Information for patients

NHS
Berkshire Healthcare
NHS Foundation Trust

Expiratory Muscle Strength Training (EMST)

For Parkinson's disease

Benefits of EMST

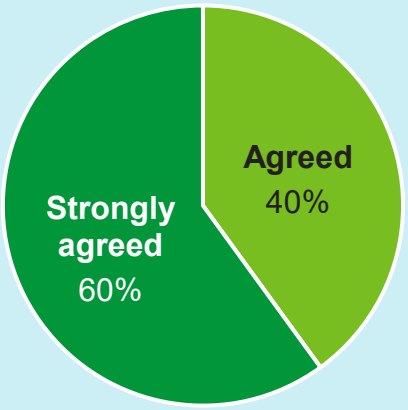
Using an EMST device can slow deterioration in swallow muscle function and improve:

- airway protection during swallowing (by increasing cough strength and therefore ability to clear any food and drink from your airway)
- the movement and strength of your swallowing muscles to help effectively clear food and drink through your throat
- the upwards lift of your larynx during swallowing, which will help protect your airway when you swallow
- shortness of breath

There is some evidence that EMST can also promote a louder voice and improve drooling.

After completing therapy, patients were asked:

"Would you recommend EMST to others?"



(Survey conducted up to 22 October 2025)

Procedure for EMST

Rule of 5: 5 lots of 5 breaths (25 total), 5 days a week, for 5 weeks.

You will have regular check-ins with your speech and language therapist (SLT). They will provide support and guide you through gradually increasing resistance each week.

Following the 5 weeks, you will be advised to continue, but with the frequency reduced to 3 days a week, for long-term maintenance. You will be able to keep the EMST device for life.

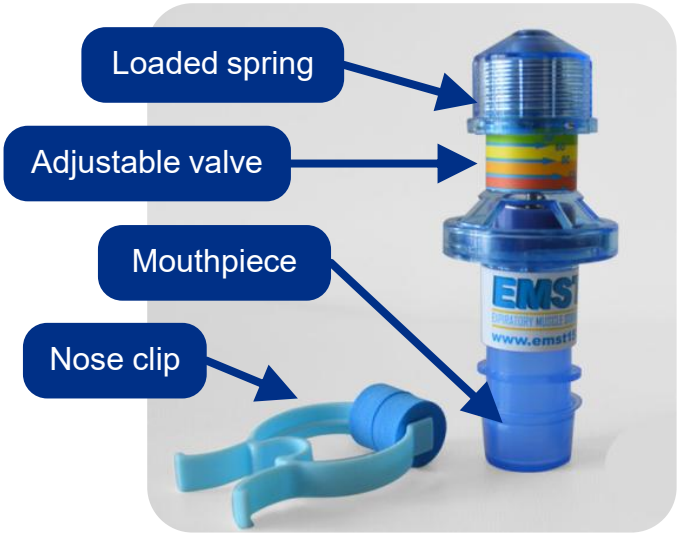


Image credit: Sentient Healthcare

Adult Speech and Language Therapy Service (ASLT) EMST project

We are proud to be running a pilot study introducing EMST as part of its Parkinson's disease (PD) service provision. This project is supported by Parkinson's UK charitable funding. We have 90 devices available for therapy at no cost to patients.

The project aims to have provided EMST therapy to 90 patients with idiopathic PD and to have collected data and feedback from this. This data, feedback and input from a steering group will then be used to improve the quality of care for swallowing difficulties within our service. This, in turn, should support better patient outcomes, experience and overall quality of life.

This project's intended benefits are not limited to service/local level. We aim to use the project to strengthen the evidence for integrating EMST into the PD care pathway at a national level.

Your role in the project

We will be asking you to complete questionnaires at the beginning and end of therapy. This is so that we can analyse data on the effects of EMST for different patients. We will also ask for your feedback on the therapy, which will directly feed into the EMST pathway we are creating, and may even support national EMST therapy delivery.

All data collected will be anonymised before sharing with anyone who is not a speech therapist within our team.

Your time taken completing these questionnaires is valued highly.

Eligibility to commence EMST with ASLT

- You must live within Berkshire and meet ASLT referral criteria.
- You would need a formal referral to ASLT via a healthcare professional.
- You need to have dysphagia symptoms (swallowing difficulties).
- You must not meet any of the exclusion criteria listed.

Exclusion criteria

- Cerebrospinal fluid drain (shunt) in place or intracranial pressure monitoring.
- Abdominal hernia or recent abdominal or oesophageal surgery.
- Asthma patients who suffer frequent severe exacerbations and/or minimal insight into their shortness of breath.
- Ruptured eardrum or any other condition of the ear.
- Pregnancy.
- Recent facial, oral, neck, skull, or chest surgery (including cardiac surgery) or trauma.
- Untreated or uncontrollable reflux or hypotension.
- Tracheostomy with cuff not deflated, site unhealed, and/or inadequate secretion management.

What does research show us about EMST?

Research into Expiratory Muscle Strength Training (EMST) has shown benefits for breathing strength, cough effectiveness, and swallowing safety in people with neurological conditions, including Parkinson's disease.

Studies include:

- Brooks et al. (2019) - A review of studies demonstrating improved swallowing and respiratory outcomes following EMST.
- Kuo et al. (2017) - Research demonstrating improved swallowing and respiratory outcomes following EMST.
- Pitts et al. (2009) - A study demonstrating positive changes in cough and swallow function after EMST in Parkinson's disease.

Together, these studies support the use of EMST within speech and language therapy services.

*Full journal references available on request.



Feedback from patients on EMST:

- “Very reassuring how I progressed weekly.”
- “Excellent care. I don’t think it needs improving. Will continue for sure.”
- “I am more motivated by face-to-face, however, a mix of face-to-face and email was good.”
- Group therapy was described as “helpful”.



How to get a referral

Ask any healthcare professional to make a referral to our service, e.g. your nurse, specialist, or GP. Please ensure your referral has detailed your speech and/or swallowing symptoms clearly.

If you would like to explore EMST, please ask your nurse or GP to include this in your referral. You will need to meet the criteria listed in this information sheet and have some swallowing difficulties. Our speech therapists can then help to check if EMST is right for you.

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Learn more about our service at:

berkshirehealthcare.nhs.uk/slt