

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

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



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

### **Working Group Background:**

In an effort to prepare the next generation of physicians with the necessary tools to curb the nation's current opioid epidemic, the Baker-Polito Administration, the Massachusetts Medical Society, and the deans of the Commonwealth's four medical schools – Boston University School of Medicine; Harvard Medical School; Tufts School of Medicine; and the University of Massachusetts Medical School – have partnered in enhancing current medical school core competencies. 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 3,000 enrolled medical students across the Commonwealth of Massachusetts.

This collaboration and set of cross-institutional core competencies will provide medical students with enhanced training in primary, secondary, and tertiary prevention strategies regarding prescription drug misuse, representing 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 medical students with a strong foundation in prevention, identifying substance use disorders, and referring patients to appropriate treatment. With this enhanced educational foundation, Massachusetts' medical students will be better prepared to enter residency training and to provide excellent patient care as our future physicians.

### **Core Competencies Overview:**

The Governor's Working Group is pleased to outline the following cross-institutional consensus document regarding a set of measureable core competencies for the prevention and management of prescription drug misuse. Working Group membership, representing the Department of Public Health, the Massachusetts Medical Society, and all four Massachusetts medical schools – Boston University School of Medicine; Harvard Medical School; Tufts School of Medicine; and the University of Massachusetts Medical School – convened over a series of four working meetings, advancing

recommendations that responded to a literature review, including over twenty-five peer-reviewed journal articles and current standards.

The following recommendations for the core competency domains will be adopted by all four schools for integration into the medical school training of all Massachusetts medical students. Each school will establish appropriate curricular interventions and innovations to ensure that the stated competencies are being addressed for all students, allowing schools to tailor these competencies to their own curriculum development.

To this end, the four 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. The Working Group recognizes opportunities to link these skills to emerging trends in competency development (e.g. linkage to the AAMC- and ACGME-endorsed Entrustable Professional Activities or “EPAs” model). Further, that the best evidence in medical education supports performance-based evaluation as a key component of competency-based curricula, utilizing clinical settings or simulation- and/or patient-based assessments using standardized patients and technology-enhanced simulation. These assessments represent the gold standard for objective competency evaluation of medical students and residents.

**Preamble:**

The following cross-institutional core competencies are framed from the perspective of an encounter with a patient who typically presents with pain and/or other medical symptoms for which a prescription medication with the potential for misuse may be indicated. The goal of the stated core competencies is to support future physicians, over the course of their medical education, with both skills and a foundational knowledge in the prevention of prescription drug misuse. These competencies set clear baseline standards for primary (preventing prescription drug misuse), secondary (treating patients at-risk for substance use disorders), and tertiary (managing substance use disorders as a chronic disease) prevention skills and knowledge in the areas of screening, evaluation, treatment planning, and supportive recovery. 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 medical professional's ability to prevent and manage prescription drug misuse.

These core competencies are designed to serve as a vital bridge between medical student education and medical residency training, ensuring that future generations of prescribers are equipped with essential skills for high quality medical practice and safe prescribing. These concepts both encourage and demand a physicians' understanding of the importance of both team- and system-based care provision, ensuring the holistic treatment of substance use disorders as a chronic disease. The four Massachusetts medical schools universally recognize these competencies as integral to the abilities of all medical students, residents, and practicing medical professionals to safely and competently prescribe prescription drugs, and to successfully prevent, identify, and treat substance use disorders.

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

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

- ❑ **Primary Prevention Domain – Preventing Prescription Drug Misuse: *Screening, Evaluation, and Prevention***
  1. Evaluate a patient’s pain using age, gender, and culturally appropriate evidence-based methodologies.
  2. Evaluate a patient’s risk for substance use disorders by utilizing age, gender, and culturally appropriate evidence-based communication skills and 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 or “PMP”), drug urine screenings, and screenings for commonly co-occurring psychiatric disorders (especially depression, anxiety disorders, and PTSD).
  3. Identify and describe potential pharmacological and non-pharmacological treatment options including opioid and non-opioid pharmacological treatments for acute and chronic pain management, along with patient communication and education regarding the risks and benefits associated with each of these available treatment options.
  
- ❑ **Secondary Prevention Domain – Treating Patients At-Risk for Substance Use Disorders: *Engage Patients in Safe, Informed, and Patient-Centered Treatment Planning***
  4. Describe substance use disorder treatment options, including medication-assisted treatment, as well as demonstrate the ability to appropriately refer patients to addiction medicine specialists and treatment programs for both relapse prevention and co-occurring psychiatric disorders.
  5. Prepare evidence-based and patient-centered pain management and substance use disorder treatment plans for patients with acute and chronic pain with special attention to safe prescribing and recognizing patients displaying signs of aberrant prescription use behaviors.
  6. 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 Build Awareness of Social Determinants***
  7. Recognize the risk factors for, and signs of, opioid overdose and demonstrate the correct use of naloxone rescue.
  8. Recognize substance use disorders as a chronic disease by effectively applying a chronic disease model in the ongoing assessment and management of the patient.
  9. Recognize their own and societal stigmatization and biases against individuals with substance use disorders and associated evidence-based medication-assisted treatment.
  10. Identify and incorporate relevant data regarding social determinants of health into treatment planning for substance use disorders.

## Recommended Evidence-Based Methodologies for the Prevention and Management of Prescription Drug Misuse:

In the appropriate setting, and across all prevention areas, it is recommended that the graduating medical student have operational knowledge of:

- Diagnosis-Intractability-Risk-Efficacy (DIRE)
- Motivational Interviewing (MI)
- Opioid Risk Tool (ORT)
- Safe Prescribing “Universal Precautions”
- Screening, Brief Intervention, and Referral to Treatment (SBIRT)
- Screener and Opioid Assessment for Patients with Pain (SOAPP)
- Screening Tool for Addiction Risk (STAR)

### References:

- Alford, D. P., Zisblatt, L., Ng, P., Hayes, S. M., Peloquin, S., Hardesty, I., & White, J. L. (2015). SCOPE of Pain: An Evaluation of an Opioid Risk Evaluation and Mitigation Strategy Continuing Education Program. *Pain Med.* doi: 10.1111/pme.12878 <http://www.ncbi.nlm.nih.gov/pubmed/26304703>
- Ayu, A. P., Schellekens, A. F., Iskandar, S., Pinxten, L., & De Jong, C. A. (2015). Effectiveness and Organization of Addiction Medicine Training Across the Globe. *Eur Addict Res, 21*(5), 223-239. doi: 10.1159/000381671 <http://www.ncbi.nlm.nih.gov/pubmed/25966903>
- Belgrade, M. J., Chamber, C. D., & Lindgren, B. R. (2006). The DIRE score: predicting outcomes of opioid prescribing for chronic pain. *J Pain, 7*(9), 671-681. doi: 10.1016/j.jpain.2006.03.001 <http://www.ncbi.nlm.nih.gov/pubmed/16942953>
- Boyer, E. W. (2012). Management of opioid analgesic overdose. *N Engl J Med, 367*(2), 146-155. doi: 10.1056/NEJMra1202561 <http://www.ncbi.nlm.nih.gov/pubmed/22784117>
- Brady, K. T., McCauley, J. L., & Back, S. E. (2015). Prescription Opioid Misuse, Abuse, and Treatment in the United States: An Update. *Am J Psychiatry, appiajp201515020262*. doi: 10.1176/appi.ajp.2015.15020262 <http://www.ncbi.nlm.nih.gov/pubmed/26337039>
- Brady, K. T., McCauley, J. L., & Back, S. E. (2015). Prescription Opioid Misuse, Abuse, and Treatment in the United States: An Update. *Am J Psychiatry, 0*(0), appiajp201515020262. doi: 10.1176/appi.ajp.2015.15020262 <http://www.ncbi.nlm.nih.gov/pubmed/26337039>
- Butler, S. F., Budman, S. H., Fernandez, K., & Jamison, R. N. (2004). Validation of a screener and opioid assessment measure for patients with chronic pain. *Pain, 112*(1-2), 65-75. doi: 10.1016/j.pain.2004.07.026 <http://www.ncbi.nlm.nih.gov/pubmed/15494186>

- Carroll, J., Goodair, C., Chaytor, A., Notley, C., Ghodse, H., & Kopelman, P. (2014). Substance misuse teaching in undergraduate medical education. *BMC Med Educ*, *14*, 34. doi: 10.1186/1472-6920-14-34 <http://www.ncbi.nlm.nih.gov/pubmed/24533849>
- Federation of State Medical Boards. (2013). Model Policy on the Use of Opioid Analgesics in the Treatment of Pain. [http://www.fsmb.org/Media/Default/PDF/FSMB/Advocacy/pain\\_policy\\_july2013.pdf](http://www.fsmb.org/Media/Default/PDF/FSMB/Advocacy/pain_policy_july2013.pdf)
- Fishman, S. M., Young, H. M., Lucas Arwood, E., Chou, R., Herr, K., Murinson, B. B., . . . Strassels, S. A. (2013). Core competencies for pain management: results of an interprofessional consensus summit. *Pain Med*, *14*(7), 971-981. doi: 10.1111/pme.12107 <http://www.ncbi.nlm.nih.gov/pubmed/23577878>
- Friedman, R., Li, V., & Mehrotra, D. (2003). Treating pain patients at risk: evaluation of a screening tool in opioid-treated pain patients with and without addiction. *Pain Med*, *4*(2), 182-185. <http://www.ncbi.nlm.nih.gov/pubmed/12873264>
- Gonzalez, G., Oliveto, A., & Kosten, T. R. (2004). Combating opiate dependence: a comparison among the available pharmacological options. *Expert Opinion on Pharmacotherapy*, *5*(4), 713-725. <http://www.tandfonline.com/doi/abs/10.1517/14656566.5.4.713>
- Goodair, C., & Crome, I. (2014). Improving the Landscape of Substance Misuse Teaching in Undergraduate Medical Education in English Medical Schools from Concept to Implementation. *Canadian Journal of Addiction*, *5*(3), 5.
- Gourlay, D. L., & Heit, H. A. (2009). Universal precautions revisited: managing the inherited pain patient. *Pain Med*, *10 Suppl 2*, S115-123. doi: 10.1111/j.1526-4637.2009.00671.x <http://www.ncbi.nlm.nih.gov/pubmed/19691682>
- Gourlay, D. L., Heit, H. A., & Almahrezi, A. (2005). Universal precautions in pain medicine: a rational approach to the treatment of chronic pain. *Pain Med*, *6*(2), 107-112. doi: 10.1111/j.1526-4637.2005.05031.x <http://www.ncbi.nlm.nih.gov/pubmed/15773874>
- Hardisty, J., Scott, L., Chandler, S., Pearson, P., & Powell, S. (2014). Interprofessional learning for medication safety. *Clin Teach*, *11*(4), 290-296. doi: 10.1111/tct.12148 <http://www.ncbi.nlm.nih.gov/pubmed/24917099>
- Jackson, A. H., Alford, D. P., Dube, C. E., & Saitz, R. (2010). Internal medicine residency training for unhealthy alcohol and other drug use: recommendations for curriculum design. *BMC Med Educ*, *10*, 22. doi: 10.1186/1472-6920-10-22 <http://www.ncbi.nlm.nih.gov/pubmed/20230607>
- Kampman, K., & Jarvis, M. (2015). American Society of Addiction Medicine (ASAM) National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Use. *J Addict Med*, *9*(5), 358-367. doi: 10.1097/ADM.0000000000000166 <http://www.ncbi.nlm.nih.gov/pubmed/26406300>
- Meade, L. B., Caverzagie, K. J., Swing, S. R., Jones, R. R., O'Malley, C. W., Yamazaki, K., & Zaas, A. K. (2013). Playing with curricular milestones in the educational sandbox: Q-sort results from an internal medicine educational collaborative. *Acad Med*, *88*(8), 1142-1148. doi: 10.1097/ACM.0b013e31829a3967 <http://www.ncbi.nlm.nih.gov/pubmed/23807106>

- Morley-Forster, P. K., Pergolizzi, J. V., Taylor, R., Jr., Axford-Gatley, R. A., & Sellers, E. M. (2013). Mitigating the risk of opioid abuse through a balanced undergraduate pain medicine curriculum. *J Pain Res*, 6, 791-801. doi: 10.2147/JPR.S47192 <http://www.ncbi.nlm.nih.gov/pubmed/24353438>
- Murinson, B. B., Gordin, V., Flynn, S., Driver, L. C., Gallagher, R. M., Grabois, M., & Medical Student Education Sub-committee of the American Academy of Pain, M. (2013). Recommendations for a new curriculum in pain medicine for medical students: toward a career distinguished by competence and compassion. *Pain Med*, 14(3), 345-350. doi: 10.1111/pme.12051 <http://www.ncbi.nlm.nih.gov/pubmed/23387441>
- O'Connor, P. G., Nyquist, J. G., & McLellan, A. T. (2011). Integrating addiction medicine into graduate medical education in primary care: the time has come. *Ann Intern Med*, 154(1), 56-59. doi: 10.7326/0003-4819-154-1-201101040-00008 <http://www.ncbi.nlm.nih.gov/pubmed/21200039>
- Parish, S. J., Ramaswamy, M., Stein, M. R., Kachur, E. K., & Arnsten, J. H. (2006). Teaching about Substance Abuse with Objective Structured Clinical Exams. *J Gen Intern Med*, 21(5), 453-459. doi: 10.1111/j.1525-1497.2006.00426.x <http://www.ncbi.nlm.nih.gov/pubmed/16704387>
- Rockett, I. H., & Caine, E. D. (2015). Self-injury is the eighth leading cause of death in the united states: It is time to pay attention. *JAMA Psychiatry*, 1-2. <http://dx.doi.org/10.1001/jamapsychiatry.2015.1418>
- Savage, S. R., Kirsh, K. L., & Passik, S. D. (2008). Challenges in using opioids to treat pain in persons with substance use disorders. *Addict Sci Clin Pract*, 4(2), 4-25. <http://www.ncbi.nlm.nih.gov/pubmed/18497713>
- Seale, J. P., Shellenberger, S., & Clark, D. C. (2010). Providing competency-based family medicine residency training in substance abuse in the new millennium: a model curriculum. *BMC Med Educ*, 10, 33. doi: 10.1186/1472-6920-10-33 <http://www.ncbi.nlm.nih.gov/pubmed/20459842>
- Wachholtz, A., Foster, S., & Cheatle, M. (2015). Psychophysiology of pain and opioid use: implications for managing pain in patients with an opioid use disorder. *Drug Alcohol Depend*, 146, 1-6. doi: 10.1016/j.drugalcdep.2014.10.023 <http://www.ncbi.nlm.nih.gov/pubmed/25468815>
- Wachholtz, A., Gonzalez, G., Boyer, E., Naqvi, Z. N., Rosenbaum, C., & Ziedonis, D. (2011). Intersection of chronic pain treatment and opioid analgesic misuse: causes, treatments, and policy strategies. *Subst Abuse Rehabil*, 2, 145-162. doi: 10.2147/SAR.S12944 <http://www.ncbi.nlm.nih.gov/pubmed/24474854>
- Webster, L. R., & Webster, R. M. (2005). Predicting aberrant behaviors in opioid-treated patients: preliminary validation of the Opioid Risk Tool. *Pain Med*, 6(6), 432-442. doi: 10.1111/j.1526-4637.2005.00072.x <http://www.ncbi.nlm.nih.gov/pubmed/16336480>

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