



CLIENT CASE STUDY

How Restera Met Critical Clinical Trial Deadlines
with Dojo Five's Embedded Expertise

CLIENT BACKGROUND

Restera, a medtech startup developing an innovative obstructive sleep apnea treatment, needed to complete firmware for their External Pulse Generator ahead of a critical clinical trial in Australia.

With only two internal developers and strict regulatory requirements, they required highly specialized embedded expertise—fast.

PERFORMANCE & COMFORT IN WEARABLE DESIGN

Restera is developing a wearable, wireless system to treat obstructive sleep apnea, designed for comfort, ease of use, and high patient compliance.

Wearable & Wireless

Lightweight design adheres gently to the skin, avoiding the bulk and discomfort of CPAP machines.

Intelligent Neurostimulation

Addresses the root cause of sleep apnea with a less intrusive, more comfortable alternative to existing devices.

Broader Patient Reach

User-friendly design may serve patients who avoid or cannot tolerate traditional therapies.

Clinical-Stage

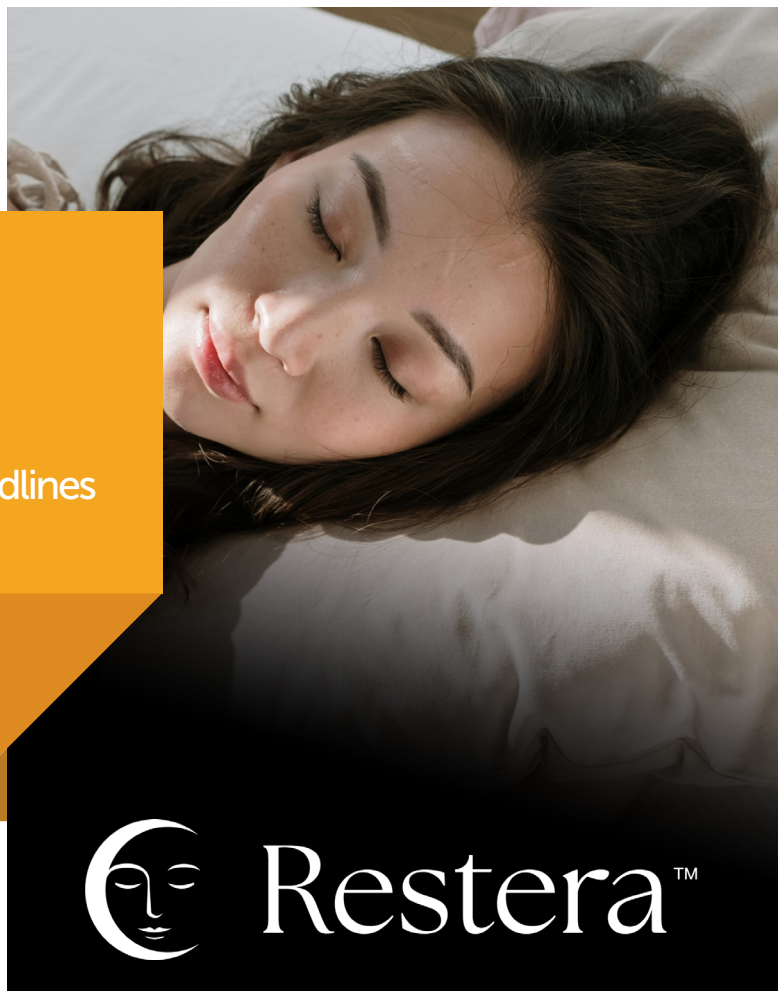
Ongoing trials with regulatory approval in progress.

Accurate Detection & Analysis

Performs comparably to polysomnography (PSG) in measuring sleep stages and detecting apnea events.

Efficacy & Compliance Focus

Aims for CPAP-level performance with higher compliance than other neurostimulation devices like Inspire and Nexo.



CHALLENGES

Tiny Internal Team

- › Only 2 developers, no bandwidth for additional hiring.

Specialized Tech Need

- › Deep knowledge of Nordic Semiconductor's nRF52840 and nRF5340 microcontrollers, Nordic BLE, and low-power firmware in a medical context.

Tight Deadline

- › Clinical trial schedule could not slip.

Regulatory Compliance

- › Build needed to meet medical device standards from day one.

SOLUTIONS

Restera partnered with Dojo Five after connecting at the Sensors Converge conference:

Why Dojo Five?

- › Proven experience with Nordic BLE and nRF microcontrollers.

Medical Device Regulatory Knowledge

- › Allowed our team to avoid compliance rework.

On-Demand Model

- › No full-time hiring, immediate ramp-up.

Agile Processes & Seamless Integration With Restera's Team

- › Iterative cycles kept development on track.