Virginia Core Competencies in Addiction, Pain Management and Opioid Prescribing

On November 21, 2016 the opioid addiction crisis was declared a public health emergency in the Commonwealth of Virginia by Commissioner of Health Marissa J. Levine, MD. Dr. Levine cited the dramatic increases in fatal opioid drug overdoses, Hepatitis C and HIV outbreaks, emergency department visits for heroin overdoses, and opioid-related drug treatment center admissions as among the factors underlying the declaration.

Among other actions, Governor Terry McAuliffe subsequently signed into law 2017 legislation directing Secretary of Health and Human Resources William Hazel, MD, to convene a workgroup from schools of medicine, pharmacy, dentistry and nursing and physician assistant programs to develop educational standards and curricula for training health care providers in pain management, addiction and the safe and appropriate prescribing of opioids. Secretary Hazel convened a workgroup representing the range of opioid prescribers and dispensers in May of 2017, which worked through the summer and early fall of 2017 to develop the *Virginia Core Competencies in Addiction, Pain Management and Opioid Prescribing*. These competencies were subsequently adapted for use by schools that educate healthcare practitioners who do not prescribe or dispense, but who interact with patients who suffer the disease of addiction or take prescription opioids for the treatment of pain, such as nurses, physical therapists, athletic trainers and social workers, available as a separate document.

The *Virginia Core Competencies in Addiction, Pain Management and Opioid Prescribing* outline the most important aspects of the opioid crisis, addiction, and opioids and pain management identified by the workgroup as critical knowledge for health professional students. These competencies are presented as a framework for developing curricula for health professions learners.

Schools are free to tailor these competencies to meet the needs of their professions and national educational standards, accommodating their needs, resources and schedules. Different disciplines have different roles and priorities and may choose to emphasize particular aspects of these competencies relative to other aspects. Different emphases also will apply to different phases of a learner's education. Delivery of curricula may include in-person instruction, online instruction, case study discussion, simulated patient exercises, practicums, internships, and residencies.

Schools will retain the responsibility for developing and implementing formative and summative evaluations to assess students' abilities to meet the competencies. Competencies are designed to target various levels of Bloom's Taxonomy of learning domains. In most cases, competency cannot be demonstrated by simple recall; additional measures such as formulating plans and carrying out interventions are considered integral to measuring competence. However, recognizing the diversity of professions that prescribe and dispense while

acknowledging the differing ways that individual schools organize their curricula, the competencies are presented here as an outline to allow schools institutional flexibility.

These competencies provide the building blocks for designing a comprehensive pain management and addiction curriculum. Specific examples of language an educator may choose to describe the level of competency expected at each level can be found in Appendix A.

Core Competency Topics in Addiction, Opioids, and Pain Management

1. **The opioid crisis**
    a. **History and current situation**
        i. Statistics, trends and demographics surrounding the crisis in Virginia and nationwide
        ii. The relationship of opioid prescribing to illicit opioid use and to overall opioid overdose deaths
        iii. The prevalence of co-occurring mental health disorders
        iv. The shift in attitudes in the 1990's toward pain management and use of opioids, including the role of pharmaceutical marketing
        v. The stigma associated with addiction, and the changing view of addiction from a moral failing to a chronic, relapsing disease
        vi. Population health and other public health aspects of the crisis, including effects on family, neonates, and overall health costs
2. **Addiction**
    a. **Science of addiction**
        i. Biopsychosocial, spiritual and behavioral aspects, and the lifecycle of addiction
    b. **Prevention and early intervention**
        i. Risk and protective factors in opioid addiction
        ii. Special populations at risk of addiction
        iii. Motivational interviewing and other communication strategies
        iv. Naloxone co-prescribing
        v. Roles of family and social institutions in prevention and early intervention
    c. **Recognition of addiction**
        i. DSM-V, and ASAM's six dimensions and continuum
        ii. Clinical and behavioral elements of addiction
        iii. Practice-appropriate screening tools, including co-morbidity screening
    d. **Treatment of addiction**
        i. Addiction as a chronic disease
        ii. Evidence-based treatment models for addiction in general and opioid addiction specifically
        iii. Medication-assisted treatment
        iv. The continuum of care in opioid addiction treatment
        v. How and when to make a referral for treatment
        vi. The roles in an interdisciplinary addiction team

vii. The role of peers in the treatment of addiction, and the differences between a drug culture and recovery culture
viii. The management of patients in recovery, including factors contributing to relapse

e. **Prevention of fatal overdose**
   i. Naloxone use and availability
   ii. Monitoring of concurrent prescribing

3. **Pain management**
   a. **Science of pain**
      i. IASP definition of pain
      ii. Neurobiological basis of pain; biopsychosocial model of pain
      iii. Types of pain (e.g., neuropathic)
      iv. Acute, sub-acute and chronic pain, including pain generation, spinal and brain modulation, behavioral adaptation and maladaptation, and the continuum from acute to chronic to chronic disabling pain
      v. The underlying science of pain relief
   b. **Assessment (diagnosis) and treatment planning**
      i. Pain-related health history and exam; role of family
      ii. Practice-appropriate screening tools, including aspects such as mood and function, and the use and limitations of pain scales
      iii. Differential diagnosis of pain and placement on pain continuum
   c. **Treatment of pain**
      i. Special populations in pain management, such as palliative/end of life care, patients with cancer, or pediatric/geriatric populations
      ii. Non-pharmacologic treatment of pain, including active care and self-care, evidence- and non-evidenced based approaches, and multimodal pain management
      iii. The challenges in discussing with patients the psychological aspects of pain and the role of the central nervous system
      iv. Non-opioid pharmacologic management of pain
      v. Adverse Drug Event Prevention for all pain medications
      vi. The roles in an interdisciplinary pain management team; the significance of issues such as anxiety, depression and sleep in pain management; and the impact of the placebo effect
      vii. Goals and expectations in the treatment of pain, based on diagnosis and pain continuum
      viii. When and where to make a pain referral
   d. **Opioids and pain**
      i. Mechanism of action and metabolism of opioids, and the development of tolerance, dependence and addiction
      ii. Appropriate use of different types of opioids in various practice settings, and the interactions, risks and intolerance of prescription opioids
      iii. Role and effectiveness of opioids in acute, sub-acute and chronic pain; reassessment of opioid use based on stage of pain

iv. Contemporary treatment guidelines, best practices, health policies and government regulation
v. Use of opioids in pain management of patients with substance abuse disorders or in recovery and in palliative and end of life care
vi. Withdrawal, both acute and protracted, from opioid dependence or addiction
vii. Tapering of patients receiving opioids
viii. Pain contracts or agreements
ix. Safe storage and proper disposal of opioids
x. Key components of and resources for patient education in the use of opioids, including risks/benefits/side effects, tolerance, signs of sedation or an overdose, naloxone, and storage and disposal

4. Communicating with patients and caregivers

a. General strategies for difficult conversations and effective communication

b. Key communication topics

i. Benefits and risks of opioids
ii. Opioid risk screening – taking a social, medical and financial history
iii. Risk mitigation (naloxone, safe storage, pain contracts, etc.)
iv. Medication tapers and/or discontinuation of therapy

Appendix A: Developing Core Competencies that Align with Curriculum Objectives

From: Virginia Tech Graduate School and the Graduate Curriculum Committee (Dec, 2015). *Reference Guide to the Graduate Course and Certificate Proposal Development and Review Process*. Blacksburg, VA: Virginia Tech.

Identify the new capabilities, skills, and levels of awareness students will derive from the course.

Clearly state what learning students are expected to gain from that assignment. For example:

Instead of

- "Conduct a review of the literature."
- "Review journal articles."

Consider

- "Analyze the use of theory in scholarly journal articles."
- "Evaluate the research designs and analytic methods used in recent publications."
- "Assess the scientific merits and weaknesses of research published in scholarly journals."
- Evaluate the contribution of published scholarly journal articles to advancing the science of…"

Instead of

- "Apply analytical methods and communicate results in both written and oral presentation formats."
- "Write a grant proposal."

Consider

- "Apply analytical methods of ____ to ____ in order to justify conclusions about ____."
- "Synthesize the literature on ____ and develop the rationale for new research."

Use one verb per learning objective and choose the higher-order one. For example, it is unnecessary to state "Analyze and critique…." "Critique…" is sufficient because one cannot construct a critique without analyzing the material first.

The following table provides a list of acceptable action verbs to use in formulating learning objectives at the graduate level. Avoid undergraduate-level outcomes such as define, describe, explain, identify, etc. as indicated with "*" in the following chart. Instead, use verbs that reflect higher-order learning processes and outcomes.

abstract	compare	distinguish	justify	record	use
acquire	compare and	dramatize	label	relate	value
adjust	contrast	draw	list	repair	verify
agree	compose	duplicate	locate	repeat	weigh
analyze	compute	employ	manage	report	write *
apply	conclude	estimate	measure	represent	
appraise	construct	evaluate	memorize *	reproduce	
argue	contrast	examine	move	restate *	
arrange	convert	experiment	name *	review	
assemble	cooperate	explain *	observe	revise	
assess	create	explore *	offer	schedule	
assign a	criticize	express	operate	score	
value to	critique	extrapolate	order	select	
attach	debate	formulate	organize	sequence	
avoid	defend	generalize	participate	set up	
bend	define *	help	perform	shop	
break	demonstrate	identify *	plan	sketch	
down	derive	illustrate	practice	solve	
build	describe *	implement	praise	specify	
calculate	design	indicate *	predict	state *	
carry out	detect	inspect	prepare	summarize *	
catalog	determine	instruct	produce	support	
categorize	diagram	integrate	propose	systematize	
check	differentiate	interpret	question	taste	
choose	discover	inventory	rank	test	
classify	discriminate	investigate	rate	theorize	
collect	discuss *	join	recall *	transform	
combine	dissect	judge	recognize *	translate	

Resources:

Avoid using the following verbs because they are difficult to quantify and evaluate. For example, how does one assess a student's understanding or appreciation?

appreciate	cover	gain knowledge of	realize
approximate	comprehend	know	reflect
be aware of	demonstrate an	learn (about)	see
be familiar with	understanding of	provide	study
become acquainted with	familiarize		understand
	apply insights		

Krathwohl, D. (2012). A revision of Bloom's taxonomy: An overview. *Theory into Practice, 41*(4), 212-218.

Overbaugh, R., & Schultz, L. (2009). Bloom's taxonomy. Old Dominion University

Appendix B: Workgroup Participants and Staff

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