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JLC Services, Inc.
HB 96 Proponent Testimony
In Support of eTMS funding
May 13, 2025

Chair Huffman, Vice Chair Johnson, Ranking Member Liston and members of the Senate Health Committee, thank you for giving me the time to speak on the eTMS Ohio EEG guided transcranial magnetic stimulation (TMS) program. I come here today to speak on the results and to ask for additional funding from \$4 million to \$10 million in the Ohio budget.

Before I proceed, let me take a moment to describe my background and how that evolved to my role as the medical lead in the current trial seeking designation of EEG guided TMS as an FDA approved intervention for PTSD. I joined the faculty at Ohio State University in 1984. My activities while at OSU included creating the Traumatic Brain Injury Service in 1984 and serving as the Medical Director until 2021. Additionally, I served as the Medical Director of Dodd Rehabilitation Hospital from 2010 until 2021 and the Chair of the Department of Physical Medicine and Rehabilitation at The Ohio State University from 2013 to 2021. In 2023, I retired from OSU and became the lead physician for the eTMS Ohio FDA PTSD trial.

In 2021, I first stood before legislature to advocate for an EEG guided TMS treatment program for Veterans to treat PTSD. Transcranial magnetic stimulation, or TMS, received its first FDA approved clinical indication as a treatment for major depression in the 1980's. Unfortunately, the TMS protocol for depression is not effective for PTSD and it has a high incidence of actually aggravating PTSD symptoms.

Our protocol differs from other current FDA approved TMS protocols in several important ways. First, the treatment involves sending a series of pain-free magnetic pulses over the forehead to modulate the activity of the frontal lobes. In addition, this protocol is personalized in that the firing rate of these pulses is determined for each individual patient by brain wave activity noted on their baseline EEG. This allows us to deliver more targeted TMS stimulation to the brain at a frequency most likely to benefit that individual patient. The clinical benefits we consistently observe with this protocol include a significant resolution of PTSD symptoms as well as measurable improvements in other mental health and substance use disorders as documented with the use of psychometrically validated scales including the PCL-5 (PTSD), PHQ-9 (depression), GAD-7 (anxiety), OCS (opioid craving scale).

Again, in 2021, I reported observing remarkable improvements in PTSD, sleep, and other mental health disorders while working with veterans. The funding was then approved to add first responders to the program, and we are reporting the same very positive outcomes. We've now seen over a thousand veterans and first responders since the funding first began. A list of 100-120 veterans and first responders around Ohio are waiting to get into treatment, and we have 80-85 people who are currently receiving treatment

In addition, we completed a Phase 1 FDA trial where we reported data to the FDA, documenting the clinical safety of the eTMS protocol. We subsequently received permission from the FDA to proceed

with a Phase 2 trial that will prove that this intervention is clinically effective and worthy of designation as an FDA approved intervention for PTSD.

In 2024, after observing significant improvements in opiate and alcohol craving scales in our PTSD patients, the team began to consider leveraging this technology for substance abuse disorder interventions. JLC Services self-funded an initiative at two inpatient treatment centers to demonstrate that this treatment could effectively address opioid, alcohol, and methamphetamine use in the general public. Those results show a 67% decrease in opioid craving, 89% decrease in alcohol craving, a 72% decrease in Fentanyl craving and a 45% decrease in methamphetamine/stimulant craving.

I testified four years ago that the transformation I saw in people with PTSD after only several weeks of treatment with eTMS would take traditional medicine several years to achieve. I remain unequivocally convinced that eTMS is an important advancement in the care of people with PTSD and substance use disorders. We are therefore seeking additional funding for the eTMS Ohio program to treat more Veterans and first responders. We are also seeking new funding to address substance use disorders in a general public group, while also completing a new FDA clinical trial for opioid use disorder utilizing eTMS. This is a critical step in achieving sustainable funding, payor reimbursement and combatting the opioid epidemic.

Thank you for the opportunity to testify, I am happy to answer questions.