

THE ARIZONA PAIN AND ADDICTION CURRICULUM SCOPE AND SEQUENCE

UNDERGRADUATE HEALTH PROFESSIONAL EDITION

- The University of Arizona College of Medicine Phoenix
- The University of Arizona College of Medicine Tucson
- Mayo Clinic School of Medicine Arizona Campus
- Creighton University School of Medicine Phoenix Regional Campus
- Midwestern University Arizona College of Osteopathic Medicine
- A.T. Still University School of Osteopathic Medicine in Arizona
- A.T. Still University School of Dentistry & Oral Health in Arizona
- Midwestern University Arizona School of Podiatric Medicine
- Northern Arizona University Post-Master's Family Nurse Practitioner Certificate

- Northern Arizona University Doctor of Nursing Practice
- Grand Canyon University College of Nursing and Health Care Professions
- Arizona State University College of Nursing and Health Innovation
- · University of Arizona College of Nursing
- University of Phoenix College of Health Professions
- Southwest College of Naturopathic Medicine and Health Sciences
- A.T. Still University Physician Assistants Degree Program in Arizona
- Midwestern University Physician Assistant Program
- Northern Arizona University Physician Assistant Program



June 25, 2018

Dear Clinical Educators of Arizona:

It has been nearly a year since there was a Statewide Public Health Emergency declared in the State of Arizona due to the opioid epidemic. With more than two Arizonans dying every day from an opioid overdose, multiple stakeholders, including clinical educators, came together to change the paradigm of pain and addiction management here in Arizona.

While the Arizona Department of Health Services proposed a statewide curriculum as part of its response to the opioid epidemic, the Arizona Curriculum on Pain and Addiction that your programs have jointly developed has surpassed all expectations. Your collaboration across program types (MD, DO, NP, PA, DMD, ND, DPM) to link pain and addiction, to use a socio-psycho-biological model and to stress destignatization and clinician introspection is something that has not been attempted or seen before in the nation.

We hope that your program is able to implement this curriculum into your educational structures as soon as possible. This curriculum strives to fundamentally change the culture of pain and addiction – with new definitions, new emphases and the newest evidence represented in a forward-thinking approach. It will take years to see a difference from these efforts, so we need to start now.

As participating in the creation and implementation of this Arizona Curriculum, you are part of a bold move to make a generational, wide-sweeping change to pain and addiction education. Thank you for your innovation, leadership and commitment. We are proud to be your partners in Arizona.

Sincerely,

Cara M. Christ, MD, MS

Director

Arizona Department of Health Services

CM. Chit MD

INTRODUCTION

PURPOSE

The Arizona Curriculum on Pain and Addiction represents a large-scale culture shift in the education of the next generation of prescribers. While it is hoped the curriculum will bring about focused results such as a reduction in the number of opioid-related overdoses, a reduction in opioids prescribed, and an increase in the number of providers able to treat opioid use disorder -- this curriculum moves beyond these discrete goals to redefine pain and addiction as interlinked, complex, public health processes, requiring interprofessional care and involvement of the community and health-based systems.

BACKGROUND

On June 5, 2017, Governor Doug Ducey declared a Statewide Public Health Emergency in Arizona due to the Opioid Epidemic. Real time data from the Arizona Department of Health Services Opioid Overdose Surveillance System revealed over one-hundred fatal and nonfatal overdoses being reported each week. There were indications of unsafe and non-evidence-based practices of some prescribers and a distinct lack of statewide capacity to manage opioid use disorder. In response to these findings, one of the recommendations from the Department was to create a statewide curriculum for all prescribers on pain and addiction (azhealth.gov/opioidactionplan).

METHODS

Beginning in January 2018, four meetings were held with Deans and Curriculum Representatives from all eighteen MD, DO, PA, NP, DMD, DPM and ND programs in Arizona. After reviewing the surveillance data and current program curricula, the group used best practices from other schools, published theories of pain and addiction education, national trends from the National Pain Strategy and National Academies of Medicine, and input from Arizona pain and addiction specialists to create curriculum drafts that were systematically reviewed for relevance and scope.

As such, a number of forward-thinking concepts were established upon which to build a new statewide curriculum:

- · The link between pain and addiction
- The use of a macro- to micro- perspective to pain and addiction (the socio-psycho-biological approach)
- · The destigmatization of pain and addiction
- · The evidence-base of pain and addiction care
- · The influence of the pharmaceutical industry on clinicians
- · The focus on clinician and system introspection, both in personal biases and excellence of care

INTENDED SCOPE

There are twelve types of clinicians that are authorized to prescribe opioids in the State of Arizona: Doctors of Medicine (MD), Doctors of Osteopathic Medicine (DO), Doctors of Podiatric Medicine (DPM), Doctors of Medicine in Dentistry (DMD), Registered Nurse Practitioners (RNP), Naturopathic Doctors (ND), Physician Assistants (PA), Doctors of Optometry, Doctors of Homeopathy, and Doctors of Veterinary Medicine.

This curriculum is intended for use in the following health educational programs:

- · Undergraduate: MD, DO, DPM, DMD, RNP, ND and PA programs
- · Graduate: RNP programs

STRUCTURE + INTENDED USE

The structure of the curriculum is intuitively organized by a set of ten *Core Components*, each of which is expanded and detailed into specific *Objectives* and Key Readings. The subsequent sections list implementation strategies (*Toolbox*) and assessment mechanisms (*Assessment*). The last section is a sample mapping of the curriculum to Entrustable Professional Activities (*Map*), a standardized curriculum structure for many programs.

This curriculum is intended to be used as the entire set of ten *Core Components*, rather than choosing individual ones (e.g. teaching only *Core Components* #1, #5, #8). The ten *Core Components* are pertinent to all programs, but the detail of which can be expanded and contracted, accordion-style, as pertinent. This material is likely to be best integrated across the years of training in both classroom and clinical settings.

Of note, this Faculty Guide, along with the original Arizona Pain and Addiction Curriculum, are public materials. They are non-proprietary and can be used outside of the state in any health educational program. Although permission is not required, email notification of programs' use of the materials is appreciated (azopioid@azdhs.gov).

INTRODUCTION

IMPLEMENTATION + ASSESSMENT

The Arizona Curriculum represents a radical change to the classical approach to pain and addiction education. It will take planning and time for programs to implement all components as intended. In order to assess the effectiveness of this implementation and effect on learners, a standardized metric will be administered annually to all programs, with pre-and post-training evaluations to be given to all students at the end of their first and last years of training.

The Arizona Department of Health Services will provide further resources for programs that incorporate this curriculum, including a *Faculty Guide*, and a Curriculum Summit in the Fall of 2018.

NATIONAL REFERENCES

- Institute of Medicine. Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research. (2011) Washington, DC: National Academies Press. doi:https://doi.org/10.17226/13172
- Interagency Pain Research Coordinating Committee. National Pain Strategy: A Comprehensive Population Health-Level Strategy for Pain. (2016). https://iprcc.nih.gov/sites/default/files/HHSNational Pain Strategy 508C.pdf

TABLE OF CONTENTS

- · Curriculum Vision
- · Core Components (#1-10)
- · Objectives (for Core Components #1-10)
- Toolbox for Operationalization
- · Assessment and Follow-Up
- Map to Entrustable Professional Activities (EPA)

VISION + CORE COMPONENTS

CURRICULUM VISION -

To redefine pain and addiction as multidimensional, interrelated public health issues that require the transformation of care toward a whole-person interprofessional approach with a community and systems perspective.

CORE COMPONENTS

Upon graduation from a health professional education program in Arizona, a student should demonstrate the independent ability to:

REDEFINE PAIN + ADDICTION

1	Define pain and addiction as multidimensional, public health problems.
2	Describe the environmental, healthcare systems and care model factors that have shaped the current opioid epidemic and approach to pain care.
3	Describe the interrelated nature of pain and opioid use disorder, including their neurobiology and the need for coordinated management.

APPLY AN EVIDENCE-BASED, WHOLE-PERSON APPROACH TO PAIN + ADDICTION

4	Use a socio-psycho-biological model to evaluate persons with pain and opioid use disorder.
5	Use a socio-psycho-biological model to develop a whole-person care plan and prevention strategies for persons with pain and/or opioid use disorder.
6	Reverse the unintended consequences created by the medicalization of chronic pain by empowering persons with self-management strategies, and include an awareness of chemical coping.
7	Use and model language that destigmatizes, reflects a whole-person perspective, builds a therapeutic alliance and promotes behavior change.

INTEGRATE CARE WITH A SYSTEMS PERSPECTIVE

8	Employ an integrated, team-based approach to pain and/or addiction care.
9	Engage family and social support in the care of pain and/or addiction.
10	Critically evaluate systems and seek evidence-based solutions that deliver quality care and reduce industry influence in the treatment of pain and opioid use disorder.

1

Define pain and addiction as multidimensional, public health problems.

RATIONALE

This core component sets the tone for the rest of the curriculum by redefining pain and addiction as multidimensional, integrated, population-health based problems. This definition aims to transform education away from the traditionally siloed and reductionist approach to pain and addiction.

OBJECTIVES

- A. MESSAGE: Pain and addiction are multidimensional issues.
 - A1 Define pain and addiction.
 - A2 Describe the established and evolving neurobiological, clinical, psychological, and cultural basis of pain and addiction.
 - A3 Describe the social determinants of health and host factors that affect the development of opioid use disorder.
 - A4 Describe the social determinants of health and host factors that affect progression from acute pain to chronic pain and disability.
- B. MESSAGE: Pain and addiction are public health problems.
 - B1 Describe the impact of chronic pain and opioid use disorder on population morbidity and mortality.
 - B2 Describe the legal landscape in the state and nation for managing pain and opioid use disorder.

- American Society of Addiction Medicine. (2011, April 12). Public Policy Statement: Definition of Addiction. Retrieved June 26, 2018, from https://www.asam.org/resources/definition-of-addiction
- Carr D. B. (2016) "Pain Is a Public Health Problem" —What Does That Mean and Why Should We Care? Pain Medicine, 17(4), 626-627. doi:10.1093/pm/pnw045
- Cohen, M., Quintner, J., & Rysewyk, S. V. (2018). Reconsidering the International Association for the Study of Pain definition of pain. PAIN Reports, 3(2). doi:10.1097/pr9.00000000000000034
- Institute of Medicine Committee on Advancing Pain Research, Care, and Education. *Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research.* (2011) Washington D.C: National Academies Press; 2, Pain as a Public Health Challenge. Available from: https://www.ncbi.nlm.nih.gov/books/NBK92516/
- Interagency Pain Research Coordinating Committee. National Pain Strategy: A Comprehensive Population Health-Level Strategy for Pain. (2016). https://iprcc.nih.gov/sites/default/files/HHSNational Pain Strategy 508C.pdf
- Kolodny, A., Courtwright, D. T., Hwang, C. S., Kreiner, P., Eadie, J. L., Clark, T. W., & Alexander, G. C. (2015). The Prescription Opioid and Heroin Crisis: A Public Health Approach to an Epidemic of Addiction. *Annual Review of Public Health*, 36(1), 559-574. doi:10.1146/annurev-publhealth-031914-122957
- Substance Abuse and Mental Health Services Administration; Office of the Surgeon General. *Facing Addiction in America:* The Surgeon General's Report on Alcohol, Drugs, and Health. (2016) Washington D.C: US Department of Health and Human Services; CHAPTER 7, VISION FOR THE FUTURE: A PUBLIC HEALTH APPROACH. Available from: https://www.ncbi.nlm.nih.gov/books/NBK424861/

2

Describe the environmental, healthcare systems and care model factors that have shaped the U.S. opioid epidemic and approach to pain care.

RATIONALE

This core component focuses on the complexity of the CDC-described opioid epidemic. There are overlapping factors that have shaped both the development of the epidemic and the current clinical approach to pain. More than providing background, this centers on prevention, in order to avoid a similar epidemic in the future.

OBJECTIVES

- A. MESSAGE: Multiple factors shaped the current opioid epidemic.
 - A1 Describe the environmental, healthcare systems, industry, legal, and care model factors that have shaped the opioid epidemic.
 - A2 Describe the impact a single provider can have on the opioid epidemic.
- B. MESSAGE: Multiple factors shaped the current approach to pain.
 - B1 Describe the origins of "pain is the fifth vital sign" and the cultural, industry, The Joint Commission and other care model factors that have shaped the traditional biomedical approach to pain.
- **C.** MESSAGE: It will take a comprehensive approach to address the opioid epidemic.
 - C1 Explain the macro (e.g., policy, systems, legal, societal) and micro changes (e.g. clinician prescribing, focus on pain self-management) that are needed to stem this epidemic.
 - C2 Explain how an epidemic like this might be prevented in the future.

- Baker, D.W. (2017) The Joint Commission's Pain Standards: Origins and Evolution. Oakbrook Terrace, IL: The Joint Commission.
- Ballantyne, J. C. (2017). Opioids for the Treatment of Chronic Pain. Anesthesia & Analgesia, 125(5), 1769-1778. doi:10.1213/ane.0000000000002500
- Blanchflower, D. G., & Oswald, A. (2017). Unhappiness and Pain in Modern America: A Review Essay, and Further Evidence, on Carol Graham's Happiness for All? National Bureau of Economic Research. doi:10.3386/w24087
- · Carr, D. B. (2009). Pain: Clinical Updates What Does Pain Hurt? International Association for the Study of Pain, 17(3), 1-6.
- National Academies of Sciences, Engineering, and Medicine. (2017). Pain Management and the Opioid Epidemic: Balancing Societal and Individual Benefits and Risks of Prescription Opioid Use. Washington, DC: The National Academies Press. doi:https://doi.org/10.17226/24781.
- Porter, J., & Jick, H. (1980). Addiction Rare in Patients Treated with Narcotics. New England Journal of Medicine, 302(2), 123. doi:10.1056/neim198001103020221
- · Quinones, S. (2015). Dreamland: The True Tale of America's Opiate Epidemic. New York: Bloomsbury Press.

3

Describe the interrelated nature of pain and opioid use disorder, including their neurobiology and the need for coordinated management.

RATIONALE

Key to the curriculum's vision, this core component establishes the link between pain and addiction. Pain and addiction are highly comorbid and share neurobiologic mechanisms, clinical manifestations, and treatment approaches. Separation of the research, education, and clinical management of these conditions has led to an unnecessarily narrow understanding and a fragmented approach to care. Integrating these domains enhances the clinician's understanding, assessment, and treatment of persons with pain and/or addiction.

OBJECTIVES

- A. MESSAGE: Pain and opioid use disorder are interrelated.
 - A1 Describe the neurobiology of pain and addiction, including reward and anti-reward.
 - A2 Describe how coordinated management of pain and opioid use disorder benefits patients and their outcomes.
- B. MESSAGE: Substance use relates to pain and the risk of developing opioid use disorder.
 - B1 Detail the relationship between substance use disorders (including alcohol, tobacco and other drug use), pain and the risk of developing opioid use disorder.
 - B2 Explain the relationship between mental illness and trauma with pain and substance use disorders.
 - B3 Explain the importance of screening for substance use disorder, when treating someone for acute or chronic pain.

- Blanco, C., Wall, M. M., Okuda, M., Wang, S., Iza, M., & Olfson, M. (2016). Pain as a Predictor of Opioid Use Disorder in a Nationally Representative Sample. *American Journal of Psychiatry*, 173(12), 1189-1195. doi:10.1176/appi.ajp.2016.15091179
- Bonnie, R. J., Ford, M. A., & Phillips, J. (2017). Pain management and the opioid epidemic: Balancing societal and individual benefits and risks of prescription opioid use. Washington, DC: The National Academies Press. doi:10.17226/24781
- Borsook, D., Linnman, C., Faria, V., Strassman, A., Becerra, L., & Elman, I. (2016). Reward deficiency and anti-reward in pain chronification. Neuroscience & Biobehavioral Reviews, 68, 282-297. doi:10.1016/j.neubiorev.2016.05.033
- Elman, I., & Borsook, D. (2016). Common Brain Mechanisms of Chronic Pain and Addiction. Neuron, 89(1), 11-36. doi:10.1016/j. neuron.2015.11.027
- Nelson, S., Simons, L., & Logan, D. (2017). The Incidence of Adverse Childhood Experiences (ACEs) and their Association
 with Pain-related and Psychosocial Impairment in Youth with Chronic Pain. The Clinical Journal of Pain, 1. doi:10.1097/
 ajp.000000000000549
- Rivat, C., & Ballantyne, J. (2016). The dark side of opioids in pain management: basic science explains clinical observation. PAIN Reports, 1(2). doi:10.1097/pr9.0000000000000000070
- Substance Abuse and Mental Health Services Administration. Tip 54: Managing chronic pain in adults with or in recovery from substance use disorders: Quick guide for clinicians. (2013). Rockville, MD: U.S. Dept. of Health and Human Services, Center for Substance Abuse Treatment.
- U.S. Department of Health & Human Services. (2016, November). Surgeon General's Report on Alcohol, Drugs, and Health.
 CHAPTER 2. The Neurobiology of Substance Use, Misuse, and Addiction. Retrieved from https://addiction.surgeongeneral.gov/sites/default/files/chapter-2-neurobiology.pdf

4

Use a socio-psycho-biological model to evaluate persons with pain and/or opioid use disorder.

RATIONALE

This curriculum flips the traditional biopsychosocial model to instead focus on social, psychological, and physical functioning. This emphasis on the interpersonal and intersubjective domains of pain and opioid use disorder reflects the most recent basic science and clinical evidence that social, emotional, and cognitive aspects of pain are central to chronification and the associated dysfunction and disability – and not a secondary issue or a distraction. Rather than beginning with a reductionist approach that focuses on cellular and molecular mechanisms and then progresses to social and psychological phenomena as merely the result of the microscopic processes, a macroscopic, integrated, whole-person approach is what is recommended in this component.

OBJECTIVES

- A. MESSAGE: Clinical understanding of pain and addiction encompasses social, psychological and biological dimensions.
 - A1 Describe the socio-psycho-biological model of pain, and detail the components of each.
 - A2 Describe the socio-psycho-biological model of opioid use disorder, and detail the components of each.
- B. MESSAGE: Evaluation of pain and opioid use disorder requires a whole-person approach.
 - B1 Perform a whole-person assessment of a person with pain.
 - B2 Describe patient-centered and clinician-centered parts of the pain interview.
 - B3 Discuss red flags noted during a history and physical, and the associated work-up when present.
 - B4 Describe yellow flags and their importance in acute and chronic pain conditions.
 - B5 Discuss the indications for imaging for common pain complaints.
 - B6 Demonstrate ability to screen individuals for opioid use disorder and diagnose them using DSM-5 diagnostic criteria.
 - B7 Demonstrate use of Screening, Brief Intervention, and Referral to Treatment (SBIRT) for persons with addiction.
 - B8 Perform a whole-person assessment of a person with addiction.

- Carr, D. B., & Bradshaw, Y. S. (2014). Time to Flip the Pain Curriculum? Anesthesiology, 120(1), 12-14. doi:10.1097/aln.00000000000004
- Darnall, B., Sturgeon, J., Kao, M., Hah, J., & Mackey, S. (2014). From Catastrophizing to Recovery: A pilot study of a single-session treatment for pain catastrophizing. *Journal of Pain Research*, 219-226. doi:10.2147/jpr.s62329
- Gatchel, R. J., Peng, Y. B., Peters, M. L., Fuchs, P. N., & Turk, D. C. (2007). The biopsychosocial approach to chronic pain: Scientific advances and future directions. *Psychological Bulletin*, 133(4), 581-624. doi:10.1037/0033-2909.133.4.581
- U.S. Department of Veterans Affairs. (2016, September). Opioid Use Disorder: A VA Clinician's Guide to Identification and Management of Opioid Use Disorder (2016) (Rep.). Retrieved https://www.pbm.va.gov/PBM/AcademicDetailingService/ Documents/Opioid Use Disorder Educational Guide.pdf

5

Use a socio-psycho-biological model to develop a whole-person care plan and prevention strategies for persons with pain and/or opioid use disorder.

RATIONALE

Evidence-based treatment of chronic pain focuses on a whole-person approach that emphasizes active treatments and self-management strategies while avoiding unnecessary exposure to opioids. Evidence-based treatment of opioid use disorder centers on medication-assisted treatment, while again employing a whole-person approach to care. This core component is the most involved in this curriculum - it stresses the multimodal nature of treatment care plans and the necessary prevention and risk mitigation strategies to employ before and during treatment.

OBJECTIVES

- A. MESSAGE: Treatment for pain and opioid use disorder requires a socio-psycho-biological approach.
 - A1 Describe a multimodal treatment plan for a person with acute pain.
 - A2 Describe a whole-person treatment plan for a person with chronic pain.
 - A3 Discuss the difference between the use of active and passive therapies for a person with chronic pain.
 - A4 Discuss the evidence for the use of opioids for acute and chronic pain.
 - A5 Discuss the use of non-pharmacologic and non-opioid pharmacotherapy for acute and chronic pain.
 - A6 Understand the regulatory requirements when treating pain and/or prescribing opioids for a patient with acute and chronic pain.
 - A7 Describe a multimodal treatment plan for a person with opioid use disorder.
 - A8 Understand the state and federal regulations when treating opioid use disorder.
 - A9 Describe the process of coordinating care and arranging for a higher level of care for a person with opioid use disorder.
 - A10 Address the management of acute pain in special populations, including persons in the pre- and post-operative periods, perinatal periods, the elderly, the pediatric population and those with substance use comorbidities.
- **B.** MESSAGE: Specific attention must be given to prevention and risk mitigation strategies as part of a treatment plan for acute pain, chronic pain and/or opioid use disorder.
 - B1 Demonstrate ability to implement risk mitigation strategies to prevent adverse outcomes from the use of opioid therapy for chronic pain.
 - B2 Recognize the clinical presentation of opioid withdrawal and know clinical and community resources to address it.
 - B3 Design strategies to prevent the progression from acute pain to chronic pain and pain-related disability.
 - B4 Demonstrate ability to manage challenging patients and recognize how people-pleasing behavior by clinicians can interfere with providing evidence-based care.
- **C.** MESSAGE: Treatment plans for persons on long-term opioid therapy must include an exit strategy, which transitions persons from long-term opioid therapy to a different treatment strategy, to minimize opioid-related adverse events.
 - C1 Contrast complex persistent opioid dependence with simple dependence and opioid use disorder.
 - C2 Describe three approaches to an opioid exit strategy.
 - C3 Discuss the importance of recognizing and addressing substance use disorders, mental health comorbidities and medical comorbidities when managing a person with chronic pain on long-term opioid therapy.

- Dowell, D., Haegerich, T. M., & Chou, R. (2016). CDC Guideline for Prescribing Opioids for Chronic Pain—United States, 2016.
 JAMA, 315(15), 1624. doi:10.1001/jama.2016.1464
- Krebs, E. E., Gravely, A., Nugent, S., Jensen, A. C., Deronne, B., Goldsmith, E. S., . . . Noorbaloochi, S. (2018). Effect of
 Opioid vs Nonopioid Medications on Pain-Related Function in Patients With Chronic Back Pain or Hip or Knee Osteoarthritis
 Pain. JAMA, 319(9), 872. doi:10.1001/jama.2018.0899
- Schuckit, M. A. (2016). Treatment of Opioid-Use Disorders. New England Journal of Medicine, 375(4), 357-368. doi:10.1056/neimra1604339
- Substance Abuse and Mental Health Services Administration. Tip 54: Managing chronic pain in adults with or in recovery from substance use disorders: Quick guide for clinicians. (2013). Rockville, MD: U.S. Dept. of Health and Human Services, Center for Substance Abuse Treatment.

6

Reverse the unintended consequences created by the medicalization of chronic pain by empowering persons with self-management strategies, and include an awareness of chemical coping.

RATIONALE

The medicalization of pain describes the process over the past century whereby the understanding and management of pain has been removed from the lay public and co-opted by the medical profession. This has transformed the clinician and the medical system into the primary, active manager of pain with the implicit understanding that the person experiencing pain takes a passive role. Additionally, the commonly practiced structural pathology paradigm erroneously focuses resources toward identifying and eliminating anatomic abnormalities long after acute pain has transitioned to a chronic condition requiring active lifestyle management approaches. Recognizing that medicalization of chronic pain has offered some benefits, the demedicalization of chronic pain aims to reestablish the self-efficacy of the person with pain who then takes the active role at the center of a care team. Self-management strategies form the foundation for improving function and quality of life for persons with chronic pain.

OBJECTIVES

- A. MESSAGE: In order to reverse the medicalization of chronic pain, the role of active management of pain must be transferred from the medical system to the person with chronic pain.
 - A1 Describe the medicalization of chronic pain, recognizing the role of the biomedical model in promoting passive treatments for chronic pain and how this model is perpetuated by industry, financial incentives, specialty training, and governmental decisions.
 - A2 Describe how the demedicalization of chronic pain enhances patient outcomes.
 - A3 Describe several self-management strategies for chronic pain and the evidence behind them.
 - A4 Counsel persons with pain on self-management strategies.
- B. MESSAGE: Patient strategies to avoid unpleasant physical sensations and emotional distress include "chemical coping" that can lead to poor outcomes.
 - B1 Describe the agonist and withdrawal effects of opioids and other controlled substances on multiple systems including social bonding, affective dimension of pain, anxiety, mood and sleep.
 - B2 Define chemical coping, its prevalence in different populations, risk factors, clinical presentation and how it differs
 - B3 Describe a therapeutic approach to chemical coping, including addressing the underlying suffering causing the behavior.

- Edwards, R. R., Dworkin, R. H., Sullivan, M. D., Turk, D. C., & Wasan, A. D. (2016). The Role of Psychosocial Processes in the Development and Maintenance of Chronic Pain. *The Journal of Pain, 17*(9 Suppl), T70-T92. doi:10.1016/j.jpain.2016.01.001
- Miotto, K., Kaufman, A., Kong, A., Jun, G., & Schwartz, J. (2012). Managing Co-Occurring Substance Use and Pain Disorders. *Psychiatric Clinics of North America*, *35*(2), 393-409. doi:10.1016/j.psc.2012.03.006
- Passik, S. D., & Lowery, A. (2011). Psychological Variables Potentially Implicated in Opioid-Related Mortality as Observed in Clinical Practice. Pain Medicine, 12(Suppl 2), S36-S42. doi:10.1111/j.1526-4637.2011.01130.x
- Roditi, D., & Robinson, M. E. (2011). The role of psychological interventions in the management of patients with chronic pain. Psychology Research and Behavior Management, 4: 41-49.
- Simons, L., Elman, I., & Borsook, D., (2014) Psychological processing in chronic pain: A Neural Systems Approach. *Neurosci Biobehav Rev, 0*: 61–78. doi:10.1016/j.neubiorev.2013.12.006.
- Szalavitz, M. (2017, September 18). The Social Life of Opioids. Retrieved from https://www.scientificamerican.com/article/the-social-life-of-opioids/
- Tajerian, M., & Clark, J. D., (2017). Nonpharmacological interventions in targeting pain-related brain plasticity. Neural Plasticity;
 1-10. http://dx.doi.org/10.1155/2017/2038573

7

Use and model language that destigmatizes, reflects a whole-person perspective, builds a therapeutic alliance and promotes behavior change.

RATIONALE

Chronic pain, substance use and addiction are often associated with negative perceptions that are furthered by stigmatizing language. The use of nonjudgmental, person-first language with patients and colleagues is necessary for cultural transformation and to reduce the negative impact of stigma on the community. Person-first language should be paired with language that reflects a whole-person, evidence-based approach to mental health conditions, addiction and chronic pain, while moving away from the structural pathology paradigm of chronic pain.

OBJECTIVES

- A. MESSAGE: Stigma negatively affects the treatment and outcomes of persons with chronic pain and/or addiction.
 - A1 Describe the impact of stigma on legal, policy, research and care services for persons with pain and/or addiction.
 - A2 Contrast the science-based nature of addiction and chronic pain with commonly held perceptions.
 - A3 Model respectful and nonjudgmental communication with persons with pain and addiction.
 - A4 Use active reflection to uncover personal biases to persons with chronic pain and/or addiction.
- B. MESSAGE: Language must be tailored to attend to the patient's unique socio-psycho-biological factors.
 - B1 Explain the diagnosis of pain and/or opioid use disorder using patient-centered language.
 - B2 Describe the impact of language and expectations on a patient's experience with pain.
 - B3 Describe the effectiveness of motivational interviewing for substance use disorders and chronic pain.
 - B4 Demonstrate techniques of motivational interviewing techniques to support behavior change.
 - B5 Assess an individual's readiness for change and tailor treatment approaches to the patient's stage of change.
- C. MESSAGE: A therapeutic alliance with persons with pain and/or addiction enhances treatment outcomes.
 - C1 Describe the importance of the therapeutic alliance in working with persons with pain and/or addiction.
 - C2 Model the development of a therapeutic alliance by demonstrating empathy as well as reaching agreement on functional goals and approaches to reach these goals.
 - C3 Demonstrate validation, partnering, and boundary setting in situations with a high degree of negative affect.

- American Psychiatric Association. (n.d.). APA Learning Center Addiction, Stigma, and Discrimination: Implications for Treatment and Recovery (Archived Webinar). Retrieved March 27, 2018, from https://education.psychiatry.org/Users/ProductDetails.aspx?ActivityID=1303
- Goldberg, D. S. (2017). Pain, objectivity and history: Understanding pain stigma. *Medical Humanities*, 43(4), 238-243. doi:10.1136/medhum-2016-011133
- SAMHSA National Registry of Evidence-based Programs and Practices. (2017). Motivational Interviewing for Behavioral Health Conditions. Retrieved March 27, 2018.
- Szalavitz, M. (2017, June 11). Why We Should Say Someone Is A 'Person With An Addiction,' Not An Addict. Retrieved March 27, 2018, from https://www.npr.org/sections/health-shots/2017/06/11/531931490/change-from-addict-to-person-with-an-addiction-is-long-overdue

8

Employ an integrated, team-based approach to pain and addiction care.

RATIONALE

Integrated, team-based care is the future direction of medical care, and there is good evidence that this approach to pain and addiction leads to the best outcomes. The silos of care that characterize conventional medical approaches create obstacles to successful care coordination.

OBJECTIVES

- A. MESSAGE: Team-based approach to pain and addiction care is effective.
 - A1 Define integration and its relationship to the team structure and function of a healthcare team.
 - A2 Describe the components and characteristics of an effective team to assist in the care of someone with pain and/or addiction.
- B. MESSAGE: Interdisciplinary, integrated care has a role in the care of all patients.
 - B1 Describe the process of creating an interdisciplinary care team in the outpatient setting.

- Gallagher, R., Verma, S. (2004). Biopsychosocial Pain Medicine: Integrating Psychiatric and Behavioral Therapies into Medical Treatment. Seminars in Neurosurgery, 15(01), 31-46. doi:10.1055/s-2004-830012
- Kamper, S. J., Apeldoorn, A. T., Chiarotto, A., Smeets, R. J., Ostelo, R. W., Guzman, J., & Tulder, M. W. (2014). Multidisciplinary biopsychosocial rehabilitation for chronic low back pain. *Cochrane Database of Systematic Reviews*. doi:10.1002/14651858. cd000963.pub3
- SAMHSA-HRSA Center for Integrated Health Solutions. (2014, March). Essential Elements of Effective Integrated Primary Care
 and Behavioral Health Teams. Retrieved March 27, 2018, from https://www.integration.samhsa.gov/workforce/team-members/Essential Elements of an Integrated Team.pdf
- Substance Abuse and Mental Health Services Administration; Office of the Surgeon General. Facing Addiction in America:
 The Surgeon General's Report on Alcohol, Drugs, and Health. (2016) Washington D.C: US Department of Health and Human Services; CHAPTER 6 HEALTH CARE SYSTEMS AND SUBSTANCE USE DISORDERS. Available from: https://www.ncbi.nlm.nih.gov/books/NBK424848/
- Watkins, K. E., Ober, A. J., Lamp, K., Lind, M., Setodji, C., Osilla, K. C., ... Pincus, H. A. (2017). Collaborative Care for Opioid and Alcohol Use Disorders in Primary Care. JAMA Internal Medicine, 177(10), 1480. doi:10.1001/jamainternmed.2017.3947

9

Engage family and social support in the care of pain and addiction.

RATIONALE

Beyond the clinician-patient relationship, community is centrally important to the sustained recovery of persons with pain and addiction. This core component pointedly focuses on the need for family and social support.

OBJECTIVES

- A. MESSAGE: Family and social support play an important role in the care of a person with pain and/or addiction.
 - A1 Describe the impacts of pain, addiction and disability on family members including potential for and consequences of caregiver burnout.
 - A2 Describe the impact family and social support can have on recovery from pain and addiction.
- **B.** MESSAGE: Resources and education can empower family and social supports to care for themselves and build healthy relationships with persons with pain or addiction.
 - B1 Detail family resources for care, including family therapy and crisis response numbers.
 - B2 Describe illness and wellness behaviors in persons with chronic illness, including their significance within the family and social spheres.
 - B3 Discuss the importance/use of naloxone for a family member or social support figure, and how to access it.

- Arizona Department of Health Services. (2017, November 20). Standing Orders for Naloxone. Retrieved from http://www.azdhs.gov/documents/prevention/womens-childrens-health/injury-prevention/opioid-prevention/naloxone-standing-order.pdf
- Duenas, M., Ojeda, B., Salazar, A., Mico, J. A., & Failde, I. (2016). A review of chronic pain impact on patients, their social environment and the health care system. *Journal of Pain Research*, *9*, 457-467. doi:10.2147/jpr.s105892
- Gainsbury, S. M. (2017). Cultural competence in the treatment of addictions: Theory, practice and evidence. Clinical Psychology and Psychotherapy, 24; 987-1001 doi: 10.1002/cpp.2062
- Substance Abuse and Mental Health Services Administration. (2015). TIP 39: Substance Abuse Treatment and Family Therapy.
 Rockville, MD: U.S. Department of Health and Human Services, Center for Substance Abuse Treatment.

10

Critically evaluate systems and seek evidence-based solutions that deliver quality care and reduce pharmaceutical influence in the treatment of pain and opioid use disorder.

RATIONALE

An awareness of and responsiveness to the larger context and system of health care has been established in this curriculum; this core component ensures that learners can evaluate these systems and find solutions to inevitable barriers to the safe, quality care of patients. This requires the learner to be proactive and reflective and to critically evaluate the evolving field of health care.

OBJECTIVES

- A. MESSAGE: Systems and individual clinician care require continual, critical evaluation.
 - A1 Explain how use of patient-centered outcomes can enhance pain and/or addiction care.
 - A2 Demonstrate skill in appraising sources, content and applicability of evidence with an emphasis on quality, safety, population health and cost-effectiveness.
 - A3 List ways a provider can evaluate his/her own practice, including use of a data registry of patients with chronic pain and morbidity reviews.
- B. MESSAGE: Quality pain and addiction care requires resourceful efforts to overcome obstacles to care.
 - B1 Describe clinical resources within the healthcare system, governmental entities and private organizations that can assist with care management and treatment.
- C. MESSAGE: Pharmaceutical companies have an impact on clinical care.
 - C1 List examples of how pharmaceutical companies influence continuing medical education, published evidence and clinical guidelines.
 - C2 Summarize how pharmaceutical companies have impacted prescribing practices and clinical practice.
 - C3 Detail ways to reduce pharmaceutical influence on clinical practice at the level of individual clinician and health care systems.

- Campbell, E. G., Rao, S. R., Desroches, C. M., Iezzoni, L. I., Vogeli, C., Bolcic-Jankovic, D., & Miralles, P. D. (2010). Physician Professionalism and Changes in Physician-Industry Relationships From 2004 to 2009. *Archives of Internal Medicine, 170*(20), 1820-1826. doi:10.1001/archinternmed.2010.383
- Cohen, S. P., Deyo, R. A. (2013) A call to arms: The credibility gap in interventional pain medicine and recommendations for future research. Pain Med, 14(9):1280-1283. doi:10.1111/pme.12186.
- Gatchel, R. J., & Okifuji, A. (2006). Evidence-Based Scientific Data Documenting the Treatment and Cost-Effectiveness of Comprehensive Pain Programs for Chronic Nonmalignant Pain. *The Journal of Pain*, 7(11), 779-793. doi:10.1016/j. jpain.2006.08.005
- Goodnough, A., & Zernike, K. (2017, June 11). Seizing on Opioid Crisis, a Drug Maker Lobbies Hard for Its Product. Retrieved March 27, 2018, from https://www.nytimes.com/2017/06/11/health/vivitrol-drug-opioid-addiction.html
- Shaughnessy, A. F., Slawson, D. C., Bennett, J. H. (1994) Becoming an Information Master: A Guidebook to the Medical Information Jungle. *J Fam Pract*, 39(5), 489-499.
- Wazana, A. (2000). Physicians and the Pharmaceutical Industry: Is a Gift Ever Just a Gift? JAMA, 283(3), 373-380. doi: 10.1097/00006254-200008000-00012

OPERATIONALIZATION

The following table lists different approaches to teaching this curriculum and ideas of how to operationalize the newer concepts into an existing program structure. It is intended to be a living list and will be updated as programs implement the curriculum and new best practices evolve.

	TOOLBOX FOR OPERATIONALIZATION
[Dedicate time for faculty familiarization with the cultural transformation embodied in this curriculum and for adaptation to their particular health education program.
[Dedicate specific didactic time for the <i>Arizona Curriculum</i> , as external attendings and professors may not yet embody this modern approach to pain and addiction.
[Consider how to facilitate awareness of the discordance between the curriculum and "hidden curriculum" in student exposure during rotations particularly related to pharmaceutical influence and an older, biomedical approach to pain and addiction.
[Tag-team instruction with pain and addiction specialists.
[Involve individuals in recovery in lectures or in small groups.
[Follow up with students after clinical rotations to address possible mismatches between current best practices and the traditional approach to pain.
[Include influential publications and books, including chapters from <i>Dreamland</i> , articles from the New York Times, Jane Ballentyne, etc.
[Reduce the impact that pharmaceutical companies have on students and ask students in rotation evaluations about their interaction (lunches, swag, lectures) with the industry.
[Dedicate time to assess and reassess the curriculum, and share findings with other programs.

REQUESTED [PROGRAM] METRICS

In order to evaluate the effectiveness of the Arizona Curriculum, standardized metrics will be requested by the Arizona Department of Health Services to be administered to all undergraduate health educational programs and nurse practitioner programs in Arizona on an annual basis. These metrics should be reported to the Department, in a form determined by the Department, at the end of each training year (between March and July).

Finalized metrics will be made available by the Department and sent to programs when required. Requested metrics will include questions such as those listed in this sample:

A. DEMOGRAPHICS OF STUDENTS	
	[#] How many 1 st , 2 nd , 3 rd (+ 4 th) year students received components of the <i>Arizona Curriculum</i> this past year?
	[#] How many students are graduating from your program this year?
	[#] How many graduating students are remaining in Arizona for post-graduate training or employment?
B. IN	MPLEMENTATION OF CORE COMPONENTS
	[YES/NO] Were all ten Core Components of the Arizona Curriculum included in your program's curriculum?
	[SCALE] Was Core Component 1, 2, 3 etc implemented in your program's curriculum last year? [SKIP LOGIC]
	[CHECKBOX] How was Core Component 1, 2, 3, etc implemented into the program: Lectures, Learning modules, OSCEs, Workshop, Other? In what year of training? [SKIP LOGIC]
	[SCALE] How difficult was it to implement Core Component 1, 2, 3, etc? [SKIP LOGIC]
	[NARRATIVE] What, if any, specific Core Components or Objectives were challenging to teach or implement? Please describe.
	[NARRATIVE] What unique implementations of the Arizona Curriculum would you like to report? Please elaborate.
C. F.	ACULTY DEVELOPMENT
	[#] How many representatives from your program attended the Arizona Pain and Addiction Curriculum Summit (Fall 2018) or Annual Curriculum Reconnection (Summer 2019, 2020, 2021))?
	[NARRATIVE] Of the representatives who attended, what are their job titles? [SKIP LOGIC depending on above answer]
	[NARRATIVE] How do you ensure that clinical rotation supervisors are consistent and able to implement the Arizona Curriculum?
	[YES/NO] Are students asked, post-community rotation, about their observations of pain and addiction care, and how it differs from the new curriculum?

D. INDUSTRY INFLUENCE		
	[#] How many students last year received specific didactic training about the potential influence of industry (e.g. pharmaceutical companies, international/device companies, supplement companies) on clinical practices?	
	[CHECKBOX] What year of training are didactics specifically related to industry influence administered?	
	[YES/NO] Upon completion of training rotations, are students specifically asked about their interaction with industry representatives?	
	[NARRATIVE] What unique example(s) or successful models of training do you have regarding implementation of the curriculum on to topic of industry influence?	
E. F	EEDBACK	
	[NARRATIVE] Please provide additional comments on your experience implementing the <i>Arizona Curriculum</i> this past year, including potential impact on learners, faculty and patient care.	

The collected data may be presented publicly in aggregate form by program type; specific narratives would be presented at the level of program-type only if further permission from the school is granted.

REQUESTED [LEARNER] METRICS

In order to evaluate the effectiveness of the Arizona Curriculum on students, standardized metrics will be requested by the Arizona Department of Health Services to be administered to all undergraduate health educational and nurse practitioner students. **These metrics should be gathered from all learners after the first and last years of training and submitted to the Arizona Department of Health Services between April and August of each year.**

Finalized metrics will be made available by the Department and sent to programs. Requested metrics will include questions such as those listed in this sample:

A. K	A. KNOWLEDGE	
	[SCALE] I have a solid understanding of the factors (e.g. biological, psychological, social) that contribute to the development of chronic pain and opioid use disorder.	
	[SCALE] I am prepared to distinguish between acute and chronic pain.	
	[SCALE] I am prepared to treat someone with acute pain.	
	[SCALE] I am prepared to treat someone with chronic pain.	
	[SCALE] I am prepared to explain to patients the indications for ordering imaging for back pain.*	
	[SCALE] I am prepared to educate patients about the evidence-based therapies for chronic back pain.*	
	[SCALE] I am prepared to evaluate someone for addiction.	
	[SCALE] I am prepared to treat someone with addiction.*	
	[SCALE] I am confident that there is an effective treatment for opioid use disorder (opioid addiction).	
	[SCALE] I am prepared to discuss pain and addiction care with a patient's family and support system.	
	[SCALE] I am prepared to critically review evidence, clinical trends and pharmaceutical materials for rigor and validity.	
B. A	TTITUDINAL	
	[SCALE] I know someone personally, outside of the clinical setting, who has chronic pain.	
	[SCALE] I know someone personally, outside of the clinical setting, who has a substance use disorder (addiction).	
	[SCALE] I plan to take care of patients with acute pain in the future.	
	[SCALE] I plan to take care of patients with chronic pain in the future.	
	[SCALE] I plan to take care of patients with addiction in the future.	
	[SCALE] I am aware of biases I may have toward persons with pain.	
	[SCALE] I am aware of biases I may have toward persons with addiction.	
	[SCALE] I believe pain is a public health problem.	
	[SCALE] I believe addiction is a public health problem.	

C. PRACTICES + PLANS	
	[SCALE] I am likely to prescribe long-term opioid analgesics for chronic non-cancer pain.
	[SCALE] I am likely to refer or prescribe treatment for opioid use disorder.
	[SCALE] I am prepared to teach patients about the FDA Black Box warning against the combined prescribing of opioid analgesics and benzodiazepines.
	[FREQ SCALE] As part of my clinical training, I observed or engaged with community resources to treat people with pain and/or addiction.
	[FREQ SCALE] During my training, I received pharmaceutical industry-supported gifts, meals, products or other items.
	[FREQ SCALE] During my training, my colleagues and/or supervisors used stigmatizing language when discussing persons with pain and/or addiction (e.g., "addict", "junkie", "abuser", "drug seeker", "dirty urine").
	[FREQ SCALE] During my training, I observed and was encouraged to use patient-focused and clinically compassionate language when discussing persons with pain and/or addiction.
	[SCALE] I intend to remain in Arizona post-training.

REQUESTED PROGRAM FOLLOW-UP

Implementation of this Statewide Curriculum constitutes a major shift in pain and addiction education. This attempt to redefine pain and addiction is being done at a widespread, generational level, and struggles and adjustments are to be expected.

There will be an annual meeting hosted by the Arizona Department of Health Services for the next three years after implementation, to be held in the summer of 2019, 2020, and 2021. A curriculum representative familiar with the program's curriculum and implementation is expected to attend, having previously submitted the program's metrics to the Department. The goal of participation is to learn from the successes and challenges of other programs.

^{*}Metrics for medical programs only

Mapping Statewide Curriculum to the Association of American Medical Colleges Core Entrustable Professional Activities

Core Entrustable Professional Activities for Entering Residency (EPAs) consist of progressive sequences of student behavior that medical educators may encounter at students engage in the medical school curriculum and became proficient in integrating their clinical skills. Written by the Association of American Medical Colleges, MD and DO curriculum components are best mapped to these EPAs.

EPA-MAPPED CORE COMPONENTS

1	Define pain and addiction as multidimensional, public health problems. EPA 1: Gather a History and Perform a Physical Examination, KP1, KP4, KP5
2	Describe the environmental, healthcare systems and care model factors that have shaped the current opioid epidemic and approach to pain care. EPA 1: Gather a History and Perform a Physical Examination, KP4, KP5
3	Describe the interrelated nature of pain and opioid use disorder, including their neurobiology and the need for coordinated management. EPA 1: Gather a History and Perform a Physical Examination, KP1, KP2, KP5 EPA 9: Collaborate as a Member of an Interprofessional Team, IPC2, SBP2
4	Use a socio-psycho-biological model to evaluate persons with pain and opioid use disorder. EPA 1: Gather a History and Perform a Physical Examination, ICS7, P1, P3, KP1 EPA 2: Prioritize a Differential Diagnosis Following a Clinical Encounter, PC2, PC3, PC4, KP2, KP3, KP4, PPD8 EPA 3: Recommend and Interpret Common Diagnostic and Screening Tests, PC5, SBP3, PBL19, KP1, SBP3, PC5, PC7 EPA 10: Recognize a Patient Requiring Urgent or Emergent Care and Initiate Evaluation and Management, PC2, PC3
5	Use a socio-psycho-biological model to develop a whole-person care plan and prevention strategies for persons with pain and/or opioid use disorder. EPA 2: Prioritize a Differential Diagnosis Following a Clinical Encounter, ICS2 EPA 4: Enter and Discuss Orders and Prescriptions, KP4, KP5, PC6 EPA 5: Document a Clinical Encounter in the Patient Record, PC4, ICS1, ICS2
6	Reverse the medicalization of chronic pain by empowering persons with self-management strategies, and include an awareness of chemical coping. EPA 4: Enter and Discuss Orders and Prescriptions, PC7
7	Use and model language that destigmatizes addiction, reflects a whole-person perspective, builds a therapeutic alliance and promotes behavior change. EPA 5: Document a Clinical Encounter in the Patient Record, PC6, ICS1, ICS1, ICS7 EPA 6: Provide an Oral Presentation of a Clinical Encounter, P1, P3, PPD4
8	Employ an integrated, team-based approach to pain and/or addiction care. EPA 2: Prioritize a Differential Diagnosis Following a Clinical Encounter, ICS2, IC3, ICS4 EPA 6: Provide an Oral Presentation of a Clinical Encounter, ICS1, ICS2, PBL1 EPA 7: Form Clinical Questions and Retrieve Evidence to Advance Patient Care, ICS1, PBLI8, PBLI9, PC7 EPA 8: Give or Receive a Patient Handover to Transition Care Responsibility, ICS2, ICS3, PC8 EPA 9: Collaborate as a Member of an Interprofessional Team, IPC2, SBP2, ICS3, IPC1
9	Engage family and social support in the care of pain and/or addiction. EPA 4: Enter and Discuss Orders and Prescriptions, ICS1, PC7 EPA 6: Provide an Oral Presentation of a Clinical Encounter, ICS1, PPD7, P3, P1, PPD4, EPA 8: Give or Receive a Patient Handover to Transition Care Responsibility, P3
10	Critically evaluate systems and seek evidence-based solutions that deliver quality care and reduce pharmaceutical influence in the treatment of pain and opioid use disorder. EPA 7: Form Clinical Questions and Retrieve Evidence to Advance Patient Care, PBLI6, KP3, KP4, PBLI1, PBLI3, PBLI7 EPA 13: Identify Systems Failures and Contribute to a Culture of Safety and Improvement, PBLI4, PBLI6, PBLI10, SBP4, P4, SBP4, SBP5, KP6

COMPLETE EPA GUIDELINES LISTED AT <u>aamc.org.initiatives.coreepas/</u>

1. PATIENT CARE (PC): Provide patient-centered care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health

- 1.1 Perform all medical, diagnostic, and surgical procedures considered essential for the area of practice
- 1.2 Gather essential and accurate information about patients and their condition through history-taking, physical examination, and the use of laboratory data, imaging, and other tests
- 1.3 Organize and prioritize responsibilities to provide care that is safe, effective, and efficient
- 1.4 Interpret laboratory data, imaging studies, and other tests required for the area of practice
- 1.5 Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- 1.6 Develop and carry out patient management plans
- 1.7 Counsel and educate patients and their families to empower them to participate in their care and enable shared decision making
- 1.8 Provide appropriate referral of patients, including ensuring continuity of care throughout transitions between providers or settings and following up on patient progress and outcomes
- 1.9 Provide health care services to patients, families, and communities aimed at preventing health problems or maintaining health
- 1.10 Provide appropriate role modeling
- 1.11 Perform supervisory responsibilities commensurate with one's roles, abilities, and qualifications

2. KNOWLEDGE FOR PRACTICE (KP): Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care

- 2.1 Demonstrate an investigatory and analytic approach to clinical situations
- 2.2 Apply established and emerging biophysical scientific principles fundamental to health care for patients and populations
- 2.3 Apply established and emerging principles of clinical sciences to diagnostic and therapeutic decision making, clinical problem solving, and other aspects of evidence-based health care
- 2.4 Apply principles of epidemiological sciences to the identification of health problems, risk factors, treatment strategies, resources, and disease prevention/health promotion efforts for patients and populations
- 2.5 Apply principles of social-behavioral sciences to provision of patient care, including assessment of the impact of psychosocial-cultural influences on health, disease, care-seeking, care compliance, and barriers to and attitudes toward care
- 2.6 Contribute to the creation, dissemination, application, and translation of new health care knowledge and practices

3. PRACTICE-BASED LEARNING AND IMPROVEMENT (PBLI): Demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning

- 3.1 Identify strengths, deficiencies, and limits in one's knowledge and expertise
- 3.2 Set learning and improvement goals
- 3.3 Identify and perform learning activities that address one's gaps in knowledge, skills, or attitudes
- 3.4 Systematically analyze practice using quality-improvement methods, and implement changes with the goal of practice improvement
- 3.5 Incorporate feedback into daily practice
- 3.6 Locate, appraise, and assimilate evidence from scientific studies related to patients' health problems
- 3.7 Use information technology to optimize learning
- 3.8 Participate in the education of patients, families, students, trainees, peers, and other health professionals
- 3.9 Obtain and utilize information about individual patients, populations of patients, or communities from which patients are drawn to improve care
- 3.10 Continually identify, analyze, and implement new knowledge, guidelines, standards, technologies, products, or services that have been demonstrated to improve outcomes

4. INTERPERSONAL AND COMMUNICATION SKILLS (ICS): Demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals

- 4.1 Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds
- 4.2 Communicate effectively with colleagues within one's profession or specialty, other health professionals, and health-related agencies (see also interprofessional collaboration competency, IPC 7.3)
- 4.3 Work effectively with others as a member or leader of a health care team or other professional group (see also IPC 7.4)
- 4.4 Act in a consultative role to other health professionals
- 4.5 Maintain comprehensive, timely, and legible medical records
- 4.6 Demonstrate sensitivity, honesty, and compassion in difficult conversations (e.g., about issues such as death, end-of-life issues, adverse events, bad news, disclosure of errors, and other sensitive topics)
- 4.7 Demonstrate insight and understanding about emotions and human responses to emotions that allow one to develop and manage interpersonal interactions

5. PROFESSIONALISM (P): Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles

- 5.1 Demonstrate compassion, integrity, and respect for others
- 5.2 Demonstrate responsiveness to patient needs that supersedes self-interest
- 5.3 Demonstrate respect for patient privacy and autonomy
- 5.4 Demonstrate accountability to patients, society, and the profession
- 5.5 Demonstrate sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation
- 5.6 Demonstrate a commitment to ethical principles pertaining to provision or withholding of care, confidentiality, informed consent, and business practices, including compliance with relevant laws, policies, and regulation

6. SYSTEMS-BASED PRACTICE (SBP): Demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care

- 6.1 Work effectively in various health care delivery settings and systems relevant to one's clinical specialty
- 6.2 Coordinate patient care within the health care system relevant to one's clinical specialty
- 6.3 Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care
- 6.4 Advocate for quality patient care and optimal patient care systems
- 6.5 Participate in identifying system errors and implementing potential systems solutions
- 6.6 Perform administrative and practice management responsibilities commensurate with one's role, abilities, and qualifications

7. INTERPROFESSIONAL COLLABORATION (IPC): Demonstrate the ability to engage in an interprofessional team in a manner that optimizes safe, effective patient- and population-centered care

- 7.1 Work with other health professionals to establish and maintain a climate of mutual respect, dignity, diversity, ethical integrity, and trust
- 7.2 Use the knowledge of one's own role and those of other professions to appropriately assess and address the health care needs of the patients and populations served
- 7.3 Communicate with other health professionals in a responsive and responsible manner that supports the maintenance of health and the treatment of disease in individual patients and populations
- 7.4 Participate in different team roles to establish, develop, and continuously enhance interprofessional teams to provide patient- and population-centered care that is safe, timely, efficient, effective, and equitable

8. PERSONAL AND PROFESSIONAL DEVELOPMENT (PPD): Demonstrate the qualities required to sustain lifelong personal and professional growth

- 8.1 Develop the ability to use self-awareness of knowledge, skills, and emotional limitations to engage in appropriate help-seeking behaviors
- 8.2 Demonstrate healthy coping mechanisms to respond to stress
- 8.3 Manage conflict between personal and professional responsibilities
- 8.4 Practice flexibility and maturity in adjusting to change with the capacity to alter behavior
- 8.5 Demonstrate trustworthiness that makes colleagues feel secure when one is responsible for the care of patients
- 8.6 Provide leadership skills that enhance team functioning, the learning environment, and/or the health care delivery system
- 8.7 Demonstrate self-confidence that puts patients, families, and members of the health care team at ease
- 8.8 Recognize that ambiguity is part of clinical health care and respond by using appropriate resources in dealing with uncertainty

Version 3.0/Grey Edition

Contact: lisa.villarroel@azdhs.gov

NOTES



