

# Dental Education Core Competencies for the Prevention and Management of Prescription Drug Misuse

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RECOMMENDATIONS FROM THE GOVERNOR'S DENTAL EDUCATION WORKING GROUP ON PRESCRIPTION DRUG MISUSE



**Governor's Dental Education Working Group on Prescription Drug Misuse**  
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Boston University Henry M. Goldman School of Dental Medicine  
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February 2016

## **DENTAL EDUCATION CORE COMPETENCIES FOR THE PREVENTION AND MANAGEMENT OF PRESCRIPTION DRUG MISUSE**

### **Working Group Background:**

In an effort to prepare the next generation of prescribers with the necessary tools to curb the nation's current opioid epidemic, the Baker-Polito Administration, the Massachusetts Dental Society, and the deans of the Commonwealth's three dental schools – Boston University Henry M. Goldman School of Dental Medicine, Harvard School of Dental Medicine, and Tufts University School of Dental Medicine – have partnered in enhancing current dental school core competencies, building off of the successes of the Governor's Medical Education Working Group on Prescription Drug Misuse. Spanning all dental specialties, this first-in-the-nation partnership has resulted in the establishment of cross-institutional core competencies for the prevention and management of prescription drug misuse that will reach the approximately 1,800 enrolled undergraduate dental students and 580 advanced graduate dental students across the Commonwealth of Massachusetts.

Currently, each dental school has implemented core competencies in the diagnosis and management of pain across various aspects of their curriculum; however, the Working Group acknowledges the need to strengthen, coordinate, and unify these approaches within and across each program. This collaboration and set of cross-institutional core competencies will provide dental students (both at the undergraduate and advanced graduate levels) with enhanced training in prevention strategies regarding prescription drug misuse, while concurrently providing effective pain care. This represents an innovative and forward-thinking contribution to a multi-faceted strategy to curb the opioid epidemic. The Commonwealth of Massachusetts is again setting a new standard – this time by providing dental students with a strong foundation in prevention, identifying substance use disorders, managing the complex patient requiring effective pain management, and referring patients for appropriate treatment. With this enhanced educational foundation, Massachusetts' dental students will be better prepared to enter residency training and practice to provide excellent patient care as our future dentists.

### **Core Competencies Overview:**

The Governor's Dental Education Working Group membership, representing the Department of Public Health, the Massachusetts Dental Society, and all three Massachusetts dental schools – Boston

University Henry M. Goldman School of Dental Medicine, Harvard School of Dental Medicine, and Tufts University School of Dental Medicine – is pleased to outline the following cross-institutional, consensus document regarding a set of measurable core competencies for the prevention and management of prescription drug misuse in dentistry. Given the significant role of dentistry in opioid prescribing, and in order to provide cross-institutional standards of training to all dental students in Massachusetts, the following recommendations for the core competency domains will be adopted by all three dental schools. Each school will establish appropriate curricular interventions and innovations to ensure that the stated competencies are fully addressed for all students, allowing schools to tailor these competencies to their own curriculum development and to link these skills to emerging trends in competency development.

To this end, the three schools have agreed in principle to develop and implement substantive assessment of these competencies in order to evaluate students for baseline and post-implementation measurements. In addition, it is further recommended that dentists in Massachusetts receive continuing education on these core competencies to ensure ongoing knowledge on the prevention and management of prescription drug misuse in dentistry. The Working Group recognizes that the best evidence in dental education supports performance-based evaluation as a key component of competency-based curricula, utilizing clinical settings or simulation, and/or objective patient-based assessments using standardized patients and technology-enhanced simulation. These assessments represent the gold standard for objective competency evaluation of dental students and residents.

### **Working Group Preamble:**

Dental Medicine has an expanding role in promoting public health, with an increased attention to inter-professional collaboration across a range of healthcare disciplines. The need for this collaborative effort is most evident when the patient presents with complex medical and psychiatric comorbidities. For example, the patient can benefit from integrative care, after dental surgical procedures where controlled substances are dispensed as a standard of care. Dentists are in a particularly unique position to have an impact, as they typically have regular contact with their patients and commonly address issues of preventive health and wellness in their oral health regimes.

Dentists have been identified as one of the most frequent prescribers of opioid analgesics for acute pain, following closely behind internal medicine and primary care physicians. Furthermore, dentists are the most frequent prescribers to adolescents who are less aware of the high risks involved with opioid use. A recent survey suggests that in one study, dentists prescribed more opioids after single tooth extraction than guidelines would support. Further complicating the problem, unused prescriptions from dental procedures can be unwittingly diverted to family members and other individuals misusing substances, thus contributing to the risk of substance misuse and opioid related overdoses and deaths.

In a recent survey on screening in a dental care setting, Parish et al. found that three out of four dentists reported that they asked their patients about substance misuse during a routine assessment. Conversely, most underestimated the importance of substance misuse assessment in dental practice, suggesting that few dentists may follow through with appropriate substance misuse risk counselling and referral, even after identifying misuse. Hence, targeting education that encourages a simple reduction in opioid prescribing in dentistry may address only part of the problem, while more is required with respect to counselling, appropriate referral, and inter-professional collaboration.

Massachusetts has historically led the educational efforts to address this problem with practicing dentists, as underscored by the recent *Special Report on Prescribing in Dentistry in the Journal of the Massachusetts Dental Society*. Similarly, the American Dental Association recently addressed the issues with *The Practical Guide to Substance Abuse Disorders*, providing another template for enhancing the undergraduate dental curriculum. In a national effort, the National Institutes of Health (NIH) recently created 12 *Centers of Excellence in Pain Education (CoEPEs)* with dentists playing a key role in guiding CoEPE based inter-professional education for teaching the appropriate use of controlled substances in pain management.

Reinforcing the need for these successes, research suggests that change already appears to be occurring with respect to opioid prescribing in dentistry. For example, Levy and colleagues found that the largest drop in percentage of prescribing from 2007 to 2012 was from the areas of emergency medicine (-9%) and dentistry (-6%). More recent investigations suggest that the drop in opioid prescribing continues. As a result of concerted educational efforts directed toward those in practice, dentists may be shifting to alternative lower risk analgesics in order to effectively manage pain.

However, more must be done to combat today's opioid epidemic. Dental undergraduate and graduate education likely offers the best setting for early and effective clinician training, targeting developing clinician behavior that can have a positive impact during future years of practice.

Finally, the Governor's Dental Education Working Group recognizes that the practice of dentistry differs in several important ways from the practice of medicine. Some of these differences include:

- While dentistry is practiced in small local offices (nationwide 78.4% of dentists work in solo practices-ADA Practice Survey 2010), over the past decade, physicians and other healthcare professionals have come together in larger group practices, facilitating and normalizing peer review and consultations as routine.
- Dentists deal predominantly with acute pain, utilizing standard evaluations and evidence-based treatment protocols that are highly effective for acute pain. However, in contrast, their experience treating chronic pain is limited.
- More integration is required between dentistry and the medical field, particularly with regards to behavioral health.
- Although implementation has begun through the *Commission on Dental Accreditation* process, at this time there is no accredited specialty of Orofacial Pain, resulting in few resources across the dental field for consultation or referral.

### **Dental Core Competencies Preamble:**

The following cross-institutional core competencies are framed from the perspective of an encounter with a patient who typically presents with dental or orofacial pain for which a prescription medication with the potential for misuse may be indicated. The goal of the stated core competencies is to support future dentists, over the course of their dental education, with both skills and a foundational knowledge in the prevention of prescription drug misuse and the effective management of pain. These competencies set clear baseline standards for primary (preventing prescription drug misuse), secondary (treating patients at-risk for substance use disorders) prevention skills and tertiary knowledge in the areas of screening, evaluation, treatment planning, and referral. While these competencies have been stratified into prevention domains, the following competencies are not intended to be wholly exclusive

to any one prevention level; rather, this document enlists skills and knowledge which should be broadly applied to enhance a future dental professional's ability to prevent and manage prescription drug misuse.

These cross-institutional core competencies are also designed to serve as a vital bridge between dental student education, graduate training, dental residency training and dental practice, ensuring that future generations of prescribers are equipped with essential skills for high quality dental practice and safe prescribing. These concepts both encourage and demand a dentists' understanding of the importance of both team- and system-based care provision, ensuring the inter-professional treatment of substance use disorders as a chronic disease, while effectively managing acute pain. The three Massachusetts Dental Schools and the Massachusetts Dental Society universally recognize these competencies as integral to the abilities of all dental students, residents, and practicing dental professionals to safely and competently prescribe effective controlled substances, and to successfully prevent, identify, and treat patients with substance use disorders.

## **DENTAL EDUCATION CORE COMPETENCIES FOR THE PREVENTION AND MANAGEMENT OF PRESCRIPTION DRUG MISUSE**

In the appropriate setting, using recommended and evidence-based methodologies, the graduating dental student should demonstrate the independent ability and/or knowledge to:

### **□ Primary Prevention Domain – Preventing Prescription Drug Misuse: *Screening, Evaluation, and Prevention of Substance Misuse During the Diagnosis of Dental and Orofacial Pain***

1. Evaluate a patient's pain using age, gender, and culturally appropriate evidence-based methodologies, together with history, physical examination and relevant imaging studies to develop an appropriate differential diagnosis.
2. Evaluate a patient's risk for substance use disorders by utilizing age, gender, and culturally appropriate evidence-based communication skills and standardized assessment methodologies, supplemented with relevant available patient information, including but not limited to health records, family history, prescription dispensing records (e.g. the Prescription Drug Monitoring Program), screenings for commonly co-occurring psychiatric disorders (especially depression, anxiety disorders, and PTSD), review of relevant medical records, and communication with co-treating clinicians.
3. Identify and describe potential pharmacological and non-pharmacological treatment options including opioid and non-opioid treatments for acute and chronic pain management, along with patient and family communication and education regarding the risks and benefits associated with each of these available treatment options, securing of medications, and proper disposal.

### **□ Secondary Prevention Domain – Treating Patients At-Risk for Substance Use Disorders: *Engage Patients in Safe, Informed, and Patient-Centered Treatment Planning***

4. Demonstrate the ability to appropriately refer patients to their primary care physician, mental health specialists, pain specialists, and substance use treatment programs for consultation and collaboration.
5. Practice evidence-based and patient-centered pain management treatment plans for patients with acute and chronic pain.

6. Provide special attention to safe prescribing and recognizing patients displaying signs of aberrant prescription use behaviors.
7. Demonstrate the foundational skills in patient-centered counselling and behavior change in the context of a patient encounter, consistent with evidence-based techniques.

❑ **Tertiary Prevention Domain - Managing Substance Use Disorders as a Chronic Disease:** *Eliminate Stigma and Advance Interdisciplinary and Inter-professional Collaborative Efforts to Reduce Substance Misuse*

8. Recognize the role of currently available screening instruments for at-risk patients, and support the development of instruments and protocols that are tailored to dental practice.
9. Work toward eliminating the stigma associated with substance misuse, recognizing substance use disorders as a chronic disease that can be treated with effective assessment, referral, and inter-professional collaboration.
10. Develop models of inter-professional education where dentists, physicians, nurses, pharmacists, mental health clinicians and other critical disciplines can engage in collaborative training, to facilitate best practices and the optimal care of our patients.

**Recommended Evidence-Based Methodologies for the Prevention and Management of Prescription Drug Misuse:** In the appropriate setting, it is recommended that the graduating dental student have operational knowledge of questionnaires with sufficient validity and reliability for the screening of substance use risk (e.g., the NIDA Quick Screen, National Institute on Drug Abuse, 2015). Additional research on the development of cost-effective screening questionnaires is currently underway, with specific reference to the dental patient. The three Massachusetts dental schools formally support this research development by their faculty.



## **APPENDIX: Current Activities in Massachusetts Inter-professional Dental Education**

Although healthcare providers typically are trained within discipline-specific schools, there is a movement toward inter-professional education in dentistry. This focus is particularly relevant for addressing substance misuse risk assessment, counseling at-risk patients, and collaborating across disciplines on the management of complex pain conditions. In addition to didactic components of the curriculum taught by providers from varied disciplines, Massachusetts dental schools are increasingly including hands-on curriculum and clinical training that addresses patients at-risk for substance use disorders with techniques such as motivational interviewing. These curriculum changes often require the addition of new dental faculty with backgrounds in clinical psychology, psychiatry, nursing, addiction medicine and other relevant healthcare subspecialties.

**Boston University Henry M. Goldman School of Dental Medicine** is currently incorporating substance use/misuse instruction into the academic curriculum using the SBIRT model (Screening, Brief Intervention, and Referral to Treatment). This initiative is in collaboration with the Boston University School of Medicine through the BESST student training program (Boston University Evidence-Based Student SBIRT Training), which is funded by a recently awarded SAMHSA grant. The goal of this initiative is to enhance the existing substance use/misuse curriculum in the areas of behavioral health, patient communication, and inter-professional team-based practice by including evidence-based SBIRT education in an integrated, and multidisciplinary collaborative environment.

**Harvard School of Dental Medicine** is the lead institution in the Boston-based CoEPE (NIH Pain Consortium Centers of Excellence in Pain Education, 2015). At HSDM, with support of a 5-year contract from the NIH's National Institute of Drug Addiction (NIDA), educators are collaborating to teach appropriate controlled substance prescribing via both intra-professional (dentistry) and inter-professional (medical, dental, nursing, pharmacy and psychology) education.

**Tufts School of Dental Medicine** currently conducts the weekly Inter-professional Facial Pain and Headache Rounds with participation by students, faculty, and regional experts in area of pain and addiction, and the school is in the process of developing and evaluating a protocol for integrating the

Massachusetts Prescription Monitoring Program into the dental curriculum along with abbreviated screening for at-risk patients. Also, Tufts dental students review cases in a setting where multiple subspecialists collaborate on patient assessment and the management of medically complex patients.

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*Special acknowledgement* to members of the  
Massachusetts dental school's working subcommittee  
representing faculty from all three schools, which provided  
invaluable content and expertise to members of the  
Working Group in supporting this successful  
collaboration's completion: Antje M. Barreveld, MD;  
Jennifer Brownstein, MA; Shuchi Dhadwal, DMD;  
Kanchan Ganda, MD; Nadeem Karimbux, DMD, MMSc;  
Jeffrey R Shaefer, DDS, MS, MPH