

From: Bronwyn Boyes
To: Williams, Paula C.
CC: mdyer@medicaled.com; Joan Meyer
Sent: 12/7/2010 5:43:41 AM
Subject: Fwd: Follow-up from our meeting today
Attachments: AAPM #75- Assessment of ESP.pdf; AAPM #76- Commercial Bias.pdf; ESP_Outcomes_Report_Final.pdf; image001.gif; PAINWeek ESP Poster 0120.pdf; PAINWeek ESP Poster_0128.pdf; Summary Slides of ESP OutcomesStudy_Final.ppt

Hi Paula,

Unfortunately, we did not present any posters at ASPMN but I have forwarded the other four posters again to you for your year-end internal annual report.

Let me know if you need anything further.

Best wishes,

Bronwyn

-----Original Message-----

From: Bronwyn Boyes
To: "'Roy, Karen'" , "'pwilliams@cephalon.com'"
Cc: 'Joan Meyer' , "'ssturgis@medicaled.com'"
Date: Wed, 17 Nov 2010 16:24:00 -0500
Subject: Follow-up from our meeting today

Hi Ladies,

Thank s so much for your time today and for providing such a lovely lunch. I hope your subsequent meeting went well.

I have a few questions and a few follow-ups from today.

First the questions please:

1. Do you know the date of your December GRC?
2. Should the REMS grant be separate to the ESP grant?

I noted the following follow-ups from our discussion so please find these below and/or attached.

1. You should have all required reconciliation reports and budgets for all 2009 grants including (please let me know if you are missing any):

Request ID

Description

Status

Title

2620

ESP Website

Completed, Requirements Sent, Metrics Entered & Pending Closure

Emerging Solutions in Pain

2230

APS - BTP

Completed, Requirements Sent, Metrics Entered & Pending Closure

Take The Breakthrough Pain Challenge: An Expert Led Debate

1882

ASPMN

Completed, Requirements Sent, Metrics Entered & Pending Closure

Refining the Art of Assessment in Patients with Chronic Pain: The Key to Minimizing Risk and Improving Outcomes

1823

AAPMngmt Symposium

Completed, Requirements Sent, Metrics Entered & Pending Closure

2008 ESP Lecture Grant Request American Academy of Pain Management Symposium

2166

ICPCD

Completed, Requirements Sent, Metrics Entered & Pending Closure
Minimizing Risk and Improving Outcomes in Chronic Pain: A Focus on the Challenges of
Communication and Interviewing Skills in Assessing Pain Patients

2489

AAPMed Booth

Completed, Requirements Sent, Metrics Entered & Closed
Emerging Solutions in Pain Meet the Experts Booth

The only grant closed is 2489, the rest are all listed as pending closing but you have all requirements, so should we just ignore these please?

2. Attached are the four ESP poster pdfs. I have also reached out to AAPM to validate how to reference the posters so will let you know shortly.

3. I have re-attached the ESP Outcomes Assessment slides for your internal presentation.

4. The complete Mayday Fund report can be found at:

<http://www.maydaypainreport.org>

[/docs/A%20Call%20to%20Revolutionize%20Chronic%20Pain%20Care%20in%20America%2003.04.10.pdf](http://www.maydaypainreport.org/docs/A%20Call%20to%20Revolutionize%20Chronic%20Pain%20Care%20in%20America%2003.04.10.pdf)

and further information about the program can be found at:

<http://www.maydayfellows.org/about.html>

Please do let me know if I have missed any actions which we discussed.

Thanks again and it really was great seeing you in person.

Best wishes,

Bronwyn



Assessment of ESP Online CME Activities for Pain Physicians

Bronwyn Boyes, PharmD,* Joan Meyer, RN, MHA,* Benjamin Whitfield,‡ Gregory Salinas‡
*MediCom Worldwide, Inc., 101 Washington Street, Morrisville, PA; ‡CE Outcomes, LLC, Birmingham, AL

P# 75



Background

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

Managing Subacute in Pain (ESP) was launched in 2005 with a leading cadre of experts in pain management and addiction medicine. ESP is a robust and multi-award-winning ongoing, educational initiative which provides an array of information, resources, tools, and case studies to highlight and educate clinicians on the complexities surrounding the management of chronic pain. It aims to inform clinicians of methods of communication, ways in which risk of abuse may be measured, and how to integrate these strategies into an individualized treatment plan. Membership is free to all health care professionals.

Aim

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 in the educational initiative *Managing Subacute in Pain* (ESP). Both programs focused on the safe and effective treatment of chronic pain while minimizing the risks of misuse.

Overview

The site *Managing Subacute in Pain* is a comprehensive website consisting of updates and CME programs on the topic of pain. CE Outcomes assessed the impact of two CME activities:

- *Minimizing Risk and Improving Outcomes in Chronic Pain*
- *Assessment Strategies and Practical Approaches to Successful Monitoring of Chronic Pain*

Both programs focused on ways to integrate risk assessment strategies into clinical practice while enabling clinicians to gain an appreciation for the inter-disciplinary approach to pain management, maximizing professional communication and improving patient care outcomes. The target audience for these programs were primary care physicians and pain specialists who manage patients with chronic pain. The participants who completed the CME activity were offered 1.0 AMA PRA Category 1 Credits.

Of the 116 health care providers who participated in all three programs, a sample of 50 physicians was collected and analyzed.

Target groups and sample size:

Participants	Nonparticipants
Pain specialists, family practitioners, and internists who participated in one of the two activities (n = 50)	Pain specialists, family practitioners, and internists who did not participate in the activities (n = 50)

Program Overview

Program Title	Faculty	Learning Objectives
<i>Minimizing Risk and Improving Outcomes in Chronic Pain: From the Challenges of Communication and Learning to the Ability to Assess Pain Patients</i>	Mickie A. Brown, BS, RN, RN, Steven D. Pinski, PhD, John A. Keating, MD, FACPM, FASAM	<ul style="list-style-type: none"> Describe why understanding the necessity of communication techniques and assessing tools for the effective management of chronic pain patients. Identify two reasons why risk assessment is necessary to all clinicians on their clinical practice and the effective management of chronic pain patients. Identify three ways to assess risk of chronic pain, use a risk scale to assess and social interventions use clinical utilization to potentially better practice and improve individualized treatment strategies. Summarize the importance of effective communication to the overall management of chronic pain patients on long-term opioid therapy.
<i>A Successful Strategy and Practical Approaches to Successful Monitoring of Chronic Pain</i>	Steven D. Pinski, PhD	<ul style="list-style-type: none"> Recognize the high prevalence of potential scenarios in chronic pain. Describe appropriate scenarios of chronic pain, including long-term opioid therapy. Outline and compare risk assessment methods and understand their limitations. Describe other forms of risk control and identify the most optimal risk management strategies to use in their own medical practice setting.

Methods

A post-activity assessment 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. Effort was made to ensure a case-based survey,¹ 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 nonparticipants.

Analysis

Data were analyzed using T-frequencies, followed by t-tests to analyze the differences between the mean evidence-based responses of the 50 participant and the 50 nonparticipant physicians. Differences between the two groups were considered significant if the P value was ≤ 0.15.

An effect size was calculated using the Cohen's d formula² to determine the amount of difference between the evidence based responses of the participants vs. nonparticipants. This calculation is expressed as a nonoverlap percentage, or the percentage achieved by participants that was not reflected in the evidence based responder of nonparticipants.

Results

A total of 4,771 physicians (MDS/DOS) who practice in pain management using approximately 32,613 chronic pain patients participate in ESP CME activities over a 3-month period. Responses from 50 participant and 50 control nonparticipant 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 nonparticipants were very similar in demographics:

Years in Practice	Participants (n=50)	Nonparticipants (n=50)
Years in Practice	25	23
Chronic Pain Patients Seen/Week	33	26

A series of case-based questions were asked to assess the knowledge acquisition and clinical decision-making skills of participants vs. nonparticipants. The responses with an asterisk (*) represent the most correct response.

17 participants and 21 nonparticipants responded to the first case vignette. The correct response was to assess the patient's risk of addiction based on the patient's history of using controlled substances.

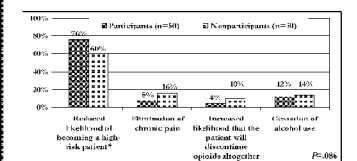


Figure 1. Case vignette 1: reduced likelihood of becoming a high risk patient based on history of using controlled substances.

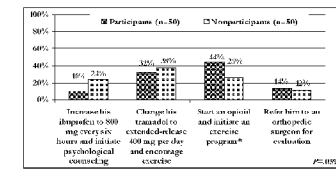


Figure 2. Case vignette 2: increased likelihood of becoming a high risk patient based on history of using controlled substances.

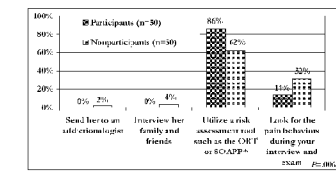
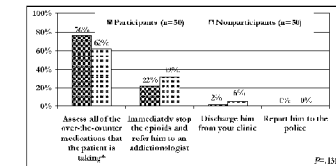


Figure 3. Case vignette 3: increased likelihood of becoming a high risk patient based on history of using controlled substances.



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:

- 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 (P=.086).
- Participants were more likely to start a patient with severe pain that is not controlled with acetaminophen and NSAIDs with demonstrated moderate risk for aberrant behavior on multidisciplinary therapy (P=.009).
- Participants were more likely to recognize the need to utilize a structured risk-assessment tool (such as the OPI or SCAPP) as the best approach to stratifying risk in a patient at the primary care setting (P=.006).
- Participants were more likely to recognize that some over the counter medications cause a false positive urine test and would affect a patient's CTRC medication prior to stopping the patient's opioid therapy (P=.111).

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

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

References

1. Pebody JW, et al. Comparison of vignettes, standardized patients, and chart abstraction: A prospective validation study of 3 methods for measuring quality. *JAMA* 2000;283:1715-1722
2. Pebody JW, et al. Measuring the quality of physician practice by using clinical vignettes: A prospective validation study. *Ann Intern Med* 2004;141(11):771-780.
3. Cohen J. *Statistical Power Analysis for the Behavioral Sciences*, 2nd edition Hillsdale, NJ: Lawrence Erlbaum Associates, 1988.

Acknowledgements

This study was supported by an educational grant from Cephalon, Inc., Eado Pharmaceuticals, PeActra®, a Division of Ortho-McNeil-Janssen Pharmaceuticals, Inc., and Audite Pharma, LLC.

For additional information about this study, please contact Ben Whitfield, CE Outcomes, LLC, ben.whitfield@ceoutcomes.com, 205-299-1500.

For additional information about ESP or MediCom Worldwide, Inc., please contact Joan Meyer, MediCom Worldwide, Inc, info@medicomed.com, 213-337-9911, x129.



Pain Clinicians' Perceptions on Commercial Bias in CME

Bronwyn Boyes, PharmD, and Joan Meyer, RN, MHA
MediCom Worldwide, Inc., 101 Washington Street, Morrisville, PA



Background

MediCom Worldwide, Inc. was founded in 1993 as an independent medical education communications company (MEO) that has now educated over 1.5 million clinicians through approximately 1,500 educational activities. MediCom launched *Prescribing Solutions in Pain* (PSP) in 2005 as an ongoing robust initiative to provide education on the challenges of managing chronic pain to maximize patient outcomes while minimizing the risks associated with opioid misuse. PSP was funded by a single grantor until 2008 when it became a multi-sponsored initiative.

In recent years, there has been increased concern and discussion over the independence of continuing medical education (CME).¹⁻³ Commercial industry support of education is perceived to cause potential conflicts of interest between physicians' commitment to patient care and the desire of pharmaceutical companies and their representatives to sell their products.^{4,5}

According to the Accreditation Council for Continuing Medical Education (ACCME), three medical schools (the University of Missouri-Kansas City School of Medicine, Nova Southeastern University College of Osteopathic Medicine in Florida), and Texas University Nevada College of Osteopathic Medicine) accepted no commercial support for CME in 2009, although no institution has had policies against accepting commercial support. Recently, however, the University of Michigan Medical School has become the first medical school to adopt a policy of no longer accepting industry funding for its CME courses.⁶

Concern about the potential commercial influence on CME has resulted in substantial efforts to reduce potential bias in accredited educational activities. Many organizations, including the ACCME, the American Association of Medical Colleges (AAAC), and the American Academy of Family Physicians (AAFP), have chosen to preserve commercial support while introducing increasingly more rigorous regulations designed to control industry funding influence of CME content and objectivity.⁷

The ACCME 2005 annual report data showed that commercial grant funding of CME has decreased in 2006-2009 by 17.7% of \$187 million, yet physician attendance and participation continue to grow, and that more physicians are attending jointly sponsored CME programs. In 2009, second- and third-year CME activities drew more than 17 million participants, highlighting a need for CME, education and peer interaction to support patient care outcomes.⁸

Aim

The aim of this study was to determine the perceived commercial bias associated with all CME activities developed by MediCom from 2002 to 2010, and to examine the direct relationship between perceptions of bias and commercial supporter funding of these activities. Grantor funding was greater than 95% for all educational CME activities.

CME Courses

Table 1. Format and Participant Number of CME Courses Offered by MediCom

Format	Example	Number of Participants
CD-ROM		742
Live		10,321
Print		7,610
Web		15,212

Methods

A cross-sectional study was undertaken to analyze all pain management CME activities developed between 2002 and 2010 (n=568; 30,085 clinician participants). A standard yes/no question from course evaluations was used to determine the degree to which attendees believed commercial bias was present.

Analysis

The main variable analyzed was the percentage of respondents participating in a CME activity who perceived that the activity was free of commercial bias. Higher percent indicate less commercial bias was perceived, eg, a value of 100% shows that all respondents indicated that the activity was bias free. We also evaluated responses by educational format, degree of respondent, and year of activity.

Results

The majority of participants perceived an commercial bias, with a median of 98.1% (95.0% to 98.8%) of respondents stating that the educational activity maintained fair balance for all therapeutic options. The median percentages were also determined with respect to clinician type, media format, and activity year.

Characteristic	Median %
Degree	Physicians: 97.6% - Nurses: 95.5%
Format	CD-ROM: 95.0% - Live: 98.6%
Year	2002: 96.6% - 2005: 93.1%
Grantor funding	Single-funded: 98.1% - Multi-funded: 97.7%

The following three charts show the results by respondent degree, CME format, and year of educational activity.

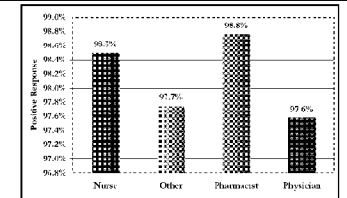


Figure 1. Perceptions of Commercial Bias by Respondent Degree (n=22,042)

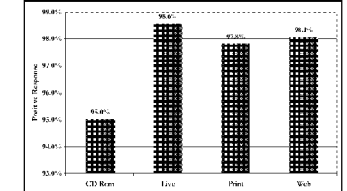
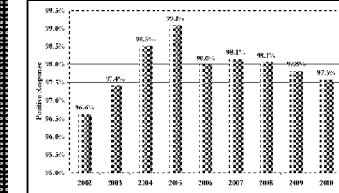


Figure 2. Perceptions of Commercial Bias by Year of CME Activity (n=22,042)



*Observed differences between categories, practitioner groups, or years are not statistically significant.

Conclusions

In this study of 568 educational programs organized through a MEOC provider of CME, the vast majority of CME activities were perceived by health care professionals to be free of commercial bias.

This cross-sectional study has several limitations, including but not limited to: 1. The low rates of perceived bias found in this study may be due in part to the inconsistency of the simple "yes/no" question used to assess participants' perceptions of bias. A single binary question may fail to fully capture the range of career perceptions of commercial influence. 2. The sample of 568 CME activities were organized by a single MEOC with a rigorous set of process and quality for designing and managing conflicts of interest (COI) and commercial bias in content. The results can therefore not be generalized to other MEOC providers of CME who may have a less stringent review process.

Under increasingly stringent rules of the ACCME, all accredited providers of CME must abide by the rigorous ACCME Standards of Commercial Support. These standards require accredited activities to be balanced and the conflicts of interest be disclosed and managed.¹²



In summary, this study confirms that the strong majority of health care practitioners participating in commercially funded CME activities on pain management and addiction medicine developed by MediCom, who rigorously follows ACCME rules and standards, perceive no commercial bias from grantor funding. No significant differences were found between clinicians, media formats, activity years, or funding sources (single- or multi-sponsored).

References

1. Carrish JK, Liao JC. What constitutes commercial bias compared with the personal opinion of experts? *J Contin Educ Health Prof*. 2006;26(2):161-167.
2. Lilliana JA, Iltisukes GD, Wang J, et al. *Less uses of reporting commercial bias by physicians following online continuing medical education activities.* *Am J Med*. 2009;122(9):975-978.
3. Schmitz MA, Rosenthal CK, Agraya L, et al. Commercial influence and non-represented bias in continuing medical education. *Acad Med*. 2010;85(7):79.
4. Kawczak S, Carey W, Lopez R, et al. The effect of industry support on participants' perceptions of bias in continuing medical education. *J Gen Med*. 2008;8(2):40-44.
5. Gohary L, et al. Continuing medical education: limiting industry's influence. *N Engl J Med*. 2010;362(11):1052.
6. Jurek J. Renewed Efforts to Reduce Industry Funding of CMEs. *Health Reform Watch*. Accessed September 2, 2010 at: www.healthreformwatch.com
7. Brennan TA, Rothman D, Blase L, et al. Health Industry Practices That Create Conflicts of Interest. *JAMA*. 2006;295:129-133.
8. ACCME. 2009 Annual Report. Accessed September 2, 2010 at: www.aacme.org/accme/docs/annualreport/2009/2009-annual-report.pdf
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10. ACCME. 2009 Annual Report. Accessed September 2, 2010 at: www.aacme.org/accme/docs/annualreport/2009/2009-annual-report.pdf
11. Data on file. MediCom Worldwide, Inc.
12. ACCME policy updates to the ACCME standards for commercial support. Accessed September 2, 2010 at: www.aacme.org/accme/docs/annualreport/2009/2009-annual-report.pdf

Further Research, Acknowledgements & Contact

Further research may be needed to evaluate the presence of commercial bias and the type of questions required in CME evaluations to detect subtle forms of commercial bias to ensure that CME activities do not continue to decrease. This trend is especially troubling considering doctors will continue to have an increasing need for CME and valuable opportunities to interact with their peers to address the growing number of people being added to our health care system.

This study was not associated with any commercial funding. The CME activities were supported by independent educational grants from Cephalon, Inc., Ilex Pharmaceuticals, Pflizer, Division of Ortho-McNeil-Janssen Pharmaceuticals, Inc., Purdue Pharma LP, Neurim Pharmaceuticals, Forest Laboratories, Astra Laboratories, and IdL Lab.

For additional information about TSP or MediCom Worldwide, Inc., please contact: Joan Meyer, MediCom Worldwide, Inc., info@medicom.com, 215 337 9911, x129



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



Bronwyn Boyes, PharmD,[†] Joan Meyer, RN, MHA,[†] Benjamin Whitfield,[†] Gregory Salinas[†]
 MedCom Worldwide, Inc., 101 Washington Street, Morrisville, PA; [†]CE Outcomes, LLC, Birmingham, AL

Background

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.

Emerging Solutions in Pain (ESP) was launched in 2005 with a leading cadre of experts in pain management and addiction medicine. ESP is a robust and multi award-winning ongoing educational initiative which provides an array of information, resources, tools, and case studies to highlight and educate clinicians on the complexities surrounding the management of chronic pain. It aims to inform clinicians of methods of communication, ways in which risk of abuse may be measured, and how to integrate these strategies into an individualized treatment plan. Membership is free to all health care professionals.

Aim

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 assessment 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^{1,2} 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 groups 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 nonparticipants.

Analysis

Data were analyzed using frequencies, followed by T-tests to analyze the differences between the mean evidence-based responses of the 50 participant and the 50 nonparticipant physicians. Differences between the two groups were considered significant if the P value was ≤ 0.15 .

An effect size was calculated using the Cohen's d formula³ to determine the amount of difference between the evidence-based responses of the participants vs. nonparticipants. The calculation is expressed as a non-overlap percentage, or the percentage achieved by participants that was not reflected in the evidence-based responses of nonparticipants.

Results

A total of 4,174 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 nonparticipant 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 nonparticipants were very similar in demographics:

Characteristics of Survey Respondents	Participants	Nonparticipants
Years in Practice	23	23
Patients seen per week with Chronic Pain	33	28

A series of case-based questions were asked to assess the knowledge acquisition and clinical decision-making skills of participants vs. nonparticipants.

Strategic Precautionary Approach

Learning Objective: Identify and measure the effectiveness of increasing and improving their clinical utilization in the effective management of chronic pain patients.

Key Point: Participants are 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.

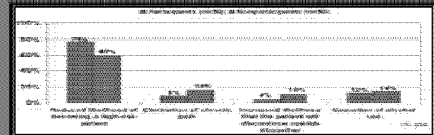


Figure 1: Benefit of using a strategic precautionary approach to assessment and management of a patient with chronic pain.

Results (continued)

Key Point: Participants are 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 an opioid and initiate an exercise program.

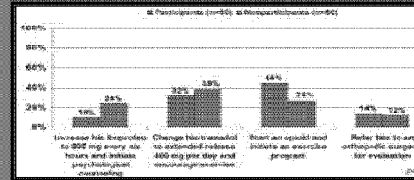


Figure 2: Initial treatment for a patient with severe pain that is not controlled with acetaminophen and NSAIDs who demonstrates moderate risk for aberrant behavior.

Key Point: Participants are more likely to recognize that some over-the-counter medications cause a false-positive urine test for methamphetamines and would assess a patient's OTC medication prior to stopping the patient's opioid therapy.

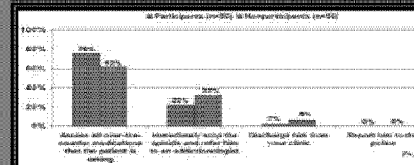


Figure 3: Management step for a patient receiving opioid therapy who has a urine drug screen positive for methamphetamines.

Key Point: Program participants 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.

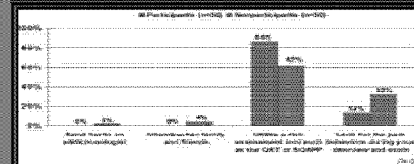


Figure 4: Best risk stratification approach for a patient in the primary care setting.

Conclusion

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:

- 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 ($P=0.86$).
- 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 ($P=0.59$).
- Participants were more likely to recognize that some over-the-counter medications cause a false-positive urine test and would assess a patient's OTC medications prior to stopping the patient's opioid therapy ($P=.13$).
- 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 ($P=0.6$).

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.

Literature Cited

- Peabody JW, et al. Comparison of vignettes, standardized patients, and chart abstraction: A prospective validation study of 3 methods for measuring quality. *JAMA*. 2000;283:1715-1722.
- Peabody JW, et al. Measuring the quality of physician practice by using clinical vignettes: A prospective validation study. *Ann Intern Med*. 2004;141(10):771-780.
- Cohen J. *Statistical Power Analysis for the Behavioral Sciences*. 2nd edition. Hillsdale, NJ: Lawrence Erlbaum Associates; 1988.

Acknowledgements and Contact Information

This study was supported by an independent educational grant from Cephalon, Inc., Endo Pharmaceuticals, PirCata[®], a Division of Ortho-McNeil-Janssen Pharmaceuticals, Inc., and Purdue Pharma L.P.
 For additional information about this study, please contact: Ben Whitfield, CE Outcomes, LLC, ben.whitfield@ceoutcomes.com, 205-209-1500
 For additional information about ESP or MedCom Worldwide, Inc., please contact: Joan Meyer, MedCom Worldwide, Inc., info@medicaled.com, 215-337-9991, ext 129.



A Comprehensive Assessment of Pain Clinicians' Perceptions and Knowledge of Breakthrough Pain

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Background

Breakthrough pain (BTP) is an abrupt onset, transitory flare of pain occurring in the context of managed, chronic, baseline pain, building to moderate-severe intensity, peaking within 5 minutes after onset and lasting approximately 30 minutes.¹

The prevalence of BTP varies from 64% in cancer and 74% in noncancer pain patients.¹⁻³

BTP has been shown to cause detrimental effects to both function and quality of life, yet despite increasing clinical awareness, BTP remains underdiagnosed and undertreated, causing unnecessary negative impacts of patient suffering, quality of life, and the associated economic burden.⁴

	Cancer	Noncancer
Subjects	227 (2 studies)	229
Prevalence, %	64-65	74
Episodes/day	4-6	2
Duration, min	30	60
Time to max intensity, min	3.2	10
QOL	Significant effects on the BDI, BAI, & all domains of the BPI	Adverse effects on multiple QOL domains ⁴

Figure 1: Breakthrough Pain in Cancer vs. Noncancer Populations
BAI = Beck Anxiety Inventory; BDI = Beck Depression Inventory; DPI = Brief Pain Inventory; QOL = quality of life

Aim

The purpose of this study was to determine the knowledge and perceptions of clinicians regarding BTP to identify areas for ongoing research and education.

Method

MediCom developed a comprehensive educational program to discuss and challenge clinicians on the key characteristics, assessment, and management of BTP. The program included convening an advisory panel of leading experts in the field of pain management to develop the program's essential elements. A pre-activity survey was sent to practicing pain clinicians and results were utilized to develop an innovative symposium format using a case-based interactive debate where the audience members could vote on their views and management of the case presented. The symposium was edited and posted as an enduring piece on *Emerging Solutions to Pain*. All participants were asked to complete a pre- and post-test evaluation. A follow-up survey was sent 3 to 5 months after participation. The last part of this educational program was an outcomes study utilizing patient chart audits to identify the practice patterns and knowledge of physicians who manage BTP in their pain patients.

Program Overview

This program explored through debate, data, and case studies, the complexities surrounding breakthrough pain management of chronic noncancer pain. It served to:

- Identify the issues and controversies surrounding BTP
- Collect information about the participants' common questions, beliefs, and attitudes toward BTP
- Incorporate a dynamic video case vignette into the point-counterpoint debate to comprehensively discuss the challenges of BTP

The Learning Objectives of the program were to:

- Identify controversies and issues associated with current understanding of breakthrough pain
- Describe assessment strategies for identifying breakthrough pain in chronic pain patients
- Summarize the role of proactive and ongoing assessment in the development of a comprehensive treatment strategy in chronic pain patients

Results

A pre-symposium survey was sent to over 6,000 practicing pain clinicians to obtain attitudes, beliefs, and current practices in breakthrough pain.

The pre-survey showed:

- Assessment tools utilized
- Drivers and barriers to diagnosis and treatment
- Understanding of clinical evidence
- Difference in attitudes and management of BTP in cancer and noncancer chronic pain patients
- Attitudes toward impact of BTP on public health
- Current prescribing practices

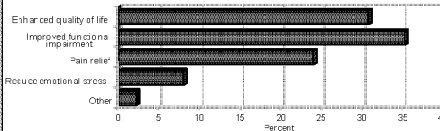


Figure 2: Pre-Symposium Question: Which of the following best described the most important decision driver for you to diagnose and treat BTP?

Approximately 136 symposium participants were surveyed using an audience response system (ARS) during the interactive debate format on all of the above as well as:

- Differential diagnosis
- Risk assessment
- Treating BTP if diagnosed

Results (continued)

Participants were once again asked about their attitudes, practices, and competencies in treating BTP. These participants were sent a follow-up survey 3 to 5 months after completing this activity to self-report on implementation of competencies learned into practice.

A pre- and post-activity chart review audit was also completed with registered participants from the live symposium utilizing a chronic pain assessment guide.

The enduring activity had over 10,000 sessions and 1,500 completed certificates. The pre- and post-perceptions/beliefs assessment showed:

- There was a significant change in defined perceptions regarding breakthrough pain post-activity ($P < .0001$)
- There was a significant change in establishing an approach to assess and treat breakthrough pain ($P < .0001$)
- There was no significant changes in drivers to or drivers not to diagnose and treat breakthrough pain

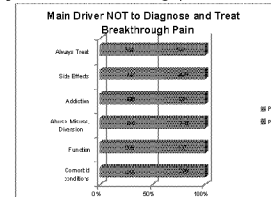


Figure 3: Pre- and Post-Ending Activity Question: Which of the following best describes the most important decision driver for you NOT to treat a diagnosed BTP patient?

The pre- and post-knowledge assessment showed:

- There was a significant change in all knowledge questions asked pre- versus post-report
- Two questions are of higher significance, namely:
 - Characteristics of breakthrough pain ($P < .0001$)
 - Differences between BTP in cancer vs. noncancer patients ($P < .0001$)
- On average, there was a 1.4-fold positive increase in post-test scores when compared to pre-tests

The follow-up self-report survey showed both retention of knowledge and implementation of changes in practice.

Each element of the comprehensive educational activity on breakthrough pain highlighted key areas of further research and education for health care clinicians.

Conclusion

This program showed that:

- Raising awareness of BTP via continuing educational programs such as this one can lead to a greater awareness and management of this condition
- Competency testing of participants showed increased knowledge in classification, assessment, monitoring, and management of BTP
- Self-reported data shows attendees implementing these learned competencies into practice

The growing challenge with BTP is to enable clinicians to better understand and clinically interpret the concept outside of its original application in cancer patients.

This challenge is further compounded by the risk management concerns, especially in pharmacotherapy for chronic pain. It is imperative to have a standardized definition of BTP in all chronic pain patients to enable clinicians to improve diagnosis and structure pharmacological therapy appropriate to the management of BTP.

Continual efforts focused on elucidating health care professionals' approach to BTP management are required to improve patient outcomes.

Further educational programs such as this one are needed to continually educate clinicians about pain definitions, taxonomy, assessment, and diagnostic categories to optimize therapies and outcomes while minimizing risks.

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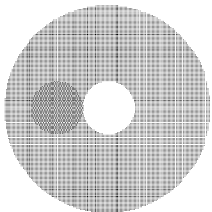
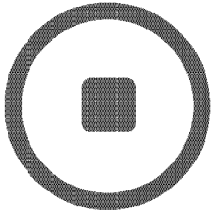
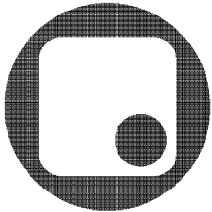
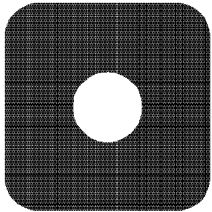
Acknowledgements and Contact Information

This educational activity and outcomes initiatives were developed in conjunction with a leading panel of experts including (in alphabetical order): Michael Brennan, MD; Jeffrey Gudim, MD; John Markman, MD; Steven Passik, PhD; David Simpson, MD; Steven Stanos, DO; and Lynn Webster, MD.

The Breakthrough Pain Challenge: An Expert Led Debate was supported by an independent educational grant from Cephalon, Inc.

For further information about this educational activity or about MediCom Worldwide, Inc. please contact:

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E: info@medicated.com



CME Metrics Report

Emerging Solutions in Pain

***Assessment Strategies and Practical Approaches to
Successful Monitoring of Chronic Pain
and
Minimizing Risk and Improving Outcomes in Chronic Pain:
Case-Based Survey***

December 2009 – March 2010

MediCom Worldwide, Inc.

Supported by an educational grant from:
Cephalon, Inc., Endo Pharmaceuticals, PriCara[®],
a Division of Ortho-McNeil-Janssen Pharmaceuticals, Inc.,
and Purdue Pharma, L.P.

October 7, 2010



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Executive Summary

Metrics for Assessment Strategies and Practical Approaches to Successful Monitoring of Chronic Pain and Minimizing Risk and Improving Outcomes in Chronic Pain

Overview

The purpose of this assessment was to determine the effectiveness of two continuing medical educational programs, *Assessment Strategies and Practical Approaches to Successful Monitoring of Chronic Pain* and *Minimizing Risk and Improving Outcomes in Chronic Pain*, included in the educational initiative *Emerging Solutions in Pain*. The target audiences for these programs were primary care physicians (PCPs) and pain specialists. Effectiveness was measured using a case-based survey designed to assess whether the diagnostic and therapeutic choices of program participants were consistent with the evidence-based content of the educational activity. The survey was also administered to a representative control group of physicians who did not participate in the educational program (nonparticipants) in order to assess differences in practice choices associated with program participation.

Educational Objectives

Minimizing Risk and Improving Outcomes in Chronic Pain

- 1 Describe and understand the necessity of communication techniques and screening tools for the effective management of chronic pain patients
- 2 Indicate two reasons why risk assessment is necessary and demonstrate their clinical utilization in the effective management of chronic pain patients
- 3 Identify three screening tools used to assess the risk of abuse, misuse, and addiction of prescribed opioid medications and clinical utilization to potentially protect practices and improve individualized treatment strategy
- 4 Summarize the importance of effective communication between members of the chronic pain management team to identify and address risk factors in chronic pain patients on long-term opioid therapy

Assessment Strategies and Practical Approaches to Successful Monitoring of Chronic Pain

- 1 Recognize the high prevalence of prescribed controlled substance misuse
- 2 Describe appropriateness criteria of patients who may require long-term opioid therapy
- 3 Contrast and compare risk assessment tools and understand their limitations
- 4 Describe other forms of risk control and identify the most optimal risk management strategies to use in their own medical practice setting

Educational Impact



At least 137,643¹ patients with chronic pain seen by 4,171² health care providers who participated in *Emerging Solutions in Pain* are 30%³ more likely to receive evidence-based care than those seen by health care providers who did not participate in the activity, specifically in:

- 1 Treating a patient with chronic pain who is at moderate risk for aberrant behavior
- 2 Recognizing the benefit of using a strategic precautionary approach to assessment, and management of a patient with chronic pain

¹The number of patients seen weekly with chronic pain.

²The number of health care providers who participated in this educational activity (from 12/2009 to 3/2010).

³The percent of the non-overlap difference between participants and non-participants in evidence-based clinical choices made when presented with a series of clinical vignettes; this percentage is based on an effect size calculated using *Cohen's d*.

- ④ Assessing a patient's OTC medications prior to stopping opioid therapy when the patient's urine drug screen is positive for methamphetamines
- ④ Utilizing risk assessment tools such as the Opioid Risk Tool (ORT) and the Screener and Opioid Assessment for Patients with Pain (SOAPP)

Barriers to Optimally Managing Pain

The most significant barriers to the optimal management of pain are patient drug addiction and drug-seeking behaviors.

Focus of Future Educational Activities

Based on the responses of the nonparticipant physicians, the following areas have been identified for additional focus in future continuing education activities:

- ④ Initial treatment intervention for a patient with chronic pain who demonstrates moderate risk for aberrant behavior
- ④ Comparison of the relative merits of patient interview/exam and formal risk assessment tools in determining risk of aberrant behavior
- ④ Advantages of the ORT as compared with other risk assessment tools used in patients with chronic pain
- ④ Risk factors addressed by all currently available risk assessment tools
- ④ Indications for referral to an addictionologist
- ④ Risk assessment tool(s) that best predict risk of level 1 aberrant behavior
- ④ Limitations of currently available risk stratification assessments

CE Outcomes, LLC CME Metrics

Metrics for *Emerging Solutions in Pain*

Project Overview

The purpose of this assessment was to determine the effectiveness of two educational programs in the initiative entitled *Emerging Solutions in Pain*. Effectiveness was measured using a survey comprised of evidence-based case vignettes, questions about physician confidence, and questions about barriers to the optimal management of patients with chronic pain. Surveys were administered to a group of participants and a similar group of nonparticipants, allowing for assessment and reporting based on the following learning objectives:

Minimizing Risk and Improving Outcomes in Chronic Pain:

- Describe and understand the necessity of communication techniques and screening tools for the effective management of chronic pain patients
- Indicate two reasons why risk assessment is necessary and demonstrate their clinical utilization in the effective management of chronic pain patients
- Identify three screening tools used to assess the risk of abuse, misuse, and addiction of prescribed opioid medications and clinical utilization to potentially protect practices and improve individualized treatment strategy
- Summarize the importance of effective communication between members of the chronic pain management team to identify and address risk factors in chronic pain patients on long-term opioid therapy

Assessing Strategies and Practical Approaches to Successful Monitoring of Chronic Pain

- Recognize the high prevalence of prescribed controlled substance misuse
- Describe appropriateness criteria of patients who may require long-term opioid therapy
- Contrast and compare risk assessment tools and understand their limitations
- Describe other forms of risk control and identify the most optimal risk management strategies to use in their own medical practice setting

CME Course Information

Two CME programs, *Minimizing Risk and Improving Outcomes in Chronic Pain* and *Assessment Strategies and Practical Approaches to Successful Monitoring of Chronic Pain*, which were presented as part of the *Emerging Solutions in Pain* activity were assessed. The educational programs focused on methods of communication, ways in which risk of abuse may be measured, and how to integrate these strategies into an individualized treatment plan for patients. The program also enabled clinicians to gain an appreciation for the interdisciplinary approach to pain management, stimulating professional communication and improving patient care outcomes. The target audience for this program was primary care physicians and pain specialists who manage patients with chronic pain. The participants who attended and completed this CME event were offered 1.0 AMA PRA Category 1 Credit™.

Methods

Overview

CE Outcomes, LLC physicians reviewed the educational objectives and content of *Emerging Solutions in Pain* to define a series of key measurement indicators focused on the management of chronic pain. Measurement indicators are individual evidence-based statements that outline the health care performance expectations associated with the content of an educational activity. Measurement indicators were used in framing questions related to the case vignettes, which were presented (in survey format) to program participants and a demographically similar group of nonparticipants. Measurement indicators were identified from this program and used to develop the case vignette survey.

Measurement Indicators

- Clinicians should conduct a focused history and physical examination to help place patients with low back pain into 1 of 3 broad categories: nonspecific low back pain; back pain potentially associated with radiculopathy or spinal stenosis; or back pain potentially associated with another specific spinal cause. The history should include assessment of psychosocial risk factors, which predict risk for chronic disabling back pain.⁴
- ORT is the briefest addiction risk assessment tool.⁵
- Opioid analgesics or tramadol are an option when used judiciously in patients with acute or chronic low back pain who have severe, disabling pain that is not controlled (or is unlikely to be controlled) with acetaminophen and NSAIDs. Exercise therapy and other nonpharmacological therapies should be considered in patients with low back pain.¹
- A patient with major mental health concerns, personal and/or family history of substance abuse, age less than 50, and a smoker, is at high risk for aberrant behaviors if treated with opioid medications.⁶
- A strategic precautionary approach to assessment and management of patients with moderate risk for aberrant behavior will reduce the likelihood of becoming a high-risk patient.⁷
- Some OTC medications, such as those containing pseudoephedrine, cause a false-positive urine test for methamphetamine.⁸
- The risk stratification assessment tools should not be used exclusively in deciding a treatment plan. The results of these screening tools determine how closely a patient should be monitored during the course of opioid therapy.⁹
- History of alcohol and illicit drug use is assessed in all current opioid risk assessment tools.¹⁰

Case vignettes have gained considerable support for their value in predicting physician practice patterns. Results from recent research studies demonstrate that case vignettes (when compared to chart review and standardized patients) are a valid and comprehensive method to measure a physician's process of care in actual clinical practice. Furthermore, case vignettes are more cost effective and less invasive than other means of measurement.^{11,12}

For this project, case vignettes were designed to assess whether the diagnostic and therapeutic choices of participants were consistent with clinical evidence presented in the content of the educational activity. The case vignettes were also used to assess whether practice choices of participants were different from practice choices of nonparticipants. Additional survey items were included to assess barriers to the optimal management of chronic pain.

All surveys are field tested and revised based on field testing data prior to implementation.

¹Chou R, et al. Diagnosis and Treatment of Low Back Pain: A Joint Clinical Practice Guideline from the American College of Physicians and the American Pain Society. *Ann Intern Med.* 2007;147:478-491.

⁵ Dr. Passik's presentation.

⁶ Webster LR, Webster RM. Predicting aberrant behaviors in opioid-treated patients: preliminary validation of the Opioid Risk Tool. *Pain Med.* 2005;6:432-442.

⁷ Dr. Webster's presentation.

⁸ Public knowledge.

⁹ Chou R. 2009 Clinical Guidelines from the American Pain Society and the American Academy of Pain Medicine on the use of chronic opioid therapy in chronic noncancer pain: what are the key messages for clinical practice? *Pol Arch Med Wewn.* 2009;119:469-477.

¹⁰ Risk-Assessment Instruments for Pain Populations. Available at:

www.fightrxabuse.org/topics/RxAbuse/docs/Painpopriskassessment.pdf. Accessed on February 24, 2010.

¹¹ Peabody JW, et al. Comparison of vignettes, standardized patients, and chart abstraction: A prospective validation study of 3 methods for measuring quality. *JAMA.* 2000;283:1715-1722.

¹² Peabody JW, et al. Measuring the quality of physician practice by using clinical vignettes: A prospective validation study. *Ann Intern Med.* 2004;141(10):771-780.

Survey Implementation

Survey instruments were distributed by CE Outcomes, LLC to primary care physicians and pain specialists at least 30 days after participating in the online activity. A sample of 50 responses was collected by email and fax from the participating physicians. The distribution of the survey responders is provided on the map below.

Surveys were distributed to a demographically similar group (the control group) of primary care physicians and pain specialists by email. Fifty responses were collected in the control group and responses were compared to the participant group.



Data Analysis

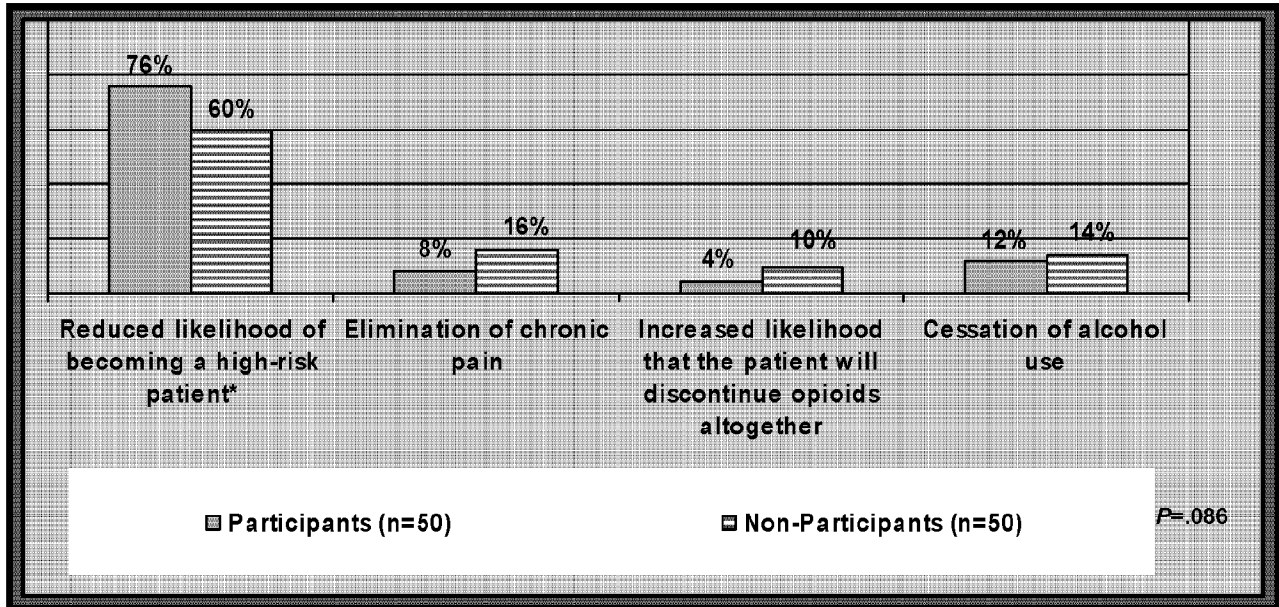
Data were analyzed using the Statistical Package for Social Sciences (SPSS 17.0). Data were first arrayed using frequencies. T-tests were then used to test the differences between the mean evidence-based responses of the participants and the nonparticipants. Differences between the two groups are considered significant if the *P* value is .10 or less. An effect size was calculated to determine the amount of difference between the evidence-based responses of the participants and nonparticipants. Effect size is calculated using the Cohen's *d* formula,¹³ and is expressed as a nonoverlap percentage, or the percentage achieved by participants that was not reflected in the evidence-based responses of nonparticipants.

¹³Cohen J. *Statistical Power Analysis for the Behavioral Sciences*. 2nd edition. Hillsdale, NJ: Lawrence Earlbaum Associates; 1988.

Results

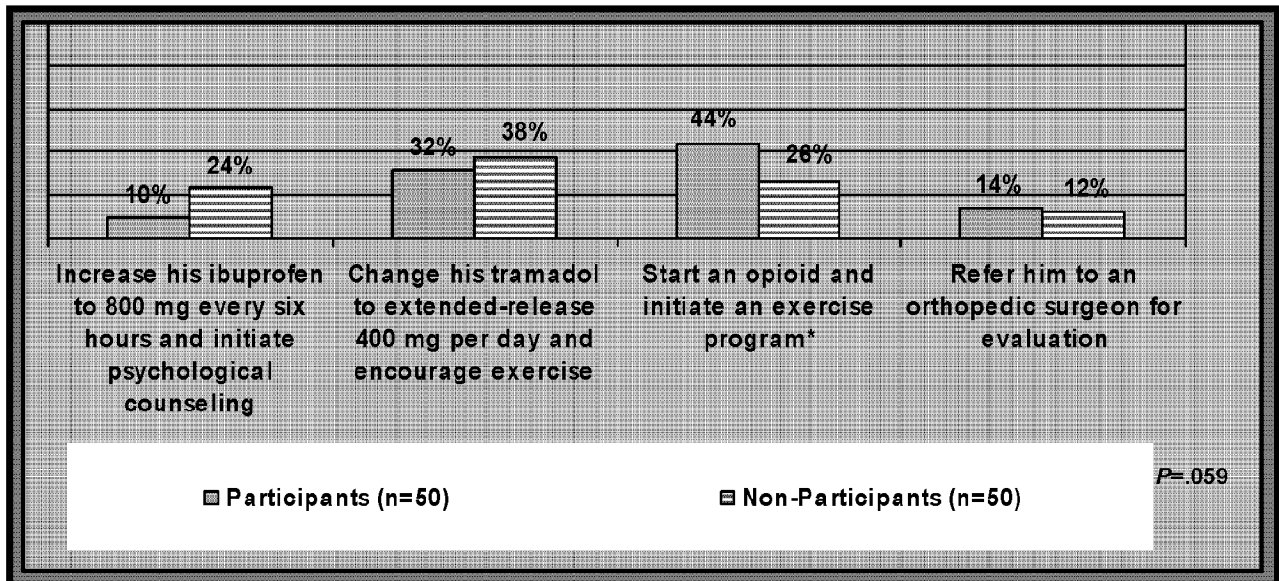
Key Point: Participants are more likely to recognize that a strategic precautionary approach to assessing a patient with moderate risk for aberrant behavior will reduce the likelihood of becoming a high-risk patient.

Benefit of using a strategic precautionary approach to assessment and management of a patient with chronic pain



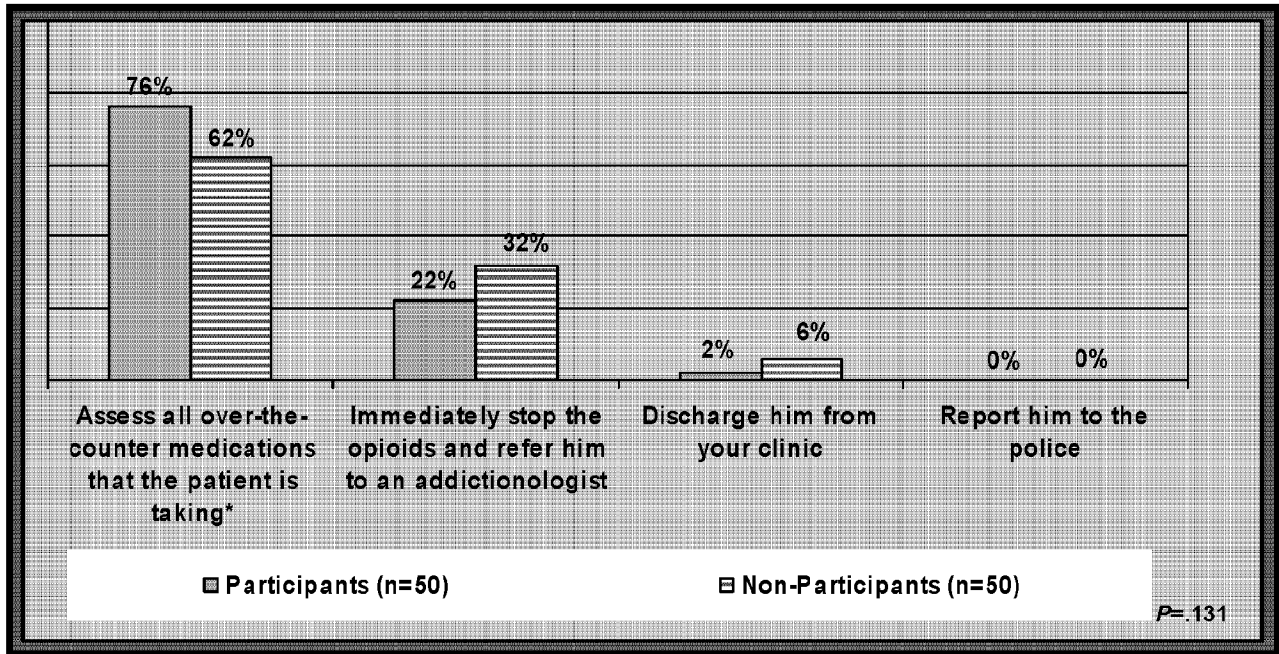
Key Point: Participants are more likely to start a patient with severe pain that is not controlled with acetaminophen and NSAIDs who demonstrates moderate risk for aberrant behavior on an opioid and initiate an exercise program.

Initial treatment for a patient with severe pain that is not controlled with acetaminophen and NSAIDs who demonstrates moderate risk for aberrant behavior



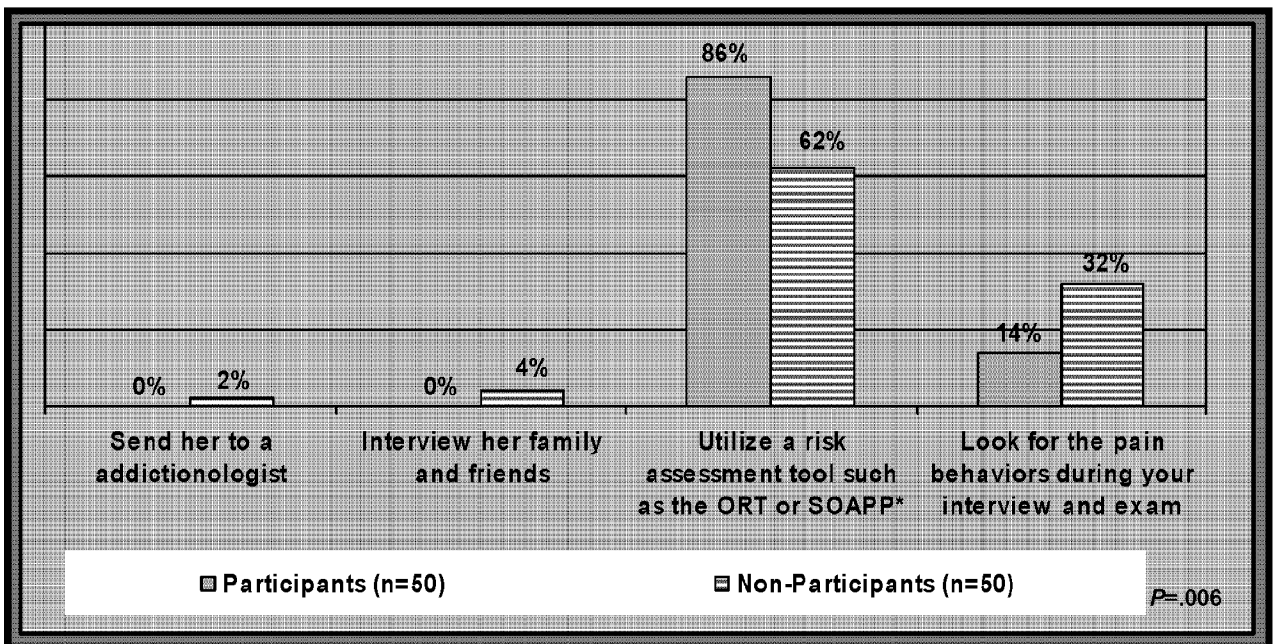
Key Point: Participants are more likely to recognize that some over-the-counter (OTC) medications cause a false positive urine test for methamphetamines and would assess a patient's OTC medications prior to stopping the patient's opioid therapy.

Management step for a patient receiving opioid therapy who has a urine drug screen positive for methamphetamines

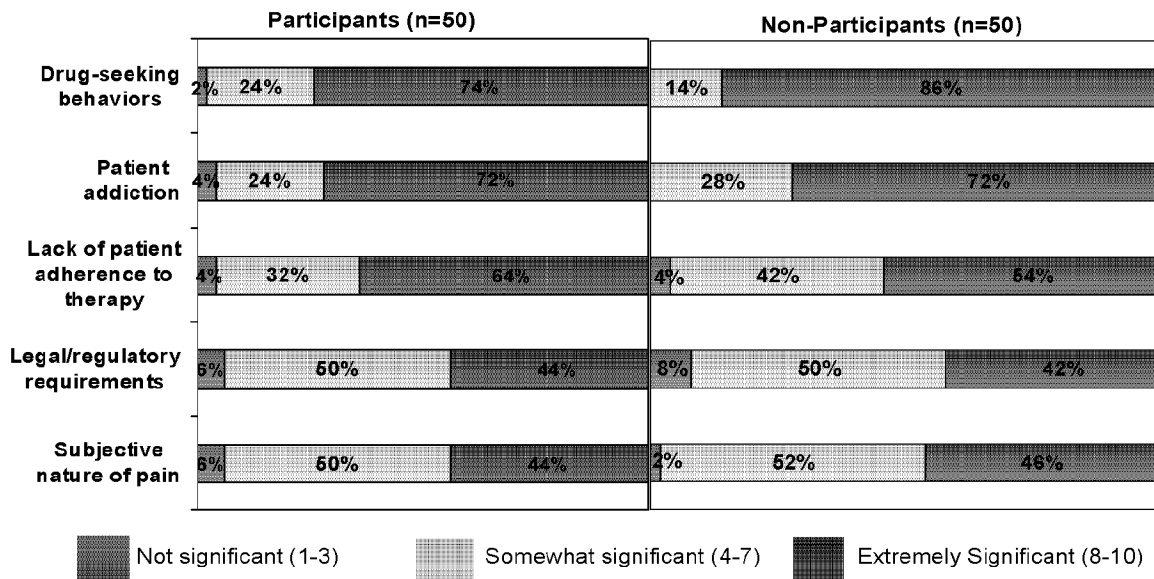


Key Point: Program participants recognize the need to utilize a standard risk assessment tool (such as the ORT or SOAPP) as the best approach to stratifying risk in a patient in the primary care setting.

Best risk stratification approach for a patient in the primary care setting



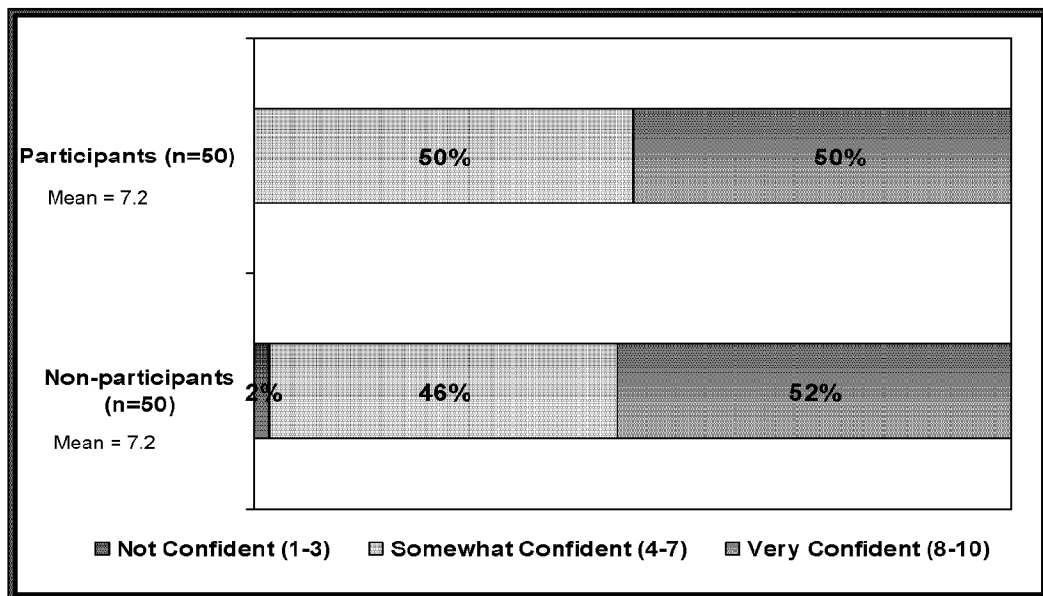
Barriers to Managing Patients with Chronic Pain



20



Confidence in Managing Patients with Chronic Pain



21



Summary



At least 137,643¹⁴ patients with chronic pain seen by 4,171¹⁵ health care providers who participated in *Emerging Solutions in Pain* are 30%¹⁶ more likely to receive evidence-based care than those seen by health care providers who did not participate in the activity, specifically in:

- ④ Treating a patient with chronic pain who is at moderate risk for aberrant behavior
- ④ Recognizing the benefit of using a strategic precautionary approach to assessment and management of a patient with chronic pain
- ④ Assessing a patient's OTC medications prior to stopping opioid therapy when the patient's urine drug screen is positive for methamphetamines
- ④ Utilizing risk assessment tools such as the Opioid Risk Tool (ORT) and the Screener and Opioid Assessment for Patients with Pain (SOAPP)

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Focus of Future Educational Activities

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- ④ Risk assessment tool(s) that best predict risk of level 1 aberrant behavior
- ④ Limitations of currently available risk stratification assessments

¹⁴The number of patients seen weekly with chronic pain.

¹⁵The number of health care providers who participated in this educational activity (from 12/2009 to 3/2010).

¹⁶The percent of the non-overlap difference between participants and non-participants in evidence-based clinical choices made when presented with a series of clinical vignettes; this percentage is based on an effect size calculated using *Cohen's d*.

File Provided Natively

Assessment of ESP Online CME Activities for Pain Physicians



Background

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.

Emerging Solutions in Pain (ESP) was launched in 2005 with a leading cadre of experts in pain management and addiction medicine. ESP is a robust and multi award-winning ongoing educational initiative which provides an array of information, resources, tools, and case studies to highlight and educate clinicians on the complexities surrounding the management of chronic pain. It aims to inform clinicians of methods of communication, ways in which risk of abuse may be measured, and how to integrate these strategies into an individualized treatment plan. Membership is free to all health care professionals.

Assessment of ESP Online CME Activities for Pain Physicians

P# 75



Aim

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.

Assessment of ESP Online CME Activities for Pain Physicians



Overview

The site *Emerging Solutions in Pain* is a comprehensive website consisting of updates and CME programs on the topic of pain. CE Outcomes assessed the impact of two CME activities:

- *Minimizing Risk and Improving Outcomes in Chronic Pain*
- *Assessment Strategies and Practical Approaches to Successful Monitoring of Chronic Pain*

Both programs focused on ways to integrate risk assessment strategies into clinical practice while enabling clinicians to gain an appreciation for the interdisciplinary approach to pain management, simulating professional communication and improving patient care outcomes. The target audience for these programs were primary care physicians and pain specialists who manage patients with chronic pain. The participants who completed the CME activity were offered 1.0 *AMA PRA Category 1 Credit*TM.

Of the 416 health care providers who participated in these two programs, a sample of 50 physicians was collected and analyzed.

Target groups and sample size:

Participants:	Nonparticipants:
Pain specialists, family practitioners, and internists that participated in one of the two activities (n = 50)	Pain specialists, family practitioners, and internists that did not participate in the activities (n = 50)

Assessment of ESP Online CME Activities for Pain Physicians



Program Overview

Program Title	<i>Minimizing Risk and Improving Outcomes in Chronic Pain: Focus on the Challenges of Communication and Interviewing Skills in Assessing Pain Patients</i>	<i>Assessment Strategies and Practical Approaches to Successful Monitoring of Chronic Pain</i>
Faculty	Micke A. Brown, BSN, RN, Steven D. Passik, PhD, Lynn R. Webster, MD, FACPM, FASAM	Steven D. Passik, PhD
Learning Objectives	<ul style="list-style-type: none"> • Describe and understand the necessity of communication techniques and screening tools for the effective management of chronic pain patients • Indicate two reasons why risk assessment is necessary and demonstrate their clinical utilization in the effective management of chronic pain patients • Identify three screening tools used to assess the risk of abuse, misuse, and addiction of prescribed opioid medications and clinical utilization to potentially protect practices and improve individualized treatment strategy • Summarize the importance of effective communication between members of the chronic pain management team to identify and address risk factors in chronic pain patients on long-term opioid therapy 	<ul style="list-style-type: none"> • Recognize the high prevalence of prescribed controlled substance misuse • Describe appropriateness criteria of patients who may require long-term opioid therapy • Contrast and compare risk assessment tools and understand their limitations • Describe other forms of risk control and identify the most optimal risk management strategies to use in their own medical practice setting

Assessment of ESP Online CME Activities for Pain Physicians



Methods

A post-activity assessment 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^{1,2} 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 nonparticipants.

Assessment of ESP Online CME Activities for Pain Physicians



Analysis

Data were analyzed using frequencies, followed by T-tests to analyze the differences between the mean evidence-based responses of the 50 participant and the 50 nonparticipant physicians. Differences between the two groups were considered significant if the *P* value was ≤ 0.15 . An effect size was calculated using the *Cohen's d* formula³ to determine the amount of difference between the evidence-based responses of the participants vs. nonparticipants. The calculation is expressed as a nonoverlap percentage, or the percentage achieved by participants that was not reflected in the evidence-based responses of nonparticipants.

Assessment of ESP Online CME Activities for Pain Physicians



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 nonparticipant 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 nonparticipants were very similar in demographics:

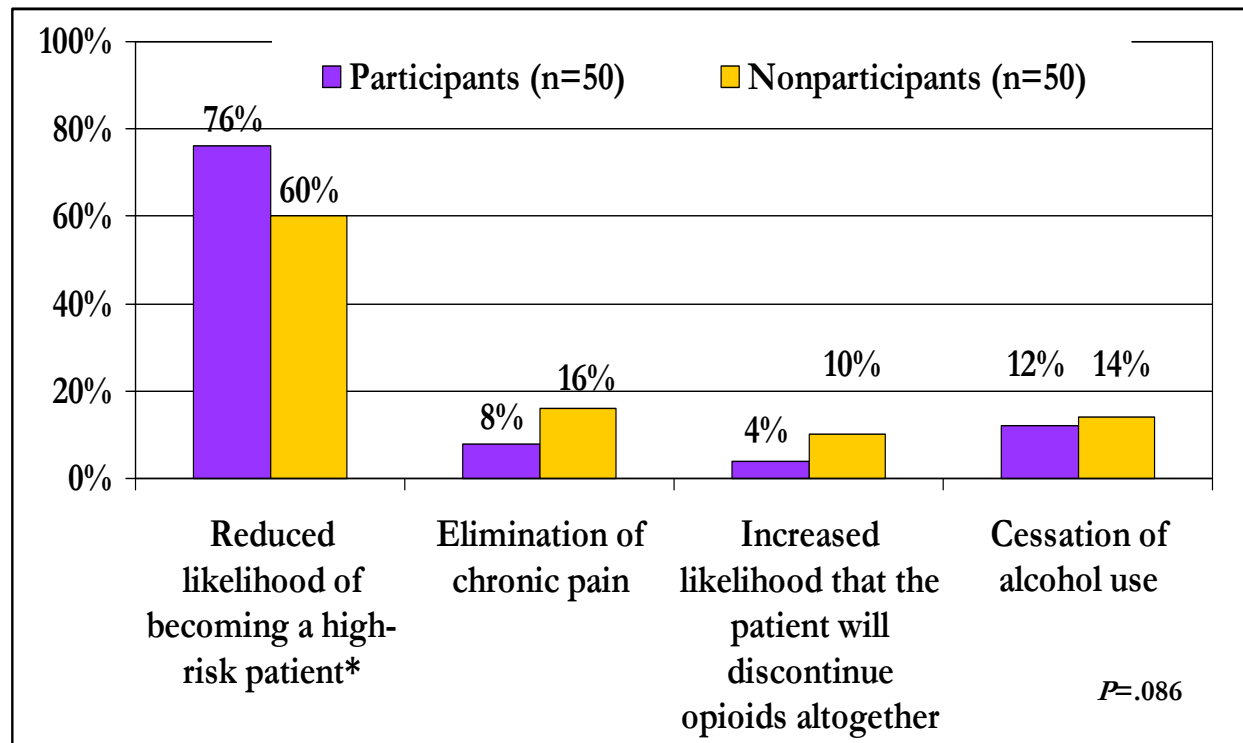
Characteristics of Survey Responders	Participants	Nonparticipants
Years in Practice	23	23
Chronic Pain Patients Seen/Week	33	26

Assessment of ESP Online CME Activities for Pain Physicians



Results

Figure 1: Participants are more likely 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.

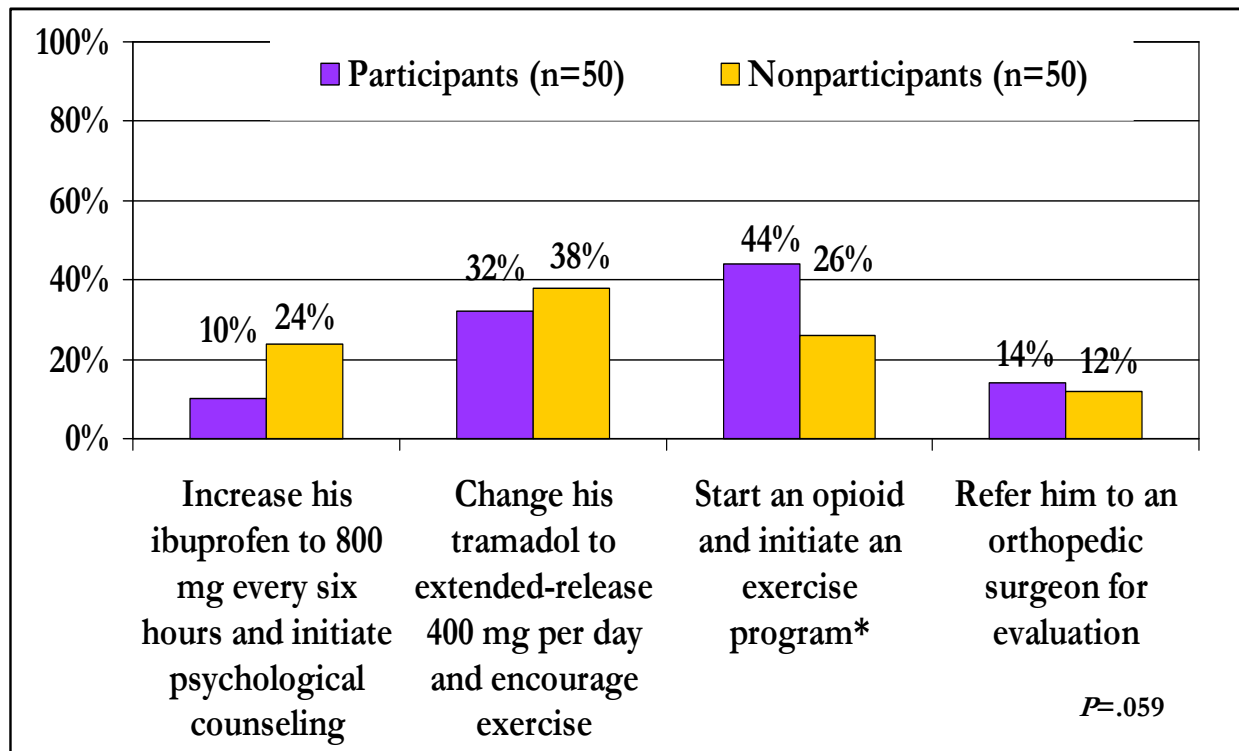


Assessment of ESP Online CME Activities for Pain Physicians



Results

Figure 2: Participants are 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 an opioid and initiate an exercise program.

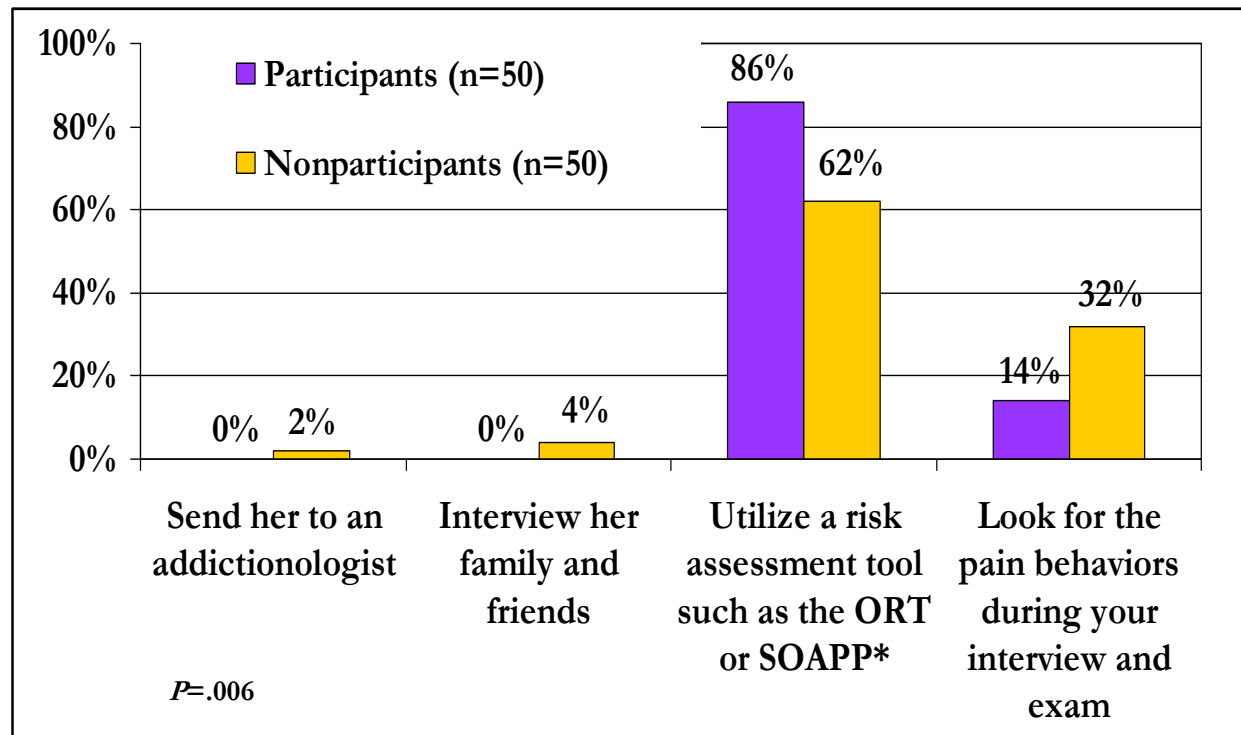


Assessment of ESP Online CME Activities for Pain Physicians



Results

Figure 3: Program participants 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.

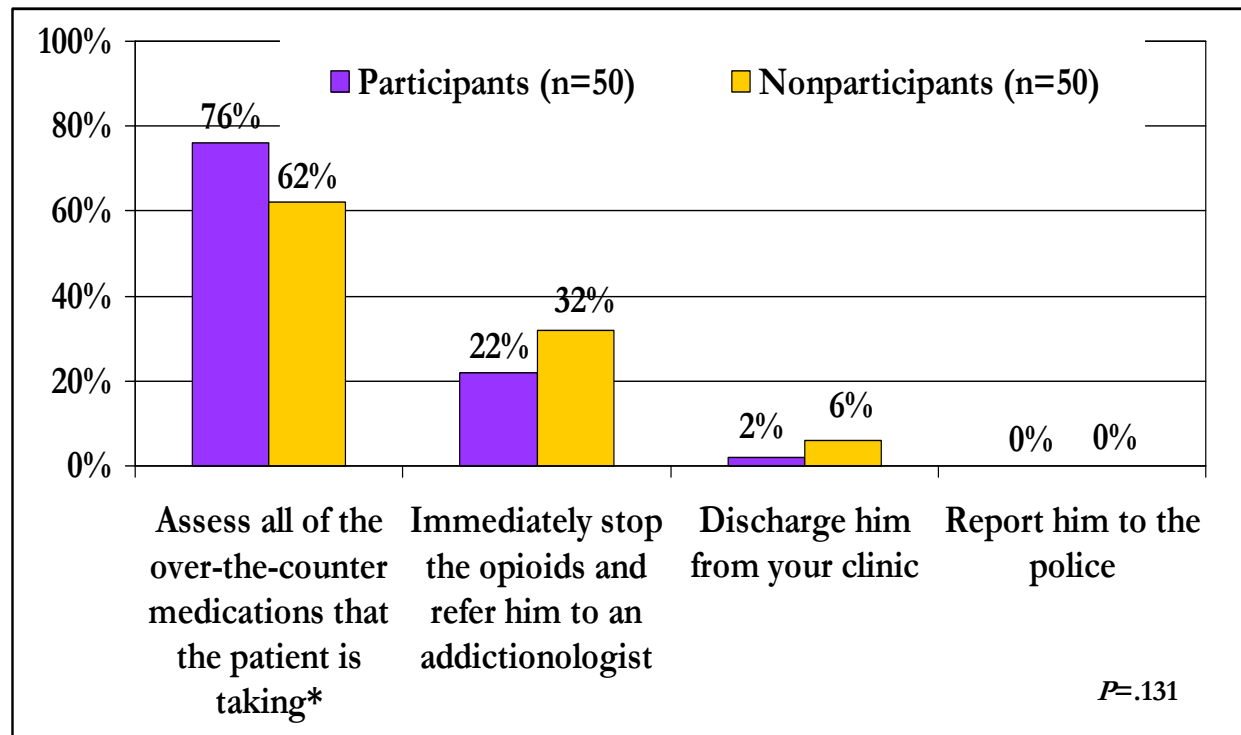


Assessment of ESP Online CME Activities for Pain Physicians



Results

Figure 4: Participants are more likely to recognize that some over-the-counter medications cause a false-positive urine test for methamphetamines and would assess a patient's OTC medications prior to stopping the patient's opioid therapy.



Assessment of ESP Online CME Activities for Pain Physicians



Conclusion

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:

- 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 ($P=.086$).
- 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 ($P=.059$).
- 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 ($P=.06$).
- Participants were more likely to recognize that some over-the-counter medications cause a false-positive urine test and would assess a patient's OTC medications prior to stopping the patient's opioid therapy ($P=.131$).

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

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

Assessment of ESP Online CME Activities for Pain Physicians



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