

relevant early symptom relief, and predictable efficacy compared with PBO. Improvements in SBMs, CSBMs, straining, and stool consistency were rapid and sustained across 12 weeks. Naloxegol is effective and safe in individuals  $\geq 65$  yrs with non-cancer pain experiencing OIC.

**Aim:** Naloxegol, an oral peripherally acting mu-opioid receptor antagonist (PAMORA) has demonstrated rapid and predictable relief of opioid-induced constipation (OIC) in patients treated with opioids for chronic non-cancer pain in two phase 3 trials (KODIAC 4/5; NCT01309841/NCT01323790). This analysis evaluates the speed and predictability of response, and the rapid and sustained impact of naloxegol on OIC symptoms in subjects aged  $\geq 65$  yrs. **Methods:** Data were pooled from the KODIAC 4/5 intent-to-treat populations (N=1337). Subjects  $\geq 65$  yrs treated once daily with naloxegol 25mg, 12.5mg, or placebo (PBO) were evaluated. Response definition:  $\geq 3$  SBM/wk and increase of  $\geq 1$  SBM/wk over baseline for  $\geq 9$  of 12 weeks, and  $\geq 3$  of the final 4 weeks. For each SBM, patients documented complete evacuation (CSBM) (Yes/No), degree of straining (scale 1=not at all, 5=extreme), and stool consistency via the Bristol Stool Scale (1=hard, 7=watery). **Results:** This analysis evaluated 148 subjects  $\geq 65$  yrs (11.1% of the overall population). In these older adults, a significantly higher response rate was achieved with naloxegol (25mg, 50.9%,  $p=0.037$ ; 12.5mg, 53.3%;  $p=0.036$ ) vs PBO (32.0%). Corresponding HRs (2.52,  $p< 0.001$ ; 1.90,  $p=0.005$ ) indicated significant, ~two-fold reduction in time to first SBM with naloxegol vs PBO. Time to first CSBM was ~50% shorter for naloxegol vs PBO for both regimens (Hazard Ratios: 1.66,  $p=0.019$ ; 1.45,  $p=0.103$ ). Rapid, statistically significant, and clinically relevant symptom improvement (straining and stool consistency) was generally sustained from weeks 1-12 for naloxegol vs PBO. The most common AEs were GI-related and similar across regimens. **Conclusion:** In subjects  $\geq 65$  yrs, naloxegol (25mg, 12.5mg) demonstrated significantly better response rates, clinically relevant early symptom relief, and predictable efficacy compared with PBO. Improvements in SBMs, CSBMs, straining, and stool consistency were rapid and sustained across 12 weeks. Naloxegol is effective and safe in individuals  $\geq 65$  yrs with non-cancer pain experiencing OIC.

### Interprofessional Pain Curriculum for an Academic Health Science Center

Kelly Allred, PhD, RN, PMGT-BC, CNE, Carey Rothschild, PT, DPT, James Whitworth, PhD, LCSW, Jeffrey E. Cassisi, PhD  
*University of Central Florida, Orlando, Florida*

**AIM:** The aim of this project is to develop a comprehensive pain curriculum to educate a diverse group of students across health care disciplines who care for those in pain. The outcome goals for participants of this educational program are to have increased knowledge and skills associated with the management of pain. This poster will describe the process of team development, development of the grant proposal, conducting a gap analysis, designing and developing the content of the program, and finally the integration of technology as we prepare for program delivery.

**METHODS:** The team developing the program include representatives from the disciplines of nursing, physical therapy, social work, and psychology. The curriculum is based on the Interprofessional Pain Curriculum developed by the International Association for the Study of Pain. Holographic technology will be used to optimize participant engagement and interest. Additional modes of content delivery include synchronous video meetings, asynchronous discussions, and the use of case studies in both modes, all completed in multidisciplinary teams.

**RESULTS:** Content has been developed and loaded into a Canvas course shell. Delivering parts of the program via hologram technology will be recorded within the next 3 months.

**CONCLUSIONS:** This content will be delivered to student groups in the Spring 2023 semester during an Interprofessional Education (IPE) event focused on the management of pain. Health disciplines represented at the IPE event will include Medicine, Nursing, Physical Therapy, Psychology, Social Work, and Pharmacy. Outcome assessments related to knowledge, beliefs and attitudes about pain from IPE participants will be collected. Based on that data, further tweaking of the education program will be considered.

**ACKNOWLEDGEMENT:** This project was made possible through funding from the Elizabeth Morse Genius Foundation, Grant number: AWD00001443

### Treatment of DPN with 8% topical capsaicin without the use of a topical anesthetic

Stephanie Simon, MSN, FNP-BC  
*Midwest Pain Clinic, Omaha, Nebraska*

**PURPOSE:** A qualitative study was done to look at the use of 8% topical capsaicin without the use of a topical anesthetic prior to treatment of DPN. In the PI it is indicated to anesthetize the affected area with topical lidocaine prior to the treatment for painful diabetic peripheral neuropathy of the feet. Many patients with diabetic peripheral neuropathy have significant numbness in their feet and limited feeling and there may not be a need for a topical anesthetic prior to application of the topical system. Applying a topical anesthetic can be time consuming to allow it to take full effect and may not be necessary. For the purposes of this study the clinics ethics committee was consulted, and approval was granted.

**METHODS:** Is topical anesthetic necessary before the procedure for the treatment of painful diabetic peripheral neuropathy with 8% topical capsaicin? 15 patient charts were reviewed at random that had received treatment with administered 8% topical capsaicin patches for their diabetic peripheral neuropathy. No topical anesthetic was used prior to the procedure. The patient was monitored throughout the procedure and ice was offered to place over the top of the patch, if needed for administration site pain.

**RESULTS:** Most patient's that did not have a topical anesthetic prior to their procedure of 8% topical capsaicin for the treatment of painful diabetic peripheral neuropathy, tolerated the procedure well without any significant increased pain or the need for interventions, such as ice.

**CONCLUSION:** Topical anesthetic can be time consuming and cumbersome. In many patients with severe diabetic peripheral neuropathy that has resulted in significant paresthesia, a topical anesthetic is not necessary due to the patient's limited feeling in the feet. This results in a more streamline process with less time for the patient to be in the office.

### Enhanced Recovery After Surgery in a Veteran Population

Vada R Taylor, RN, PMGT-BC, HTP  
*Veteran's Health Administration, Asheville, North Carolina*

ERAS protocols have improved our pain management (via patient satisfaction scores) while decreasing post op opioids used and decreasing complications and length of stay.

### Prospective Study of Masimo NSS-2 BRIDGE; as a Non-Pharmacological Treatment for Acute Opioid Withdrawal Symptoms

Carla Matta, BSN, RN<sup>a</sup>, Alexis Wieseler, PA-C, MSPAS<sup>b</sup>  
<sup>a</sup>Masimo, Irvine, California

<sup>b</sup>Zephyr Medical Group, Santa Ana, California

**Purpose:** Opioids are commonly employed for treatment of acute and chronic pain. However, continued opioid use can lead to opioid use disorder. Opioid withdrawal symptoms can be severe, and avoidance of the discomfort is a key barrier to voluntary discontinuation. The NSS-2 BRIDGE™ (Masimo Corporation, Irvine, CA) is a percutaneous nerve field stimulator that can decrease symptoms of acute opiate withdrawal. The device fits behind the ear and stimulates branches of Cranial Nerves V, VII, IX, X, and periauricular occipital nerves, which synapse with nuclei involved in processing perception of pain and pleasure, as well as in addiction. The objective of this prospective study was to investigate the effects of NSS-2 BRIDGE™ on outpatients experiencing acute opioid withdrawal symptoms. We hypothesized that participants using the active NSS-2-BRIDGE™ device would have a reduction in Clinical Opioid Withdrawal Scale (COWS) scores compared to those using the sham device, when monitored at 30-minute intervals.

**Methods:** Adult patients ( $\geq 18$  years old) who voluntarily presented to the Zephyr outpatient clinic (Santa Anna, CA) were enrolled in the study and fitted with the NSS-2 BRIDGE™ device. Initial COWS scores were recorded at baseline and at 30 minutes intervals, up to 120 minutes.

**Results:** The study included 16 participants, 8 subjects in each group. The mean COWS score of the active group decreased from 17.125 at baseline to 5.75 at 30 minutes, a mean decrease of 11.375 ( $P < 0.001$ ). The mean COWS score of the sham group decreased from 16.25 at baseline to 12.875 at 30 minutes, a mean decrease of 3.375 ( $P = 0.186$ ).

**Conclusion:** The active device group showed a statistically and clinically significant mean drop in COWS score compared to the sham group. This study demonstrated that NSS-2 BRIDGE™ can assist in opioid withdrawal and may increase initial treatment retention.

### Enhancing the Use of Opioid Sparing Protocol in the PACU

Analissa Chavez, MS, FNP-BC, CPAN, CCRN, PMGT-BC,  
Michael Tagadaya, MS, RN, NEA-BC  
NYU Langone Orthopedic Hospital, New York, New York

**Introduction:** Opioids serve as the cornerstone for severe acute post-operative pain management in the PACU. Opioids have been used for their quick onset and efficacy without analgesic ceiling yet have significant side effects.

**Identification of the problem:** Acute post-operative pain remains a major problem, resulting in the multiple undesirable outcomes if inadequately controlled. In the PACU setting, opioid use is common as the primary treatment for post-operative pain.

**Purpose of the study:** The purpose of the study is to assess the impact of the Opioid Sparing Protocol on opioid-naïve patients in the PACU post knee and hip arthroplasty.

**Methods:** Retrospective analysis by chart review of 200 comparable cases, from each period, for implementation of the Opioid Sparing Protocol pre-intervention (Q2, 2018) and post-intervention (Q2, 2019).

**Outcomes/Results:** Significant increase in the use of Tramadol (+242.86%), along with reduction in the use of Percocet (-44.44%) and Oxycodone (-56.52%) have shown to be effective in providing analgesia and improved patient outcomes.

**Discussion:** There is an ongoing effort to develop strategies for safe and effective alleviation of post-operative pain. This analysis of comparable cases shows that changes in pain management

methodologies can lead to positive results for the patient's surgical experience and post-operative clinical outcome.

**Conclusion:** Utilizing the multimodal approach outlined in the Opioid Sparing Protocol provides pain relief while reducing opioid requirements and opioid related events. Effective management of acute pain in the PACU results in reduced PACU length of stay and improved patient outcomes.

**Implications for peri-anesthesia nurses and future research:** As health care professionals, it is our responsibility to provide safe and effective pain management. Considering the heavy societal cost of the opioid crisis, enhanced pain management addresses opioid misuse. The challenge for the healthcare workforce is to develop new, effective and non-addictive approaches to pain management.

### Nurse-led Tele-Collaborative Pain Care for Rural Patients with Substance Use Disorder

Patricia E. Maloy, BSN RN, PGMT- BC  
Veterans Health Administration, Portland, Oregon

**Purpose:** Rates of chronic non-cancer pain in patients with substance use disorders (SUD) are higher than in patients without SUD. Yet access to evidence-based pain treatment for patients with SUD is limited, particularly in rural areas where care access is often poor. The purpose of this study was to examine feasibility and preliminary efficacy of a nurse-led collaborative pain intervention for patients with comorbid chronic pain and SUD, delivered exclusively via telehealth.

**Methods:** Subjects were 62 patients with chronic musculoskeletal pain enrolled in specialty SUD treatment at a single VA medical center and residing in rural geographic regions. Subjects received an initial pain assessment and treatment recommendations, 6 follow-up appointments over four months, and a 10-session weekly pain education class. All clinical encounters were delivered via video conference or telephone, based on patient preference and internet availability. Subjects completed an interviewer administered survey at baseline, 1- and 4-month follow-up that assessed pain severity and interference as measured by the Brief Pain Inventory, depression symptoms as measured by the Beck Depression Inventory-II, and daily substance use outcomes as measured by the Timeline Followback.

**Results:** Patients on average were 48 years old, and the majority were male (86%) and White Non-Hispanic (91%). By 4-month follow-up, pain severity ( $B = -0.67 [-1.05, -0.29]$ ), pain interference ( $B = -0.94 [-1.50, -0.39]$ ), and depression symptoms ( $B = -4.30 [-7.96, -0.63]$ ) had significantly declined from baseline. A significant reduction in days of alcohol ( $OR = 0.64 [0.46, 0.90]$ ) and cannabis use ( $OR = 0.47 [0.34, 0.66]$ ) was also observed at 4-month follow-up.

**Conclusion:** Preliminary analyses show promise for synchronous telehealth collaborative pain interventions delivered to rural patients receiving SUD treatment, with particular benefit in reducing pain, depression symptoms, and alcohol and cannabis use.

### Peripheral Nerve Stimulation for Knee Pain

Khairunnisa Khan, APRN FNP-C, PMGT-BC  
Arkansas Spine and Pain, Little Rock, Arkansas

Peripheral nerve stimulation (PNS) is a drug free pain management procedure that uses electrical impulses to target specific nerve and block pain signals. PNS helps decrease perception of pain, providing real answers to patients dealing with chronic knee pain. The case study discussed in this presentation is of use of PNS targeting the superior lateral genicular nerve and the saphenous