

Neurostim Device



The Device: Neurostimulation device to treat back pain.



Project Scope: Develop a complete pain management device for patients with back pain.

CHALLENGES

Device Location Accessibility

Provide pain relief and treat cause

Maintaining lead placement

ENGINEERING SOLUTIONS

Connectors used polarized magnets which allow the patients to correct orientation

Created two treatments targeting both pain management and muscle building

Designed coiled lead to stretch during body movement

Results:



Neurostimulation Platform

Leveraged Nextern's neurostimulation platform which includes 8 current controlled channels.



Mini-aturization

Minimized the product for easier transportability and use.



Battery Life Optimization

Refined the product for battery life optimization.



Nextern Liink

Utilized Nextern's internal software team to develop an app to connect via Bluetooth to the device.



Clinician Programmer

Developed a clinician programmer using an off-the-shelf android tablet.

Project Wins:

Leveraged existing technology to drive down cost of goods and connecting to patient smartphone, eliminating need for custom patient controller.

End point:

We completed the design of the product.