

## **An Assessment of Internet-based (Emerging Solutions in Pain) CME Activities for Pain Physicians**

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### **Purpose**

Physicians are increasingly utilizing the internet, and in particular, trusted independent websites, as an essential component of obtaining professional information, as a source of continuing medical education (CME) and as a communication lifeline at the point of care.

The purpose of this study was to determine the effectiveness of two Internet-based CME activities, Assessment Strategies and Practical Approaches to Successful Monitoring of Chronic Pain and Minimizing Risk and Improving Outcomes in Chronic Pain included on the educational initiative, Emerging Solutions in Pain (ESP). Both programs focused on the safe and effective treatment of chronic pain while minimizing the risks of misuse.

### **Method**

A post-activity study was conducted 3-5 months after completion to determine the effectiveness of two CME activities on the practice patterns and knowledge of physicians who manage chronic pain patients.

Effectiveness was measured using a case-based survey designed to assess whether the diagnostic and therapeutic choices of program participants were consistent with evidence-based content of the CME activities. The survey was also administered to a demographically similar control group of physicians who did not participate in the educational program in order to assess differences in practice choices. The participant group was selected from a list of physicians completing the course and also agreeing to participate in future self-study activities. The control group was selected at random from the AMA Master File. The participant and control group were matched on the following characteristics: physician specialty, degree, years in practice, whether or not direct patient care was their primary responsibility, and the number of patients seen per week with chronic pain.

CE Outcomes independently reviewed the educational objectives and content of ESP to define a series of key measurement indicators to frame case vignette questions, which were presented to participants and non-participants. Responses were analyzed based on the evidence presented in the CME activities. An effect size was calculated using Cohen's *d* to determine the difference between the two groups in the likelihood of making evidence-based clinical decisions.

### **Results**

A total of 4,171 physicians (MDs/DOs) who practice in pain management seeing approximately 137,643 chronic pain patients participated in ESP CME activities over a 3-month period. Responses from 50 participant and 50 control non-participant primary care physicians (PCPs) and pain specialists were collected for analysis. Case vignettes were used to predict practice patterns and measure a physician's process of care in actual clinical practice.

The participants and non-participants were very similar in demographics:

Years in Practice: 23 (participants); 23 (nonparticipants)

Patients seen per week with chronic pain: 33 (participants); 26 (nonparticipants)

Participants were found to be more likely to practice evidence-based care than non- participants in the ESP educational CME activities especially in the following areas:

- Participants were more likely to recognize that a strategic precautionary approach to assessing a patient with moderate risk for aberrant behavior will reduce the likelihood of becoming a high risk patient.
- Participants were more likely to start a patient with severe pain that is not controlled with acetaminophen and NSAIDs who demonstrates moderate risk for aberrant behavior on multimodal therapy.
- Participants were more likely to recognize that some over-the-counter medications cause a false positive urine test and would assess a patients OTC medications prior to stopping the patients opioid therapy.
- Participants were more likely to recognize the need to utilize a standard risk assessment tool (such as the ORT or SOAPP) as the best approach to stratifying risk in a patient in the primary care setting.

## **Conclusions**

Physicians who participated in ESP CME activities are more likely to practice evidence-based care of chronic pain patients than those who did not participate in these activities, specifically in:

- Managing patients with moderate risk for aberrant behaviors
- Recognizing the benefit of using a strategic precautionary approach to assessment and management and utilizing risk assessment tools (eg, ORT and UDT)
- Utilizing multimodal therapy

The large effect size (30%) suggests that the ESP Internet-based CME programs offer effective, credible and high-impact education.

These programs are available on-demand and in multiple formats to suit the learning preferences of physicians.