NHS
Derby and Derbyshire
Integrated Care Board

CLINICAL POLICY ADVISORY GROUP (CPAG)

Functional Electrical Stimulation (FES) for Foot Drop of Neurological Origin Policy

This procedure requires prior approval. The prior approval form can be found under Appendix 3.

Statement

NHS Derby and Derbyshire ICB (NHSDDICB) has deemed that the wired version of functional electrical stimulation (FES) using skin surface electrodes in adults and children with foot drop of neurological origin should not routinely be commissioned, unless **all** of the following criteria is met:

- The patient has foot drop caused by upper-level nerve damage
- The patient has been assessed by a specialist in foot drop of neurological origin and all treatment options have been considered
- There is evidence that foot drop has caused trips or falls, or gait issues causing significant clinical problems
- The patient can walk a minimum of 10 meters independently (+/- aids)
- The patient can physically manage a FES (+/- minimal assistance)
- The patient's cognitive ability is such that they can manage a FES independently
- The patient does not have co-morbidities which would affect their capacity to benefit from FES
- The patient does not have any of the accepted clinical contraindications to FES

Other types of FES (implanted or wireless) are not commissioned.

These commissioning intentions will be reviewed periodically. This is to ensure affordability against other services commissioned by the ICB.

1. Background

Upper motor neurone lesions caused by multiple sclerosis, stroke, cerebral palsy or spinal cord injury have a range of physical consequences, with foot drop being one of the most common manifestations.

Foot drop results from weakness or lack of voluntary control within the ankle and foot dorsiflexors. This causes the toes to drag and the foot to drop during the normal gait pattern, which is likely to increase the risk of falls. Other approaches to treating foot drop include physiotherapy and ankle-foot orthoses (AFO).

FES has been designed to help people with neurological lesions, including foot drop, to move more easily. Skin surface electrodes are placed over the nerve and connected by leads to a stimulator unit, controlled by a foot switch. It works by producing muscle contractions that mimic normal voluntary gait movement by applying electrical pulses to nerves across the skin.

2. Recommendation

NHS Derby and Derbyshire ICB (NHSDDICB) does not routinely commission the wired version of FES using skin surface electrodes in adults and children with foot drop of neurological origin, unless **all** of the following criteria are met:

- The patient has foot drop caused by upper-level nerve damage
- The patient has been assessed by a specialist in foot drop of neurological origin and all treatment options have been considered
- There is evidence that foot drop has caused trips or falls, or gait issues causing significant clinical problems
- The patient can walk a minimum of 10 meters independently (+/- aids)
- The patient can physically manage a FES (+/- minimal assistance)
- The patient's cognitive ability is such that they can manage a FES independently
- The patient does not have co-morbidities which would affect their capacity to benefit from FES
- The patient does not have any of the accepted clinical contraindications to FES

Other types of FES (implanted or wireless) are not commissioned.

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Exceptional Circumstances

NHSDDICB will consider individual cases for funding outside this commissioning policy in accordance with NHSDDICB Individual Funding Request (IFR) Policy which sets out a decision making framework for determining these cases. For an IFR request to be considered, it must be demonstrated that the patient fulfils the strict criteria for exceptionality.

It should be noted that the criteria for exceptionality is very unlikely to be satisfied if an individual is part of an identifiable cohort of patients, who at the same disease stage would

derive similar benefit from the intervention.

3. Rationale for Recommendation

The evidence for efficacy and safety of FES has been reviewed by NICE in IPG278 (2009), which states that the efficacy (improving gait) and safety of FES for foot drop of central neurological origin appears adequate to support its use under normal clinical governance and audit arrangements.

The National Clinical Guideline for Stroke (2023) also advises:

- 'People with limitations of dorsiflexion or ankle instability causing balance limitations after stroke should be considered for ankle-foot orthoses and/or functional electrical stimulation. The person with stroke, their family/carers and clinicians in all settings should be trained in the safe use and application of orthoses and electrical stimulation devices'.
- 'A clinical practice guideline has provided strong evidence that functional electrical stimulation to the dorsiflexor muscles or an ankle-foot orthosis can reduce falls and fear of falling (Johnston et al, 2021)'

4. Useful Resources

- National Institute for Health and Care Excellence. Treating drop foot using electrical stimulation, Information for people who use NHS services, Information about NICE interventional procedure guidance 278, January 2009, https://www.nice.org.uk/guidance/ipg278/resources/treating-drop-foot-using-electrical-stimulation-pdf-310962205

5. References

- East Midlands Affiliated Commissioning Committee. Commissioning Policy for Functional Electrical Stimulation for Foot Drop of Neurological Origin, version 1, November 2017.
- National Institute for Health and Care Excellence, Interventional Procedure Guidance: Functional electrical stimulation for drop foot of central neurological origin, published 28/01/2009, accessed 14/06/23, http://www.nice.org.uk/IPG278
- National Clinical Guidelines for Stroke for the United Kingdom and Ireland, Royal College of Physicians, Scottish Intercollegiate Guidelines Network (SIGN), Irish National Clinical Programme for Stroke and NICE.

6. Appendices

Appendix 1 - Consultation

All relevant providers/stakeholders will be consulted via a named link consultant/specialist. Views expressed should be representative of the provider/stakeholder organisation. CPAG will consider all views to inform a consensus decision, noting that sometimes individual views and opinions will differ.

Consultee	**Date**
Clinical Specialist Physiotherapist (STHFT)	June 2023
Team Leader, Derby Gait and FES Service (UHDBFT)	June 2023
Clinical Policy Advisory Group (CPAG)	August 2023

Appendix 2 - Document Update

Document Update	**Date Updated**
Version 3.0 • Policy has been re-worded to reflect the new NHSDDICB organisation. • Addition of link to the NHSDDICB Individual Funding Request (IFR) Policy. • Addition of reference to National Clinical Guideline for Stroke (2023) to the Rationale section of the policy. • References to SIGN management of patients with stroke: rehabilitation, prevention and management of complications, and discharge planning removed from policy. • Exclusion heading removed from policy.	August 2023

Appendix 3 - Prior Approval Form for Secondary Care

Send completed prior approval form to: ddicb.ifrfundingrequest@nhs.net

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Prior Approval to be used in conjunction with:
Functional Electrical Stimulation (FES) for Foot Drop of Neurological Origin Policy

1. Patient and request details	
Date of Request	
Patients NHS Number, initials and date of birth	
Responsible primary care organisation (ICB)	
Relevant diagnosis / indication	
Specialist who has made referral (name, job title, organisation)	
Proposed service provider	
Prior approval form completed by (name, job title, organisation) *Please note: completion should be by a clinician who knows and has assessed this patient, or be based on documentary evidence such as assessments, sufficient to complete the form.*	

2. Pre-screening prior to Assessment for FES Patient meets policy criteria outlined in the NHS DDICB Commissioning Policy for the use of FES including the following (please check relevant boxes and provide detail where indicated):		
	YES	**NO**
Is the patient's foot drop caused by upper-level nerve damage?	☐	☐
Has the patient been assessed by a specialist in foot drop of neurological origin?	☐	☐
Have a range of treatment options been considered?	☐	☐
A referral letter must be submitted with this form. Referral or clinic letter attached?	☐	☐
What alternatives have been considered and / or tried? Please provide details (including outcomes):		
Can the patient walk more than or equal to 10 meters independently (+/- walking aids)?	☐	☐
Has the patient reported any trips or falls or do they have gait problems related to foot drop?	☐	☐
Can the patient physically manage a FES (+/- minimal assistance)?	☐	☐
Is the patient's cognitive ability such that they can manage a FES independently?	☐	☐
Does the patient have any co morbidities which may affect their capacity to benefit from FES? Please provide details:	☐	☐
Does the patient have any of the following co-morbidities:	**YES**	**NO**
Fixed contractures of the joint associated with muscles to be stimulated?	☐	☐
Broken or poor condition skin?	☐	☐
Inability to stimulate site?	☐	☐
Acute concurrent DVT?	☐	☐

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Receptive dysphasia?	☐	☐
Complete peripheral nerve damage?	☐	☐
Pacemaker in situ?	☐	☐
Life expectancy < 12 months?	☐	☐
Any other accepted contraindications to FES e.g. pregnancy, uncontrolled epilepsy etc?	☐	☐
If yes to any of the above, please provide details:		

Approval for FES will be granted on condition that:

- The patient meets the criteria outlined in the policy
- The patient has agreed to proceed with the treatment
- The clinical team provides the clinical information requested below as required.
- **Approved for FES Yes ☐ / No ☐ Date:**

Approved on behalf of NHS Derby and Derbyshire ICB by:

3. Pre FES	
Patient's baseline clinical condition, Including: • Predominant symptoms and measures of effort, walking speed, gait, trips and falls etc. • SF36 or EQ-5D assessment • Co morbidities	

4. Follow up post procedure		
Date of reassessment:	Clinic letter attached (please check box if yes)	☐
Patient has derived documented clinical benefit from FES Patient wishes to continue with FES (please check box if yes)		☐
Patient has experienced complications due to FES (please check box if yes) If ticked yes, please give details:		☐
Patient's clinical condition one year after treatment: • Predominant symptoms and measures of effort, walking speed, gait, trips and falls etc. • SF36 or EQ-5D assessment • Co-morbidities		

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