
State Continuing Education Requirements for Physicians and Dentists, Including Requirements Related to Pain Management and Controlled Substance Prescribing

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ABSTRACT: States often require prescribers to undergo continuing education (CE) activities in specific areas of public health concern. Such requirements are of particular interest in the context of the opioid epidemic. In this article, we describe the prevalence and characteristics of state-level subject-specific CE requirements for physicians and dentists, with a focus on CE related to pain management/controlled substance prescribing. We reviewed individual state medical board websites and additional related information to obtain data on state subject-specific CE requirements applicable to physicians and dentists in the 50 states and the District of Columbia. Our results show that 32 states (63%) have at least one subject-specific CE requirement on any topic for physicians and 30 states (59%) have such requirements for dentists. Twenty-nine states (57%) have pain management/controlled substance prescribing CE requirements for at least some physicians, and 13 states (25%) have similar requirements for dentists. However, pain management/controlled substance CE is required of all professionals for license renewal in only 10 states (20%) for physicians and in only six states (12%) for dentists. Typically, these are no more than three hours in duration. The majority of states have subject-specific CE requirements for physicians and dentists. Many states require CE to address pain management/controlled substance prescribing, but few do so for all professionals at renewal. These requirements are of limited duration and are not in addition to the overall number of CE hours required for licensure. This analysis suggests steps that states without relevant CE requirements might take to help combat the opioid crisis.

Introduction

Continuing education (CE) is widely recognized as playing an important role in many public health initiatives. States often require subject-specific CE as a condition of a physician's or dentist's licensure to promote professional competence, address matters of public health concern, and enhance patient protection.

In recent years, many stakeholders have promoted prescriber education programs as a means of combating the opioid epidemic in the United States. Overdoses from prescription opioids are a driving factor in a 15-year increase in opioid overdose deaths,¹ and their sales quadrupled between 1999 and 2014.² One study found that people at the highest risk of overdose most frequently obtained opioids through prescriptions from physicians (27%).³ A national survey showed that more than 40% of patients receiving treatment for substance use said that their physicians had missed diagnosing a substance use disorder.⁴ Meanwhile, many physicians who reported that their training in the management of opioid dependence was unsatisfactory believed

that additional training programs could help address this knowledge deficiency.⁵ In addition, as pain is the most common complaint in the emergency department, researchers have also called for better opioid prescribing training and education for emergency physicians.⁶ Professional organizations, including the Federation of State Medical Boards, also recommend continuing education on the use of opioid analgesics and safe opioid prescribing.⁷

The federal government has promoted CE as part of a concerted effort to address the opioid public

IN RECENT YEARS, MANY STAKEHOLDERS HAVE PROMOTED PRESCRIBER EDUCATION PROGRAMS AS A MEANS OF COMBATING THE OPIOID EPIDEMIC IN THE UNITED STATES.

health crisis. For example, the Substance Abuse and Mental Health Services Administration and the Health Resources and Services Administration have collaboratively developed an online educational

resource for providers, the “Substance Use Trainings” webpage, which includes both one-time and ongoing training events that could be counted as CE credits.⁸ The Office of Disease Prevention and Health Promotion also developed an online interactive learning tool titled *Pathways to Safer Opioid Use*.⁹ The tool trains providers on patient-centered chronic pain management, while modeling safe opioid prescribing and offering CE credits. In addition, the U.S. Food and Drug Administration’s (FDA) Risk Evaluation and Mitigation Strategy for extended release/long-acting opioids requires that opioid manufacturers offer CE on opioid prescribing through accredited CE providers, using all the elements in an FDA Blueprint for Prescriber Education.¹⁰

In addition to federal efforts, states also leverage the CE system to carry out important public health initiatives, most notably mandates for provider training on pain management and/or controlled substance prescribing. According to the Centers for Disease Control and Prevention, the rate of opioid prescribing varies by state. In 2012, health care providers in the nation’s highest-prescribing state (Alabama) wrote nearly three times as many opioid prescriptions per patient as those in the lowest prescribing state

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(Hawaii).¹¹ State-required CE that provides updated knowledge of safe prescribing and the diagnosis or management of opioid dependence has significant potential to improve prescribing practices.

A previous study exclusively focusing on physicians found that as of 2015, few states had required opioid-related CE for all or nearly all physicians, and fewer than half required any physicians to obtain such training.¹² However, this study did not examine opioid-related CE requirements applicable to dentists, nor did it review other state subject-specific CE requirements. Furthermore, additional states have established subject-specific CE requirements in the past two years.

To enhance understanding of the scope and nature of state-level CE requirements and to support

evaluation research, we describe the prevalence and characteristics of state-level, subject-specific CE requirements for both physicians and dentists, with a focus on CE for pain management and controlled substance prescribing.

Methods

We searched individual state medical board websites for information on CE requirements for Doctors of Medicine (MDs) and Doctors of Osteopathic Medicine (DOs) in the 50 states and the District of Columbia, and confirmed those assessments with additional

A PREVIOUS STUDY EXCLUSIVELY FOCUSING ON PHYSICIANS FOUND THAT AS OF 2015, FEW STATES HAD REQUIRED OPIOID-RELATED CE FOR ALL OR NEARLY ALL PHYSICIANS, AND FEWER THAN HALF REQUIRED ANY PHYSICIANS TO OBTAIN SUCH TRAINING.

data from the Federation of State Medical Boards, the American College of Physicians’ website, and other publications on CE requirements.¹²⁻¹⁵ We also reviewed CE requirements for Doctors of Dental Surgery in these states by reviewing the CE information listed on websites for state boards of dentistry and additional data from the American Dental Association website.¹⁶ We reviewed all laws or regulations regarding CE requirements effective in the 50 states and the District of Columbia, as of April 30, 2017.

For each state, we collected data on the number and topics of subject-specific CE requirements and whether the CE requirement was one-time only or a part of license renewal. Not every state requires topic-specific CE for each renewal cycle; some states may permit CE in alternate renewal cycles, for example, but we still considered those to be renewal CE requirements for the purposes of this study. Providers are awarded a set number of CE credit hours for completing requirements; this paper defines duration as the number of hours awarded for completing trainings or courses. While used as the metric to award credit, CE hours may not represent the time providers actually take to complete requirements. States generally do not specify the content of CE but instead defer to CE providers. We considered pain management and controlled substance prescribing together in this analysis as both could potentially affect opioid prescribing.

We recorded the average number of credit hours per subject required, normalized to the two-year period most commonly used as the basis for state CE

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renewal cycles. For states whose CE duration requirements varied by specialty, we selected the highest requirement. If a state CE requirement provided a choice among several topics, we counted each choice as a separate requirement. If a prescriber could choose among, for example, three subjects for six hours of an overall 50-hour requirement in a two-year period, we assumed for the purposes of this study that each subject was required for two hours.

For states with pain management/controlled substance CE requirements, we reported whether they applied to all physicians or dentists and identified states that

limit these requirements to certain prescribers of controlled substances. States that exempted only limited numbers of practitioners from the CE requirement (e.g., California, where pathologists and radiologists are exempt from the pain management training) were still considered to have requirements applicable to all providers in this study. States with a CE requirement only applicable to opioid prescribing were considered to have CE requirements for controlled substance prescribing. We did not include certification in life support training, such as cardiopulmonary resuscitation or cardiac life support, because some states permit such training to count toward CE hours, while other states do not.

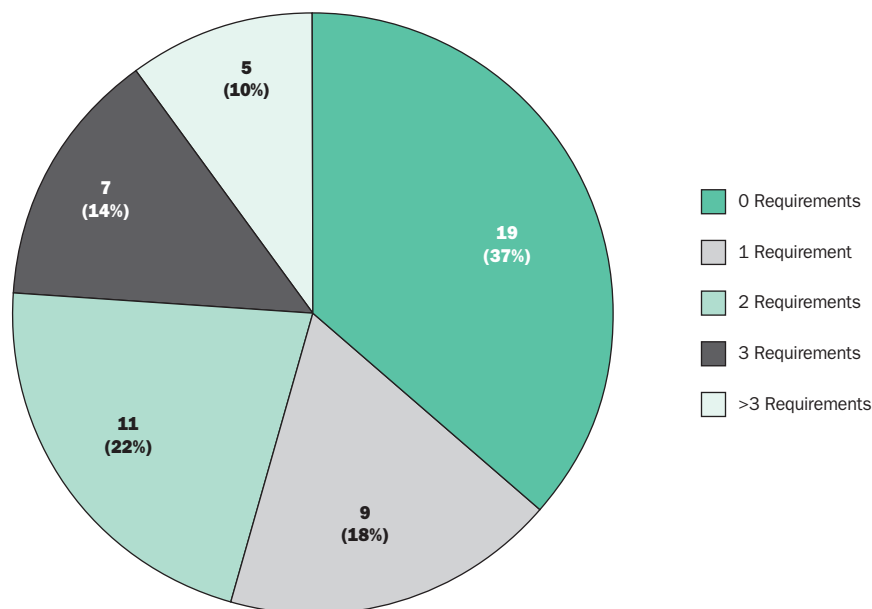
Results

Physicians (MDs and DOs)

Subject-specific requirements

Thirty-two of the 50 states and the District of Columbia (63%) have at least one subject-specific CE requirement for either MDs or DOs, with the highest number of subjects being seven in Connecticut and Massachusetts — although both of these states permit providers to select CE subjects from a list of seven topics (Figure 1). Seven states (14%) have a one-time CE

Figure 1
Subject-specific CE Requirements for Physicians by State



Sources:

1. American College of Physicians, State Continuing Medical Education Requirements, 2016
2. Federation of State Medical Boards of the United States, Continuing Medical Education Board-by-Board Overview, 2016
3. State Medical Board websites

requirement, three of which require CE in only one subject, while the other four require CE in two subjects. Thirty states (57%) have subject-specific requirements for license renewal, with nine having one subject-specific CE requirement and the remaining 21 requiring two or more subjects (maximum of seven). Five states (10%) have both one-time and renewal requirements.

Three states require one credit hour of CE, six require two hours, nine require three hours, and 12 require more than three hours. All of these CE requirements are part of, and not in addition to, the total number of CE hours required.*

Pain management and controlled substance CE requirements

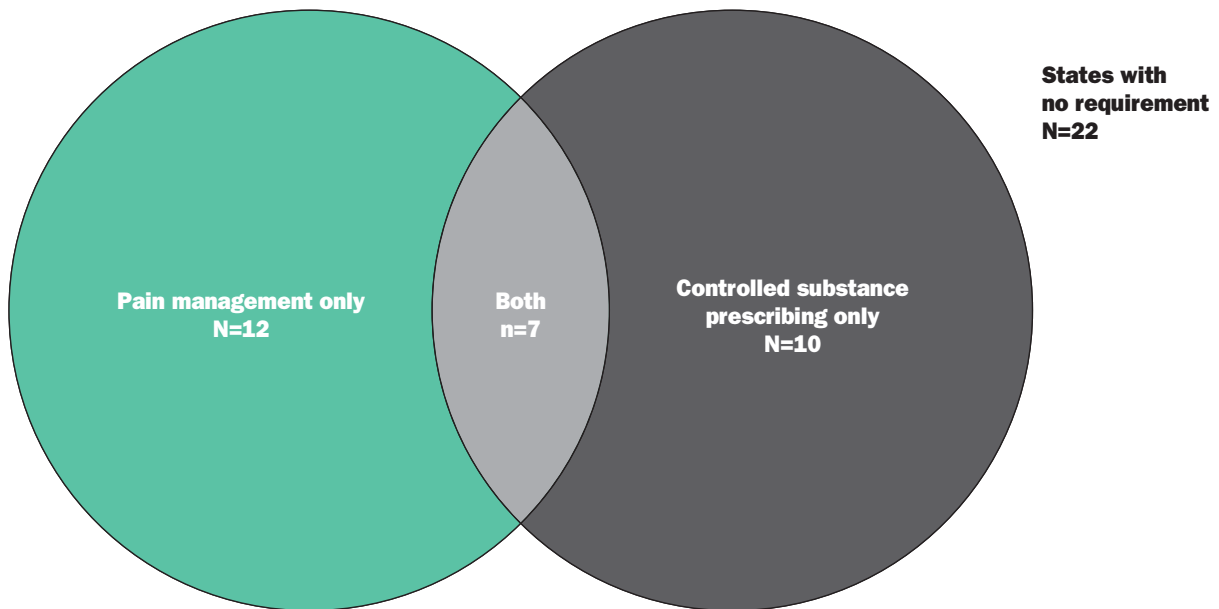
Pain management and controlled substance prescribing are the two most common subject-specific CE requirements, with 29 states (57%)

having one or both requirements. All of these states, except Rhode Island and Wisconsin, established their requirements through statute. Twelve of the 29 states require only pain management CE, 10 require only controlled substance prescribing CE, and seven require both (Figure 2). Twenty-six of the 29 states have such requirements for both MDs and DOs. Two states (Oklahoma and Nevada) have requirements only for DOs, and one state (Vermont) has requirements applicable only to MDs. Twelve of the 29 states (California, Connecticut, Michigan, New Jersey, Nevada, Oklahoma, Oregon, Rhode Island, South Carolina, Tennessee, Virginia, and Vermont) require CE on pain management/controlled substance prescribing of all MDs or DOs, while the remaining 17 states' requirements apply only to a subset of physicians/osteopaths, such as controlled substance prescribers or certain providers based in pain clinics.

Of the 12 states with pain management/controlled substance prescribing CE requirements for all MDs and DOs, 10 (Connecticut, Michigan, New Jersey,

* In Massachusetts, applicants for an initial medical license need to have three credits in pain management as a condition of initial licensure in addition to the renewal requirement.

Figure 2
States with Pain Management/Controlled Substance Prescribing CE for Physicians



Sources:

1. American College of Physicians, State Continuing Medical Education requirements, 2016
2. Federation of State Medical Boards of the United States, Continuing Medical Education Board-by-Board Overview, 2016
3. State Medical Board websites

Note:

Two states (Oklahoma and Nevada) have pain management/controlled substance prescribing requirements only for DOs and one (Vermont) has such requirements only for MDs.

Nevada, Oklahoma, Rhode Island, South Carolina, Tennessee, Virginia, and Vermont) have CE requirements for license renewal (four for pain management only, three for controlled substance prescribing only,

OF THE 12 STATES WITH PAIN MANAGEMENT/ CONTROLLED SUBSTANCE PRESCRIBING CE REQUIREMENTS FOR ALL MDS AND DOS, 10 HAVE CE REQUIREMENTS FOR LICENSE RENEWAL...

and three for both) and two (California and Oregon) require one-time CE. No state with requirements related to renewals for all MDs and DOs requires more than two hours of pain management/controlled substance prescribing CE over a two-year period.

Of the 17 states limiting application of CE requirements for pain management/controlled substance prescribing to controlled substance prescribers or certain providers, eight require CE exclusively on pain management, seven do so for controlled substance prescribing, and two require both. The

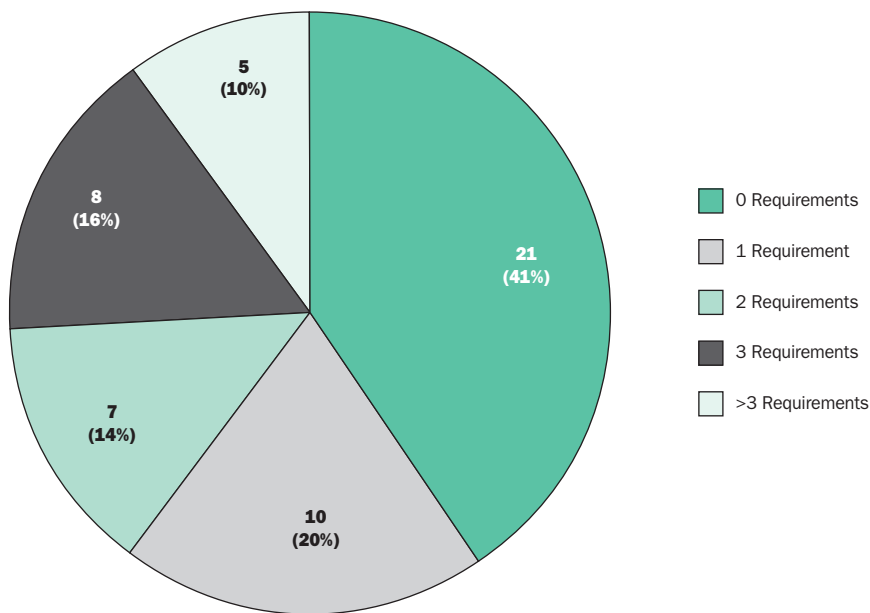
requirements in these 17 states all pertain to license renewal, and differ by provider specialty, practice setting, and other variables. For example, Texas requires the medical director or owner/operator of a pain management clinic to complete 10 hours of CE in pain management annually. The number of CE hours required for certain providers (e.g., pain management specialists) is generally equal to or greater than the requirements for all MDs and DOs (range, 1–30 hours over a two-year period, median=3 hours).

Dentists

Subject-specific requirements

Thirty of the 50 states and the District of Columbia (59%) have at least one subject-specific CE requirement for dentists, with a maximum of 15 subjects in Arizona. Among these 30 states, 10 have one subject-specific requirement, seven have two requirements, eight have three requirements, and five have more than three requirements (Figure 3). The most common subject-specific requirement is infection control (16 states), followed by pain management (nine), ethics (nine), and controlled substance prescribing (eight).

Figure 3
Subject-specific CE Requirements for Dentists by State



Sources:

1. State Board of Dentistry websites
2. American Dental Association, Continuing Education Requirements for Dentists and Auxiliaries, 2013

Pain management and controlled substance CE requirements

Thirteen states (25%) require dentists to complete pain management and/or controlled substance prescribing CE; four require both (Figure 4). All but two states require the training every renewal cycle.

THE TWO MOST COMMON SUBJECTS FOR MDS AND DOS ARE PAIN MANAGEMENT (19 STATES, 37%) AND CONTROLLED SUBSTANCE PRESCRIBING (17 STATES, 33%).

Five of 13 states only require that a subset of dentists, such as those registered with the Drug Enforcement Administration or dentists considered dispensers, complete the requirements at each renewal cycle. Of the eight states requiring all dentists to complete CE in pain management/controlled substance prescribing, two have a one-time requirement with no more than three hours, and one requires dentists to complete CE at renewal but does not specify the minimum number of CE hours. The remaining five states specify the minimum hours required; four require less than

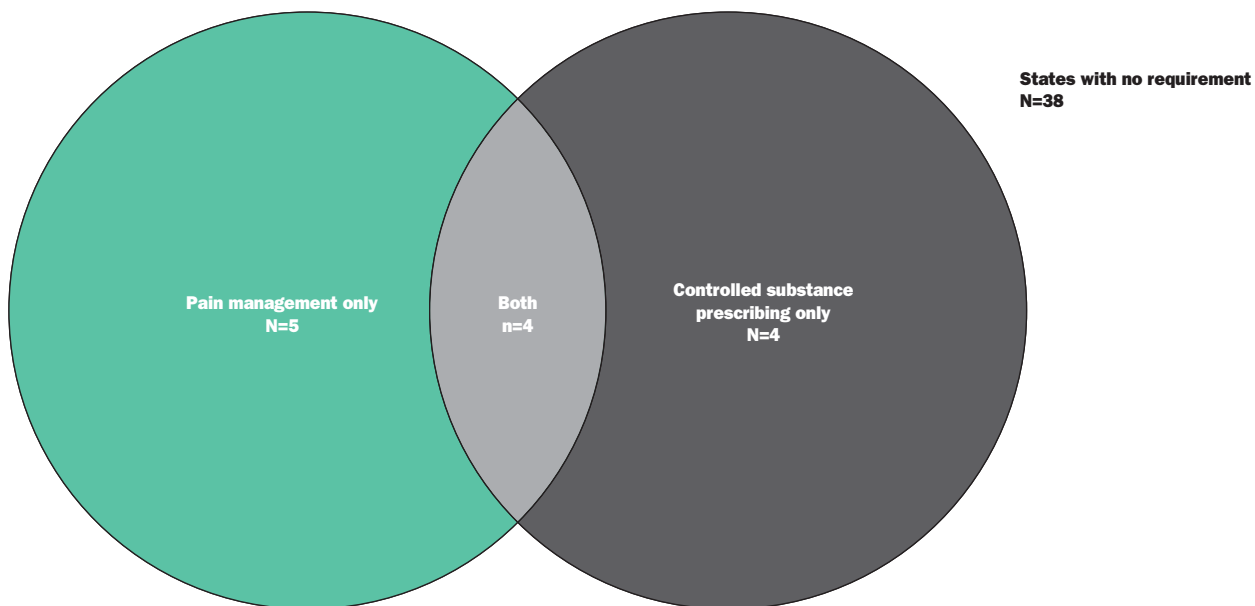
three hours over a two-year period; and one requires three hours.

A summary of specific state CE requirements for physicians/osteopaths and dentists can be seen in Table 1.

Discussion

This analysis demonstrates that 32 states (63%) have some subject-specific CE requirement for MDs or DOs, and 30 states (59%) have such requirements for dentists. The two most common subjects for MDs and DOs are pain management (19 states, 37%) and controlled substance prescribing (17 states, 33%). The most common subjects for dentists are infection control (16 states, 31%), pain management (nine states, 18%), and ethics (nine states, 18%). Those CE requirements related to all physicians at renewal never exceeded three hours for either physicians or dentists. However, only 10 states (20%) require CE on pain management and/or substance control prescribing at license renewal for all MDs or DOs at each license renewal, and only six states do so for dentists. These results imply that at least 32% of the U.S. population lives in states with no pain management/controlled

Figure 4
States with Pain Management/Controlled Substance Prescribing CE for Dentists



Sources:

1. State Board of Dentistry websites
2. American Dental Association, Continuing Education Requirements for Dentists and Auxiliaries, 2013

substance prescribing CE requirement.¹⁷ While providers in states without required CE may seek additional education on pain management/controlled substance prescribing on their own, a large number of providers may not be reached. Some states may have established pain management CE requirements

owing to a concern about palliative care rather than the opioid abuse and dependence.

All prescribers have a responsibility to prescribe opioids appropriately and to minimize their potential for harm. In 2012, dentists wrote only 6.4% of all

Table 1
Specific State CE Requirements for Physicians/Osteopaths and Dentists

Subject	State (Physician/Osteopath)	State (Dentist)
Bioterrorism	1 state (NV)	1 state (NV)
Controlled Substance Prescribing	17 states (AL*, CT, DE*, FL*, MA*, MS*, NC*, NJ, OK, SC, TN, UT*, VT*, VA, WA*, WI*, WV*)	8 states (CT, MA, NC, PA, RI, TN, UT, WV)
Cultural Competence [†]	1 state (CT)	1 state (CT)
Domestic Violence/Sexual Assault/Child and Dependent Abuse and Neglect	10 states (CT, DE, FL, IA, KY, MA, NY, OH, TX, PA)	5 states (CT, FL, IA, MD, PA)
End-of-life/Palliative Health Care	8 states (CA, GA, IA, MA, NJ, OR, RI [§] , VT)	
Electronic Health Records/Recordkeeping	1 state (MA)	4 states (AZ, AR, CT, MN)
Ethics	6 states (FL, MI, NV, PA, RI, TX)	9 states (AZ, AR, HI, IN, KS, MN, NY, ND, OK)
Geriatric Medicine	1 state (CA)	
HIPAA Compliance		2 states (AR, CT)
HIV/AIDS	2 states (DC, FL)	1 state (FL)
Infectious Disease/Infection Control	4 states (CT, DC, NY, RI)	16 states (AL, AR, AZ, CA, CT, DE, DC, MD, MA, MN, NV, NH, NM, ND, OR, WV)
Patient Safety/Risk Reduction/Risk Management/Prevention of Medical Errors	5 states (CT, FL, MA, PA, RI)	2 states (CT, FL)
Pain Management	19 states (CA, CT, GA*, IA*, KY*, MA*, MI, NJ, NV, NH*, NM*, OH*, OR, TN*, TX*, WA*, RI, VA, VT)	9 states (AZ, CT, KY, MA, MI, NM, NC, OR, PA)
Other	7 states (CT, FL, KY, MA, OK, RI, TX)	14 states (AZ, AR, CA, CT, IN, KY, MD, MN, NY, ND, OR, RI, TN, WV)

† New Jersey requires cultural competence CE for physicians licensed prior to March 2, 2005.

* Indicates subject requirement only applies to controlled substance prescribers or providers based in pain clinics.

§ At least 4 hours of CE to be earned on topics of current concern as determined by the director of the Rhode Island Department of Health.

Note: In March 2015, the Maryland Board of Physicians mandated that physician and physician assistant licensees, per renewal cycle, complete one CE (credit hour) dedicated to opioid prescribing. Due to legislation that passed during the 2016 Maryland General Assembly session, the Board's CE mandate is no longer in effect as of October 1, 2016. Available at: http://mgaleg.maryland.gov/2016RS/Chapters_noln/CH_99_hb0185t.pdf.

Sources:

- American College of Physicians, 2016
- Federation of State Medical Boards of the United States, Continuing Medical Education Board-by-Board Overview, 2016
- State Medical Board websites

All laws or regulations regarding CE requirement in the 50 states and DC have been reviewed as of April 30, 2017.

prescriptions for opioids, even though opioid prescriptions constituted 29% of all prescriptions they wrote.¹⁸ Although the American Dental Association encourages continuing education on the appropriate use of opioid pain medications,¹⁶ only 13 states require dentists to complete some form of continuing education on either pain management/controlled substances. Two states (Arizona and Pennsylvania) have such requirements for dentists but not for physicians.

Our study did not track the actual hours individual physicians or dentists spent participating in an opioid-related CE, and states often allow physicians or dentists to select certain subjects among several options. Moreover, prescribers in states without CE requirements may seek out CE on their own or may take more hours than are required.

Previous studies of the impact of CE suggest positive impacts on physician performance and physician knowledge, but studies of patient health outcomes show mixed findings.^{19,20} A systematic review of the impact of CE concluded that CE can improve physician

A SYSTEMATIC REVIEW OF THE IMPACT OF CE CONCLUDED THAT CE CAN IMPROVE PHYSICIAN PERFORMANCE AND PATIENT HEALTH OUTCOMES.

performance and patient health outcomes.¹⁹ A systematic review published in 2014 found that evaluations of CE on opioid prescribing indicate a gain in knowledge, but limited adoption of safe opioid prescribing practices.²⁰ However, the studies reviewed usually evaluated few provider specialties and had small sample sizes.

Our research did not evaluate the effectiveness of the training states required of their providers, but rather sought to determine the extent to which states require pain management/controlled substance CE in light of the current opioid overdose problem. Evaluating the effectiveness of a training would depend on its particular objectives and the ability to measurably assess provider knowledge, provider behavior, or patient outcomes. Given that research on the effectiveness of CE is limited, providers and policy makers would benefit from additional studies evaluating the effectiveness of CE in the context of the wider social, political, and organizational factors affecting physician behaviors and patient outcomes.¹⁹

More research is needed to examine the availability and quality of state CE programs on pain management/controlled substance prescribing trainings and the long-term impact of such programs on prescribing behaviors.

Conclusion

We found that a majority of states have subject-specific CE requirements, and many states require CE to address pain management/controlled substance prescribing, but few do so for all professionals at every renewal. Because current requirements for CE in pain management/controlled substance prescribing are of limited duration and included in the overall state CE hour requirements, they are unlikely to impose significant additional burdens for licensure. Our analysis suggests steps that states without pain medication/controlled substance prescribing CE requirements might take to help address the opioid epidemic. ■

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Disclaimer

The findings and conclusions of this study are those of the authors and do not necessarily reflect the views of the U.S. Food and Drug Administration or the Department of Health and Human Services.

Acknowledgements

We would like to thank Marguerite Lee, Stella Kim (Intern), and Brady Mickelsen (Intern) of the FDA; Vincent Beswick-Escanlar (Preventive Medicine Resident) of Uniformed Services University, Canada; Mitra Ahadpour of the U.S. Substance Abuse and Mental Health Services Administration; and Christopher M. Jones of the Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services for their valuable contributions to the manuscript.

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