C3 MEDTECH INNOVATIONS

CASE STUDY

ELIRA

Elira Neurostimulator

A drug-free wearable for appetite suppression and weight loss



CLIENT	FOCUS	C3 SCOPE	STATUS
Elira	Appetite suppression	Hardware, firmware, companion app	FDA approval for clinical trial

The challenge

Obesity has become a growing concern nationwide, with over one third of United States adults classified obese. According to CDC data, the rate of adult obesity in the U.S. is **42.4 percent**.

Appetite suppression aids weight loss, and neurostimulation is a reliable way to produce appetite suppression. The Elira team knew a device that could provide that stimulation from the time you wake up to going to sleep was within reach.

Elira's medical experts envisioned a drug-free solution to create and reinforce healthy habits. They believed a discrete, convenient, wearable device would be easy for patients to fold into daily life. What they lacked was the in-house technical knowledge to bring the idea to life.

What C3 delivered

With Elira's vision in mind, C3 defined a process and objectives to develop custom hardware and firmware for the wearable. The neurostimulator electrode suppresses the wearer's appetite and fits into a simple adhesive patch with a small but long-lived rechargeable battery.

We also developed a user-friendly app to support the device, allowing patients to regulate neurostimulation themselves.

Throughout, the team worked alongside Elira to meet their requirements, adjusting the design on their feedback and offering suggestions drawn from our previous work on neuromodulation devices.

We navigated supply chain hold ups along with the manufacturing and testing processes. By fully documenting the process, we were able to obtain FDA approval for a clinical trial of the device.

THE RESULT

FDA approval secured for a clinical trial of the device