



Innovative Health Solutions

## CASE STUDY #1: OHIO STATE UNIVERSITY – DR. JERRY MYSIW & DR. MATTHEW KORTES

### PATIENT HISTORY & INFORMATION

**Patient #1:** Presented after poly-trauma with single-level lumbar burst fracture and a history of chronic opioid analgesic use for years. She was admitted and stabilized.

**Additional Detail:** Both prior to, and after surgical stabilization, Patient #1 required high dose opioid analgesic medications. Patient #1 was kept on these medications for approximately seventeen (17) days at doses exceeding 850 oral morphine equivalents (“OME”) per day throughout the duration of her seventeen (17) day stay.

**Consultation:** Drs. Mysiw and Kortés were consulted three (3) days prior to planned discharge. At this time, Patient #1’s pain was poorly controlled and she was prescribed approximately 850 OME/day, excluding a secondary breakthrough medication she had been started on by acute pain service. Using conventional methods, including methadone and supportive medications, Patient #1 was still in Moderately Severe Withdrawal for most of the weekend with an ~30 Clinical Opiate Withdrawal Scale (“COWS”) score. Additionally, she required IV fluids for hypotension. Planned discharge date was extended 10 days for taper schedule using conventional methods.

### HELPING CREATE A NEW STANDARD OF CARE: NSS-2 BRIDGE

**Patient Status:** Two days prior to NSS-2 BRIDGE placement, BPs had stabilized as Drs. Mysiw and Kortés had increased scheduled dosing. Patient #1 was receiving a minimum of 560 OMEs per day from oral hydromorphone and 180 OMEs from methadone (10mg), three times a day. Sixteen (16) hours prior to NSS-2 BRIDGE placement, Patient #1’s prescription of opioids equal to 560 OMEs/day were discontinued; per MAR review last dosage was thirteen (13) hours prior. Despite scheduled hydroxyzine, Tylenol, and Robaxin, Patient #1’s COWS score (at time of NSS-2 BRIDGE placement) was eighteen (18), despite a shortened period of withdrawal.

**Effectiveness:** At one hour after NSS-2 BRIDGE placement, Patient #1’s COWS score had reduced from eighteen (18) to two (2).

**Patient Outcome:** Patient #1 was discharged home on methadone for pain less than 48 hours later.

**Hospital Outcome:** Patient #1’s discharge was ten (10) days earlier than normal saving the hospital ~\$10,000 (or 10 days at \$1,000 per day).

### CASE STUDY CONSENT & DISCLAIMER

*Consent for publication was obtained from the patient, as was a HIPAA waiver. Due to requirements of academic journals to which the case is being submitted, Drs. Mysiw and Kortés can only include a summary of the materially significant points. In addition, neither Drs. Jerry Mysiw nor Matt Kortés have a financial relationship with IHS, IHS’ subsidiaries, IHS’ employees, nor have either of them been promised or would accept any compensation for above marketing materials. Also, please note, this case study is based on an individual patient’s experience as reported by the treating physicians. Hospital stays and treatment decisions can vary based on medical judgments of medical practitioners and the individual needs of the patient.*

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### NSS-2 BRIDGE: HELPING SOLVE THE OPIOID CRISIS

To help solve this crisis, Innovative Health Solutions, Inc. (IHS) has launched the **NSS-2 BRIDGE Auricular Stimulator™ device (“BRIDGE”)** which has been FDA cleared and is clinically proven to reduce the effects of physical and emotional opioid withdrawal symptoms by more than 80%, in +98% of patients, and within 10-30 minutes of usage. In addition, the BRIDGE has shown the ability continue to reduce the effects of opioid withdrawal symptoms from the initial 80% to more than 95% over the duration of the five-day wearing time. **For most patients, the symptoms are alleviated completely.** Most importantly, the studies showed that patients attempting to detox in order to transition to the final stage of a medically-assisted treatment program for addiction (i.e., Vivitrol) were twice as likely to succeed when treated with the BRIDGE device vs. treated without it.

***The BRIDGE is the only non-surgical device, drug or technology in the world with FDA clearance for the treatment of “symptoms of opioid withdrawal”***

**Note:** COWS Scale Ranges: 5-12 = Mild; 13-24 = Moderate; 25-36 = Moderately Severe; more than 36 = Severe Withdrawal

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