**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**
   1. **History and current situation**
      1. Statistics, trends and demographics surrounding the crisis in Virginia and nationwide
      2. The relationship of opioid prescribing to illicit opioid use and to overall opioid overdose deaths
      3. The prevalence of co-occurring mental health disorders
      4. The shift in attitudes in the 1990’s toward pain management and use of opioids, including the role of pharmaceutical marketing
      5. The stigma associated with addiction, and the changing view of addiction from a moral failing to a chronic, relapsing disease
      6. Population health and other public health aspects of the crisis, including effects on family, neonates, and overall health costs
2. **Addiction**
   1. **Science of addiction**
      1. Biopsychosocial, spiritual and behavioral aspects, and the lifecycle of addiction
   2. **Prevention and early intervention**
      1. Risk and protective factors in opioid addiction
      2. Special populations at risk of addiction
      3. Motivational interviewing and other communication strategies
      4. Naloxone co-prescribing
      5. Roles of family and social institutions in prevention and early intervention
   3. **Recognition of addiction**
      1. DSM-V, and ASAM’s six dimensions and continuum
      2. Clinical and behavioral elements of addiction
      3. Practice-appropriate screening tools, including co-morbidity screening
   4. **Treatment of addiction**
      1. Addiction as a chronic disease
      2. Evidence-based treatment models for addiction in general and opioid addiction specifically
      3. Medication-assisted treatment
      4. The continuum of care in opioid addiction treatment
      5. How and when to make a referral for treatment
      6. The roles in an interdisciplinary addiction team
      7. The role of peers in the treatment of addiction, and the differences between a drug culture and recovery culture
      8. The management of patients in recovery, including factors contributing to relapse
   5. **Prevention of fatal overdose**
      1. Naloxone use and availability
      2. Monitoring of concurrent prescribing
3. **Pain management**
   1. **Science of pain**
      1. IASP definition of pain
      2. Neurobiological basis of pain; biopsychosocial model of pain
      3. Types of pain (e.g., neuropathic)
      4. 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
      5. The underlying science of pain relief
   2. **Assessment (diagnosis) and treatment planning**
      1. Pain-related health history and exam; role of family
      2. Practice-appropriate screening tools, including aspects such as mood and function, and the use and limitations of pain scales
      3. Differential diagnosis of pain and placement on pain continuum
   3. **Treatment of pain**
      1. Special populations in pain management, such as palliative/end of life care, patients with cancer, or pediatric/geriatric populations
      2. Non-pharmacologic treatment of pain, including active care and self-care, evidence- and non-evidenced based approaches, and multimodal pain management
      3. The challenges in discussing with patients the psychological aspects of pain and the role of the central nervous system
      4. Non-opioid pharmacologic management of pain
      5. Adverse Drug Event Prevention for all pain medications
      6. 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
      7. Goals and expectations in the treatment of pain, based on diagnosis and pain continuum
      8. When and where to make a pain referral
   4. **Opioids and pain**
      1. Mechanism of action and metabolism of opioids, and the development of tolerance, dependence and addiction
      2. Appropriate use of different types of opioids in various practice settings, and the interactions, risks and intolerance of prescription opioids
      3. Role and effectiveness of opioids in acute, sub-acute and chronic pain; reassessment of opioid use based on stage of pain
      4. Contemporary treatment guidelines, best practices, health policies and government regulation
      5. Use of opioids in pain management of patients with substance abuse disorders or in recovery and in palliative and end of life care
      6. Withdrawal, both acute and protracted, from opioid dependence or addiction
      7. Tapering of patients receiving opioids
      8. Pain contracts or agreements
      9. Safe storage and proper disposal of opioids
      10. 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** 
   1. **General strategies for difficult conversations and effective communication**
   2. **Key communication topics** 
      1. Benefits and risks of opioids
      2. Opioid risk screening – taking a social, medical and financial history
      3. Risk mitigation (naloxone, safe storage, pain contracts, etc.)
      4. 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 |  |

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 | familiarize |  | understand |
| with | apply insights |  |  |

**Resources:**

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

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