients with mild to moderate carpal tunnel syndrome and is a relatively simple, low-cost intervention.

4.6 The ICB recognises that early surgery is likely to be the most effective treatment option if there is evidence of nerve compression or significant functional impairment.

4.7 The ICB recognises that there is evidence of good outcomes and high levels of patient satisfaction following surgery.

4.8 Major complications of surgical release are rare. Complications such as, persistent symptoms, reduced grip strength, neurovascular injury and wound complications have been reported - usually in less than 1% of surgical patients. However, scar tenderness and pillar pain are reported more frequently and may persist for up to two years.

4.9 The ICB therefore considers that, in circumstances other than those described in section 1 of the policy, the potential risks associated with surgery outweigh the potential benefits.

5. Cost Effectiveness

5.1 The ICB considers that in mild to moderate cases, management of carpal tunnel syndrome by conservative methods (which may include splinting, activity modification and, if appropriate, a single local corticosteroid injection), before considering surgery, represents the most cost-effective treatment strategy. This policy therefore relies on the principle of cost-effectiveness by requiring conservative management to be used before considering surgery.

6. Ethics

6.1 The ICB considers that the surgical release of the carpal tunnel meets the criterion for ethical healthcare delivery and therefore this policy does not rely on the Principle of Ethics.

7. Affordability

7.1 The ICB does not call into question the affordability of surgical carpal tunnel release and therefore this policy does not rely on the Principle of Affordability.

8. Exceptions

8.1 The ICB will consider exceptions to this policy in accordance with the Policy for Considering Applications for Exceptionality to Commissioning Policies.

8.2 In the event of inconsistency, this policy will take precedence over any non-mandatory NICE guidance in driving decisions of this ICB. A circumstance in which a patient satisfies NICE guidance but does not satisfy the criteria in this policy does not amount to exceptionality.

9. Force

9.1 This policy remains in force until it is superseded by a revised policy or by mandatory NICE guidance relating to this intervention, or to alternative treatments for the same condition.

9.2 In the event of NICE guidance referenced in this policy being superseded by new NICE guidance, then:

- If the new NICE guidance has mandatory status, then that NICE guidance will supersede this policy with effect from the date on which it becomes mandatory.

- If the new NICE guidance does not have mandatory status, then the ICB will aspire to review and update this policy accordingly. However, until the ICB adopts a revised policy, this policy will remain in force and any references in it to NICE guidance will remain valid as far as the decisions of this ICB are concerned.

10. References

NHS England (2018). Evidence Based Interventions: Guidance to CCGs https://www.england.nhs.uk/wp-content/uploads/2018/11/ebi-statutory-guidance-v2.pdf

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Middleton SD & Anakwe RE, Carpal Tunnel Syndrome: Clinical Review. BMJ 2014;349:g6437 doi:10.1136/bmj.g6437 (Published 6 November 2014)

Adult Carpal Tunnel Syndrome Pathway v2

1st Presentation	Referral / Lists for Surgery	Surgical review & assessment	Day of surgery	Day Case management	Discharge & follow-up

1st presentation in primary care

Clinical assessment

URGENT RED FLAGS or Severe

Consider patient completing Boston Carpal Tunnel Syndrome Questionnaire (BCTQ)

Mild: Intermittent pain/paraesthesia / nocturnal symptoms +/- worse at night. In median nerve distribution. Subjective sensory/motor impairment +/- loss co-ordination. No Thenar muscle wasting or weakness.
Clinical Examination including provocative tests eg Tinels & Phalen's

Moderate: As above but objective mild thenar muscle weakness, no thenar muscle wasting & no persistent numbness

Severe: Constant pain, persistent paraesthesia/hypoesthesia/weakness, frequent nocturnal waking. Objective sensory loss/motor weakness, Thenar wasting.

Management
Mild: Non-operative management for 12 weeks.
Consider nocturnal splinting, single steroid injection (see box), tendon/nerve glides.
Consider TSH/HBA1C
NCS only for diagnostic uncertainty, concurrent cubital tunnel, recurrence, vibratory exposure, neuropathy or diabetes

Review:
Improvement/resolution = discharge with self management written information and advice
If no improvement after 12 weeks or progression refer to Community MSK service

Moderate refer to Community MSK service
Severe: refer Secondary Care

Recurrent post CTS surgery/Atypical Symptoms: consider red/yellow flags, secondary causes/complication of surgery,
Refer to Community MSK service or Hand Surgeon

Community MbISK specialist triage referral management system

URGENT RED FLAGS or Severe

Hand Surgery referral with full patient history

Intermediate Care
Moderate: If not already tried/given adequate time consider nocturnal splinting, single steroid injection (see box) & patient information. Consider hand therapy tendon/nerve glides or three sessions manual therapy if indicated. NCS only as per indications in Primary Care box
Patient given contact details Patient Initiated Follow UP (PIFU) for follow-up at 6 weeks or after final manual therapy session.
Review
No contact = discharge.
Improving = watch & wait.
No improvement after 6 weeks/deteriorating move into **deteriorating or persistent symptoms** flow stream as below

Deteriorating or persistent symptoms
failed 12 week pathway management Primary Care. Moderate/severe compression on NCS (inc if undertaken as per **Recurrent post CTS surgery/Atypical Symptoms**)
=
Clinician to discuss surgical decompression/provide written info.
Consider Direct Listing for CTS/referral to Secondary Care

Recurrent post CTS surgery/Atypical Symptoms consider red/yellow flags, secondary causes/complication of surgery.
Bloods & NCS as required. Referral to Secondary Care

Patient not suitable/declines surgery.
Offer alternative management including ability to be reconsidered for surgery in the future
Discharge back to GP/PIFU

Consider possible Fast track referral (severe) or 6 weeks

OPD clinics organised around team-based specialties & pooled patients by sub specialty

1st OPD appointment
Consider direct listing and/or virtual clinic at discretion surgical team/where circumstances permit

Assessment in clinic by/supervised by surgeon with appropriate training in Hand Surgery
1. Confirm diagnosis
2. Confirm appropriate non-operative treatment has taken place in Primary/Intermediate Care
3. Address queries, informed consent process. Provide patient information regarding day of surgery and recovery period
4. Offer pre-op/MRSA/COVID screening as appropriate as part of one stop pre-operative assesement
5. Consider urgent or immediate surgery vs routine
6. Atypical/equivocal presentations, persistent/recurrent CTS, possible peripheral neuropathy Request NCS

Within18 weeks of referral

Admission on day of surgery

Day case/appropriate list utilisation, surgery by or supervised by surgeon with appropriate training in Hand S Surgery, sterile operating or approved minor procedures room.

Reaffirmation of consent process

Begin discharge / TTA process

Consider WALANT as standard form of anaesthesia in the absence of specific patient factors

7 Day services including senior review

Advice given to patient: reducing dressing at 48-72hrs; driving, analgesia, managing ADLs

Nurse criteria led discharge;
reasonably pain free analgesia; follow-up procedure explained/actioned

Patient Initiated Follow-up (PIFU): telephone contact for DCU or email in case they encounter post operative complication

Discharge

Patient provided with appropriate written instructions (locally agreed) regarding suture removal: Treatment Room, Community Services or Primary Care as per local arrangements at 10-14 days & hand therapy review.
Clear guidance regarding route to earlier review if any concerns

At 6 weeks

Virtual review by surgeon or extended scope practitioner.
Consider hand therapy & F2F appointment if ongoing problems (CRPS, nerve damage, scar issues), in cases of neurolysis or flexor tenosynovectomy

Red Flags: fracture, blindness, post injury numbness/paraesthesia, nerve tumour, tumour

Yellow Flags: Neurological diseases, active inflam. joint disease, peripheral limb ischaemia,, cervical nerve entrapment = Secondary Care Referral

Single Steroid injection
Injection only by appropriately trained clinician (GP with special interest in MSK, extended scope practitioner or physiotherapist) consider for all but severe cases or for diagnostic purpose or those unable to undergo surgery/declined

BCTQ Scores
Mild: Age<50 yrs, Symptom score ≤22, functional score ≤16
Moderate/Severe: Symptom score ≥23, functional score ≥17