

## CASE STUDY

# Using cranial electrotherapy stimulation to manage symptoms of anxiety

Alpha – Stim is a mobile phone size device that uses a low voltage current to induce changes to the brain's electrical activity, from stressful rhythms to relaxing rhythms. It is connected to the earlobes for up to an hour a day and can be worn during light activity.

It has similar effects to the skilled practice of meditation/mindfulness.

Anxiety disorders are the most common mental disorders with lifetime prevalence rates ranging from 13.6% to 28.8%

Patients usually present to their General Practitioner and, where a diagnosis of anxiety is given, they may be offered medication or referral to NHS Talking Therapy services. They can experience waits for NHS assessment, further appointments, and treatment options.

Health Innovation East Midlands supported a real world demonstrator project in Northamptonshire which showed 53.39% of patients achieved reliable improvement in their anxiety symptoms using Alpha-Stim, and 33.3% achieved remission, measured using the [GAD-7](#) scale

## What we did:

NIHR – MindTech referred Alpha-Stim to us to help write a business case for adoption.

Alpha – Stim, Managing Director, Steve Hutchinson attended our Innovation Academy and several 1-2-1 meetings with Health Innovation East Midlands staff members focused on progressing Alpha-Stim along our innovation Pipeline.

In 2022 we facilitated a Real World Evidence project in Northamptonshire and are using the evidence to work with commissioners from other ICSs with potential to adopt and spread the device further.

**Health Innovation East Midlands is supporting Alpha-Stim to build evidence and awareness of the benefits of their device to reduce symptoms of anxiety within primary care settings.**

# Outcomes:

During the demonstrator, 77 patients (91.6% of those offered) consented to use the device, with full baseline and follow-up captured for 33 (43%).

53.39% of patients achieved reliable improvement and 33.3% achieved remission, measured using the GAD-7 scale.

Fifteen patients were interviewed and reported the device was accessible, easy to use, reliable, and could easily be incorporated into their daily routine.

The participants described reductions in their anxiety and panic attacks and increases in feeling of calmness and relaxation. This is supported by prior quantitative [research](#), which found Alpha-Stim AID significantly reduces anxiety symptoms (Barclay & Barclay, 2014; Griffiths et al 2021; Morriss et al. 2019; Royal et al. 2022; Shekelle et al. 2018).

Alpha-Stim is safe and is CE marked for the intended purpose, with NICE confirming “people using Alpha-Stim aid have a low risk of side effects”. (NICE MTG56 Section 4.5)

NICE Guidance states that clinical experts have identified an unmet clinical need for treating people with anxiety disorders within primary care, and that people who do not want medication or talking therapy often prefer the Alpha-Stim device.

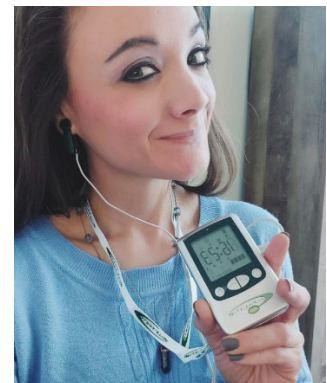
The General Practice Alliance in Northamptonshire continues to offer Alpha-Stim.

Read the [Evaluation report](#)



**Alpha – Stim, Managing Director, Steve**

**Hutchinson said:** “Health Innovation East Midlands is helping me to build the research, evidence base and awareness for adoption and spread of Alpha-Stim within the NHS, to ensure everyone who could benefit from this device can access it. Their support has been invaluable.”



## Contact us

Email: [healthinnovation-em@nottingham.ac.uk](mailto:healthinnovation-em@nottingham.ac.uk)

X: Healthinn\_em