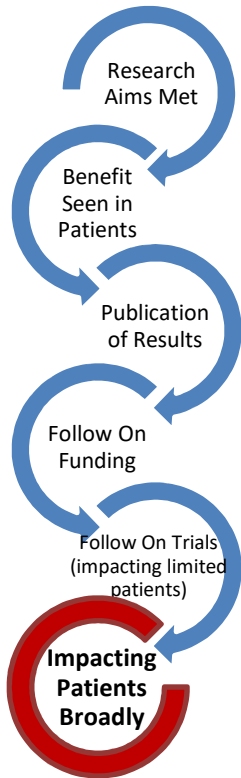


# Repurposing a Device to Help Restore Function Lost to Brain and Nerve Disorders

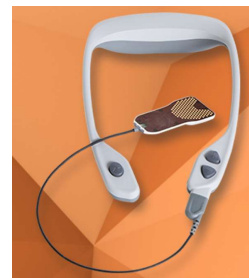


## Measuring CWR's Success



In 2009, Cures Within Reach funded Drs. Kaczmarek and Danilov at the **University of Wisconsin** to repurpose the **Portable NeuroStimulator (PoNS)** to help people suffering from multiple sclerosis (MS) regain function, previously used for treating balance disorders. 9 subjects went through a 2-week intensive program coupling physical therapy with the use of the PoNS, which stimulates the tongue to send electrical signals to the brain that help speed up and enhance the brain's ability to restore balance, walking, arm movement and strength.

One patient, after the trial, played golf for the first time in over 10 years. A much larger study was then funded in MS and smaller studies in stroke, Parkinson's and traumatic brain injury (TBI) with similar success in restoring patient function. In 2014, Helius Medical acquired NeuroHabilitation, licensee of PoNS, to commercialize the device. Helius conducted FDA-authorized clinical studies in MS and TBI. It is now approved for TBI in Canada and pending approval at the FDA.



## KEY FACTS AND IMPACT

- CWR provided \$54,000 to fund the **first human clinical trial** repurposing the PoNS device in MS
- MS patients regained significant function, leading to further clinical trials in TBI
- CWR's early funding helped to **leverage \$4.5 million in follow-on funding** for TBI from the DOD, plus led to commercialization by Helius Medical
- The device is now approved in Canada for TBI and is pending at the FDA

