Humber Coast and Vale

Functional Electrical Stimulation (FES) for Foot Drop Commissioning Policy

Intervention	**Functional Electrical Stimulation (FES)**
OPCS codes	A70 Neurostimulation of peripheral nerve A701 Implantation of neurostimulator into peripheral nerve A702 Maintenance of neurostimulator in peripheral nerve A703 Removal of neurostimulator from peripheral nerve A704 Insertion of neurostimulator electrodes into peripheral nerve A705 Electro-acupuncture A706 Acupuncture NEC A707 Application of transcutaneous electrical nerve stimulator A708 Other specified neurostimulation of peripheral nerve A709 Unspecified neurostimulation of peripheral nerve
For the treatment of:	**Foot Drop**
Commissioning position	Humber Coast and Vale CCGs do not routinely commission skin-surface, wireless and implantable Functional Electrical Stimulation for foot drop. This is due to the limited evidence for clinical effectiveness and lack of independent, published, cost effectiveness data. Humber Coast and Vale CCGs require prior approval through the Individual Funding Request Panel. The Panel may consider approval for skin surface Functional Electrical Stimulation in the following circumstances: • The individual has an upper motor neuron lesion resulting from stroke, multiple sclerosis (MS), cerebral palsy (CP) or spinal cord injury (SCI) (but has an intact peroneal nerve); • There is evidence that the foot drop interferes significantly with the individual's day to day living; • There is evidence that FES has been recommended for the individual after a thorough assessment of their suitability by the local NHS physiotherapy service or MDT specialising in rehabilitation. • The request to the IFR Panel must include evidence that first line treatments have been tried and failed. • First-line treatment is usually physiotherapy or the use of an ankle foot orthosis (AFO). Agreed to delete these lines? Evidence will be required to demonstrate that first line treatments have been tried. • Other options may include medical therapy, electrical stimulation of the affected nerves and surgery. These options can be used alone or in combination with one another. Any requests for wireless and implantable devices must demonstrate clinical exceptionality All requests should include: • Detailed clinical evidence which demonstrates the extent to which the patient's condition affects the quality of life; • Lifestyle modifications including weight management (where appropriate) that have been made and relevant services such as Occupational therapy and Falls team have been involved; • There is evidence that FES has been recommended for the individual after a thorough assessment of their suitability by an NHS Commissioned Physiotherapy service or MDT specialising in

	rehabilitation. This recommendation must specify how any benefit will be measured for the individual. If the Individual Funding request is granted it is expected that the patient will demonstrate a positive trial of FES before proceeding to a permanent stimulator. In this case it will not be necessary to seek further permission to proceed with the surface electrode device, the 'Odstock drop foot stimulator', but individual funding approval must be sought if an implanted electrode is being considered.
Summary of evidence / rationale	Foot drop is the inability to lift the foot and toes in the swing phase of the gait when walking. This can cause abnormal gait, reduced walking speed and an increased risk of falls. This condition is present in around 20% of patients surviving a stroke. It is also associated with multiple sclerosis (MS) and other neurological conditions. FES involves the application of electrical pulses to the common peroneal nerve. The pulses are produced by a stimulator unit worn externally and delivered via skin surface (or implanted electrodes). The aim is to produce muscle contractions that mimic normal voluntary movement lifting the foot so that it does not drag on the ground, and so improve gait. A body of evidence, based largely on uncontrolled observational studies in patients with stroke with drop foot and patients with multiple sclerosis with drop foot, using heterogeneous outcome measures, indicates that functional electrical stimulation (FES) (mainly using surface electrodes) is associated with improved walking speed and reduced walking effort[2]. There are preliminary findings of a therapeutic effect of FES use in patients in the chronic phase of stroke rehabilitation. Three large randomised controlled trials are underway in chronic stroke patients which may provide data on comparison with the ankle foot orthosis[2]. There are few safety concerns around the use of surface-applied FES and patient acceptability appears to be high, however the use of implanted electrodes may be associated with more serious adverse events[2].
Date effective from	December 2017
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References:

1. NICE IPG 278 Functional Stimulation for drop foot of central neurological origin. (January 2009)
2. National Guidelines for Stroke. Royal College of Physicians (2009)
3. The use of FES in adults with dropped foot. Evidence note. Quality Improvement NHS Scotland October 2008
4. NETAG Appraisal (Jan 2012) Orthotic functional electrical stimulation for drop foot of neurological origin.
5. NICE Stroke Pathway (movement difficulties)