Do No Harm: Putting Safer Pain Management Guidelines into Practice – Module 1

1.1 Introduction

Welcome to the Oklahoma Primary Healthcare Improvement Cooperative's online course for clinicians - Do No Harm: Putting Safer Pain Management Guidelines into Practice.

This Online Enduring Material educational program is designed for healthcare professionals. The contents of this program are based on the National Academy's Institute of Medicine's white paper Pain Management and the Opioid Epidemic: Balancing Societal and Individual Benefits and Risks of Prescription Opioid Use and the 2016 CDC, 2017 VA-DOD, and 2017 Oklahoma State Department of Health Guidelines for Pain and Opioid management, and Oklahoma law.

The program was developed through a grant from the Oklahoma Department of Mental Health and Substance Abuse Services by the Oklahoma Primary Health Care Improvement Cooperative of The University of Oklahoma Health Sciences Center and the OU-TU School of Community Medicine, and released in August, 2019.

1.2 Overview

Hi, I am Steve Crawford, and I will guide you through the first module, Overview, in the online continuing education course Do No Harm: Putting Safer Pain Management into Practice.

The modules in this course are: 1) Overview, 2) Epidemic, 3) Pain, 4) Analgesia, 5) Patient Engagement, and 6) Practice Systems.

Each module is designed to be a learning unit that may be completed independent of other modules, therefore some of the material and questions will be repeated across the module to add coherence to the learning.

The modules may be completed in any order you choose. The expected time to complete each module will vary, but they are estimated as: Overview - 1 hour, Epidemic - 15 minutes, Pain - 15 minutes, Analgesia - 30 minutes, Patient Engagement 30 minutes, and Practice Systems - 1 hour. The total course provides 3 and ½ hours of continuing education credit.

1.3 Planning and Review Committees

The panel of experts who reviewed this course represent primary care clinicians, pharmacists, educators, and specialists in pain, addiction, and palliative care, and a national expert in the epidemiology of the opioid crisis.

1.4 Relevant Disclosure and Resolution

None of the members of the CME Planning committee have a relevant financial relationship or affiliation with commercial interests to disclose.

1.5 Relevant Disclosure and Resolution for Expert Review Panel

None of the expert reviewers have a relevant financial relationship or affiliation with commercial interests to disclose.

1.6

Conflict Resolution Statement:

The University of Oklahoma, College of Medicine Office of Continuing Professional Development has reviewed this activity's speaker and planner disclosures and resolved all identified conflicts of interest, if applicable.

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Accommodation Statement:

Accommodations are available by contacting Jan Quayle at 405-271-2350, ext. 8 or e-mail to: jan-quayle@ouhsc.edu.

1.7 Professional Practice Gap Being Addressed

The knowledge gaps being addressed in module #1 are lack of familiarity with new guidelines for pain and opioids; AND the requirements of Oklahoma law.

One specific requirement of the law is the completion of 1 hour of CME each year. Completing this program will meet that requirement for MDs, PAs, and NPs. The first Oklahoma law went into effect on November 1, 2018, and was revised in 2019. The law is based on guidelines for safer opioid prescribing, particularly prescribing for acute painful conditions. It requires patient informed consent to use opioids for chronic conditions and the frequency of monitoring for development of adverse effects of taking opioid medications.

1.8 Objectives

Upon completion of this course, participants will improve their competence and performance by being able to: describe the role they may play in the opioid overdose epidemic; recognize pain to be a biopsychosocial phenomenon with intrinsic brain adaptations; identify modalities for pain management, their mechanisms, and limitations; and apply guidelines to safer use of opioids for pain management.

1.9 Instructions

Throughout the course, we provide questions to help consolidate your learning. If you incorrectly answer a question you will be directed to try again. You will not be permitted to advance until you have selected the best answer. These questions are directly related to the material on the slides and narrative. The quiz items are in the form of a stem-question with four possible answers. Each question has a best answer, although other answers may be partially correct, they are not the best. You will receive immediate feedback on your answer. If you incorrectly answer a question you will be directed to select another response.

1.10 Continuing Education Credits

MDs, DOs, PAs, NPs, and pharmacists are eligible to obtain professional continuing education credit for their licensing board requirements. To do so, you will be directed at the end of this module to the University of Oklahoma College of Medicine Irwin H. Brown Office of Continuing Professional Development web site. If you have not previously registered, you will be guided in registration. You must achieve an 80% score on a brief quiz indicating the knowledge you achieved through the program, and evaluate the course. You will have up to three chances to pass the quiz.

1.11 Opioid Overdose in U.S.

The rise in opioid associated deaths from 2000 to 2017 in the United States is shown on this slide. Overall, 84.2% of drug overdose deaths were unintentional. It appears the prescription opioids oxycodone and hydrocodone accounted for most of the rise. From 2011 the rate slightly slowed. The recent rise in opioid deaths is largely due to a cheaper and more dangerous heroin supply and, increasingly, illicit fentanyl mixed with the heroin or sold as heroin.

1.12 Drug Related Deaths in Oklahoma

In 2016 there were 444 opioid-related overdose deaths in Oklahoma. The majority of these, 73%, were associated with prescription opioids. Although appearing to be a small impact, the synthetic opioids which include high potency illegal fentanyl are increasing and in 2016 accounted for 12% of opioid overdose deaths. Also alarming is the increasing incidence of heroin overdose deaths. These have more than doubled from 26 to 53 deaths from 2009 to 2016. The good news is that unintentional prescription opioid involved overdose deaths have decreased.

The large majority of prescription opioids come from Oklahoma clinicians, whether directly or taken from unused opioids prescribed to others. Increasingly over the first decade of the 21st century, Oklahoma clinicians wrote opioid prescriptions at a rate almost 1.5 times higher than clinicians in other states. Considering that two-thirds of patients report not taking any prescribed opioids following a surgical procedure, an over-supply of unused medications also contributes to the addiction and other harms from these medications.

1.13 How the Epidemic Developed

Understanding how this epidemic came about can help us reverse it. Before 1990, prevailing medical practice avoided using opioids long-term for fear of addiction. The backlash claimed that clinicians were undertreating pain, particularly at the end of life. The “pain as the fifth vital sign” campaign urged clinicians to treat pain vigorously.

Pharmaceutical detailing promoted the false messages that opioids are safe, rarely addicting, and effective for chronic pain. Opioids were heavily marketed to physicians, and increased prescriptions led to widespread consequences.

New specialties in hospice and palliative care, pain medicine and addiction medicine emerged to advance the science and care of pain and to treat Substance Use Disorders.

Over the past several years, illegal strong and less expensive opioids have come into the drug market and make up the latest wave of opioid involved deaths in the U.S.. The public health effects of prescription opioids and heroin are intertwined with about 80 percent of current heroin users reporting that they began with prescription opioids.

For more information about the origin of the opioid epidemic in the US we recommend Beth Macy's award winning book, Dopesick; Dealers, Doctors, and The Drug Company That Addicted American published in 2018 by Little Brown and Company.

1.14 Pain Neurobiology

Pain is a psycho-sensory experience of tissue injury. It may be nociceptive, caused by tissue injury, or neuropathic, due to damage of peripheral nerves or to the central nervous system. Acute pain is usually the result of tissue injury while chronic pain is a complex neurological system condition. The experience of pain is under complex brain neurotransmitter control, and is intimately tied to memories, past experiences, and emotions. Pain associated with mental illness, social isolation, and poverty may confuse treatment decisions by focusing on treating the symptom of pain rather than the root cause of suffering.

1.15 Peripheral, Spinal, & Brain Pain Pathways

This diagram displays the peripheral and spinal pain pathways. Select each button to learn more

· Products of inflammation activate nociceptors at the tip of A-delta and C sensory neurons.

· The stimuli are converted into electrical signals rapidly transmitted along A-delta fibers and more slowly along C fibers of peripheral nerve axons.

· The cell bodies of sensory nerves are located in the dorsal root ganglion.

· The distal axon of sensory nerves leaves the dorsal root ganglion and enters the spinal cord dorsal horn grey matter where dendrites release excitatory neurotransmitters and synapse with adjacent neurons to amplify and distribute the nociceptive signal.

· Some signals stimulate the lower motor neurons of the anterior horn causing reflex muscle contraction to stabilize injured tissue.

· Activated post-synaptic spinal neurons cross the central spinal grey matter transmitting the nociceptive signal up the contralateral spinothalamic tracks.

· These fibers split, divide, and project into and through multiple brain nuclei within the pons, midbrain, and thalamic regions.

· The nociceptive impulse is sensed as pain in the thalamus where the signal is further amplified and distributed throughout the central nervous system to add feeling, meaning, thoughts, and reflexes or deliberate actions. The sensation of pain is thus experienced throughout the nervous system.

· Returning to the mid-brain, signals stimulate neurons which release inhibitory neurotransmitters on the dorsal horn cells to dampen the incoming noxious stimuli.

1.16 Clinical Types of Pain

Acute pain is usually a sudden, progressive, and predictable sensory response to tissue injury. As shown in the diagram, acute pain is influenced mostly by tissue injury with thoughts and emotions modestly affecting pain expression. Most people experiencing acute pain recognize that their symptoms will go away in a few days or weeks, which often prevents 'catastrophizing' the experience.

Chronic pain may begin as a symptom of inflammation or injury that does not resolve as expected. Chronic pain is defined as pain lasting more than 3 months. As shown in the diagram, chronic pain has a strong component of thought and emotional activation with tissue injury.

A CDC analysis of 2016 data estimated that 20.4% of U.S. adults have chronic pain and 8% have high impact chronic pain that interferes with daily function and uses increased healthcare resources.

1.17 OK Legal Definitions of Acute Pain

Oklahoma law provides a slightly different definition of acute pain.

Acute Pain is defined as pain resulting from disease, accidental or intentional trauma, or other cause that the practitioner reasonably expects to last only a short period of time. The law specifically excludes from the definition of ACUTE PAIN, chronic pain, pain being treated as part of cancer care, hospice or other end-of-life care, or pain being treated as part of palliative care.

1.18 Clinical Types of Pain

Oklahoma law defines chronic pain as pain that persists beyond the usual course of an acute disease or healing of an injury. Importantly, the law states that chronic pain may or may not be associated with an acute or chronic pathologic process that causes continuous or intermittent pain over months or years. This statement indirectly recognizes that chronic pain is not entirely a condition with objective signs of disease but one that has emotional and cognitive brain processes contributing to the condition.

1.19

Question 1

1.20 Analgesic Medications

The medications used for analgesia include topical anesthetics, counter irritants, NSAID gels or creams, and application of heat or cold. Acetaminophen and NSAIDs are the most frequently used oral medications with few but important side effects. Opioid medications stimulate the mu receptor and are effective analgesics when used short-term or intermittently, but are associated with serious and at time life-threatening side-effects. When used long-term, round the clock on a daily basis they may increase pain (hyperalgesia) and reduce function.

1.21 Legal Definition of "Initial Opioid Prescription"

Oklahoma law defines an "Initial Opioid Prescription" as a prescription, usually for an acute condition, of an opioid medication or its pharmaceutical equivalent that has not been prescribed to the patient during the past year. The law further permits prescription of an opioid or pharmaceutical equivalent following a surgical procedure or a NEW ACUTE EVENT even if they have been prescribed an opioid drug or pharmaceutical equivalent within the past year. It is your responsibility to consult the Oklahoma prescription monitoring program to determine if an opioid medication has been prescribed within the past year.

When a patient who is prescribed an opioid medication for the treatment of a chronic condition has an acute painful condition from surgery, accident or injury, the increase in opioid dose for the

acute condition would not be an “initial prescription” but would be a change in the chronic opioid medication. Caution and coordination of care between clinicians managing the acute and chronic condition will be necessary to avoid excessive dosing of medication or promotion of tolerance, dependence or Opioid Use Disorder.

1.22 Chronic Pain Syndrome

Chronic pain syndrome differs considerably from acute pain although it may evolve following an episode of acute disease or injury. Chronic pain syndrome may have no demonstrable tissue injury, but persists as a psycho-sensory experience of either continuous or intermittent pain for months or years.

Chronic pain is associated with reduced physical functioning and poor quality of life. It is a major cause of work absenteeism, poor health, and increased medical encounters. Chronic pain is associated with comorbidities including impaired memory, cognition, attention, sleep disturbances, as well as psychiatric and behavioral disorders such as depression, anxiety, personality disorders, and somatization. The negative impact of chronic pain disproportionally affects disadvantaged populations with barriers to access quality pain treatment.

1.23 Non-Pharmacologic Treatments

Non-pharmacologic therapies prove to be a promising option for improving outcomes in various types of chronic pain, particularly low back pain. These modalities work at various locations in the pain signaling and emotional or muscular reactivity reflexes. Physical therapy and exercise have been most studied and show strong evidence for consistent improvement of pain.

Cognitive-behavioral therapy showed improvement in pain and disability from low back pain lasting on average 34 months after treatment. Mindfulness meditation and hypnosis have weaker evidence, but also show improved pain and quality of life, and reduced depression compared with usual treatment controls.

The manual therapies including osteopathic manipulation, chiropractic, massage and acupuncture have been found to be superior to control modalities of support groups, education, and stress management for improving function and decreasing pain for low back pain, subacute neck pain, and osteoarthritis. True acupuncture was modestly superior to sham for pain relief of

musculoskeletal neck and back pain, osteoarthritis, chronic headache and shoulder pain, and fibromyalgia.

1.24 Summary of Recommendations

Pain management and opioid prescribing recommendations can be summarized using the mnemonic: “DO NO HARM.”

· It is recommended that clinicians DO a comprehensive pain assessment especially for patients with chronic pain and “DO” create a multi-modal pain management plan, not relying only on opioid medications for treating painful conditions. “DO” set a goal for improved function; and “DO” recommend naloxone for patients at risk for overdose and their families.

· The “NO” recommendations are not absolute, but call for careful clinical judgment. The guidelines are “NO” opioid prescription without a pain assessment and plan; “NO” prescribing sedating medications with opioids; and aim for “NO” overdose deaths and zero suicides.

· The “H” stands for HARM REDUCTION by avoiding opioids or tapering and stopping opioids when they are found to be ineffective, cause side-effects, produce Opioid Use Disorder or behavioral health problems.

· The “A” is AGREE in writing with the patient on the risks and benefits of opioid use; using only one prescriber and one pharmacy for opioid medications; no early refills without a visit; and performing monitoring visits, urine drug testing, and checking the Oklahoma Prescription Monitoring Program database.

· The “R” is “RX” or PRESCRIBE opioids using the lowest effective dose of an immediate release formulation, *only if* expected benefits for both pain and function are anticipated to outweigh risks. Three days or less will often be sufficient; more than seven days will rarely be needed; and prescribe, less than 50 Morphine Milligram Equivalent dose of opioid per day for chronic, non-life-limiting pain.

· The “M” is MONITOR progress toward a goal for improved function, for misuse, for side-effects, for diagnosing, treating and referring Opioid Use Disorder, or behavioral health problems.

1.25 Acute Pain Guidelines

The buttons on this slide review Acute Pain recommendations which are a combination of published guidelines and a summary of Oklahoma Law.

Please click on the buttons for each part of the recommendations.

· **The first recommendation is to use non-pharmacologic therapy or non-opioids such** as acetaminophen and NSAIDs, alone or in combination. Application of cold packs and use of topical counter irritant cream may be helpful. Local anesthetic infiltration of a surgical wound or a regional anesthetic may help severe post-operative pain.

· **The next slides explain the statutory limits for an "initial** opioid prescription" for acute pain contained in Oklahoma law. The prescription for acute pain in a patient who has not been receiving opioids should be the lowest effective dose of an immediate-release opioid in a quantity usually for less than three days and not to exceed a seven-day supply.

· When the patient had major surgery or is homebound as defined by Medicare rules, and will need continued opioid analgesic therapy beyond the first seven days, a 2nd 7-day supply of immediate-acting opioid may be written with instructions indicating the earliest date on which the prescription may be filled. The second prescription must be dispensed no more than 5 days after the "do not fill until" date indicated on the prescription.

Medicare rules define "Homebound" as a patient who has trouble leaving their home without help (like using a cane, wheelchair, walker, or crutches; special transportation; or help from another person) because of an illness or injury, or leaving home isn't recommended because of the condition, and the patient is normally unable to leave his or her home because it's a major effort.

· For all other acute pain patients, that is patients who have not had major surgery or are not home bound, a second seven day supply may be prescribed after an in-person or telephone consultation with the patient. The consultation with the patient may be performed by a physician, physician assistant or nurse practitioner working with the prescribing physician.

· If a third 7-day supply is needed, or if opioids are prescribed for 3 months or more, the clinician must check the Oklahoma Prescription Monitoring Program and enter into a pain-management agreement with the patient or guardian that includes informed consent about the

risks of addiction, overdose, and death associated with opioid drugs and the increased risk of taking opioid drugs with alcohol, benzodiazepines and other central nervous system depressants.

· The last acute pain recommendation advises clinicians to evaluate persistent pain for a change in the clinical condition, consider early development of chronic pain syndrome, and avoid escalating the opioid dose. Assess for developing opioid use disorder or other adverse events. Implement a multimodal pain plan, and obtain informed consent to continue further opioid therapy.

1.26

Question 2

1.27 Chronic Pain Recommendation #1

Let's turn now to recommendations for Chronic Pain. The first recommendation is to use a holistic approach to pain management.

Recommend lifestyle changes to improve overall health through better diet, weight loss, aerobic and strengthening exercises, sleep hygiene and stopping smoking.

Treat chronic pain using modalities that work throughout the nervous system. The multidisciplinary pain plan includes mind-body therapy such as cognitive-behavioral therapy, mindfulness meditation training, massage therapy, acupuncture, chiropractic, and osteopathic manipulation. Physical medicine and rehabilitation treatments are also effective. Interventional therapy should be reserved for pain management of refractory conditions. Reserve opioid medications as a last resort, and only if expected benefits for both pain and function are anticipated to outweigh risks to the patient.

1.28 Chronic Pain Recommendation #2

Chronic Pain Recommendation #2 reminds clinicians that Oklahoma law requires clinicians to consult **the Oklahoma Prescription Monitoring Program (PMP)** before starting opioid therapy and regularly thereafter to assess the patient's opioid and other controlled substance history and risk for overdose or other adverse events Oklahoma law requires consulting the PMP system before prescribing controlled substances and <u>at least</u> every 180 days. The results of the PMP check should be recorded in the medical record.

1.29 Chronic Pain Recommendation #3

Chronic Pain Recommendation #3 advises clinicians to perform a **Comprehensive Pain Evaluation** that includes a medical history, social history, physical examination, and a confirmed etiologic diagnosis. Click each tab to learn more.

· The **medical history** includes a present and past history related to the painful condition, prior approaches to pain management, and documentation of the functional limitations in occupation, family role, recreation, and the patient's perceived quality of life. The assessment should include the history of other medical, psychiatric, or surgical treatments and medication history of allergies and sedatives that might interact with opioids and contribute to overdose.

· The **Social history** investigates a personal history of stress-related conditions, alcohol or substance use disorder, and mental health problems which greatly increases the risk of developing opioid use disorder. Direct questions about factors affecting a pain plan include past and current employment status, pending compensation claims, living conditions, marital history, social network, and legal problems related to controlled substances.

· **A family history** of alcohol or other drug problems, or substance use disorder of any kind also modestly increases the risk for personal opioid use disorder.

· **A Physical Examination** discloses the anatomic and pathophysiologic mechanism for pain and functional limitations. Physical evidence of co-occurring cardiac, respiratory, liver or renal disease, and risk factors for sleep apnea should be explored. The patient's emotional state and mood, in addition to information from behavioral health screening, provide signs of mental health problems such as depression, anxiety, personality disorder, or post-traumatic stress.

A **confirmed etiologic diagnosis** is needed to justify prescribing controlled substance. Diagnoses such as "Degenerative Joint Disease of Lumbar Spine" or "Chronic Pain Syndrome" are appropriate, while "back pain", "shoulder pain", or "diffuse pain" are not.

1.30 Chronic Pain Recommendation #4

Chronic Pain Recommendation #4 is to assess all patients before prescribing opioids for greater risks of overdose and developing opioid use disorder. Unfortunately, there is no accurate method to predict who will develop addiction or overdose. It is the dose, form, and opioid itself, not the person taking the drug that carries the risk. Therefore, it is best to perform universal screening

for risk factors associated with opioid overdose or addiction before prescribing. Universal screening should include validated questionnaires for alcohol, tobacco, and drug use, such as the questions used in the SBIRT (Screening, Brief Intervention, and Referral to Treatment) program. Validated questionnaires screen for depression and other current or past mental health problems. Using a screening tool for identifying social determinants of health such as poor family support, isolation, housing and food needs identifies contributing factors for substance use disorder and poor mental health outcomes. Legal problems are commonly associated factors as well. *Adverse Childhood Experiences* identified by an ACE questionnaire score of 4 or greater is associated with risk for chronic disease and substance use disorder in adulthood.

Physical conditions identified through a careful medical history and physical associated with greater risk of overdose or adverse consequences are renal or hepatic insufficiency, sleep apnea, advanced age, and pregnancy. The fetus may be at risk for congenital abnormalities, and develop neonatal abstinence syndrome or neonatal opioid withdrawal syndrome when the mother is taking high MMED opioids at delivery. The CDC provides online training for opioids in pregnancy.

1.31

Question 3

1.32 Chronic Pain Recommendation #5

Chronic Pain Recommendation #5 gives indications for prescribing opioids. Evidence of effectiveness for long-term daily opioid use in chronic non-life limiting pain is lacking. Opioids are not first-line therapy. Studies have demonstrated significant risks for addiction, overdose and death that increase at higher doses. Indications for a trial of opioid treatment may include severe pain that interferes with physical, occupational, or social function. Failure of non-pharmacologic and non-opioid analgesics for some patients *may* be an indication for a trial of opioid medications if they are likely to facilitate achieving the measurable goal of improved function. Clinicians should consider opioid therapy only if expected benefits for both pain and function are anticipated to outweigh risks to the patient.

1.33 Chronic Pain Recommendation #6

Chronic Pain Recommendation #6 is to use a written pain treatment plan, including a patient-provider agreement that includes informed consent to use opioid therapy. The plan should state that the goal of treatment is to improve function as defined by the patient. The treatment is multi-modal, including more than medications. If opioids are part of the plan for more than 14 days, an informed consent to take opioids must be included. Informed consent acknowledges that long-term opioid use has not been shown to be effective in chronic pain and there are substantial risks, including overdose, addiction and becoming physiologically dependent making it difficult to come off or taper because of withdrawal symptoms. The monitoring plan explains the frequency of follow-up appointments, the policy for controlled medication refills, an expectation for random drug testing, and agreement to use only one pharmacy and one prescriber. Examples of treatment plans and informed consents can be found at the web site shown.

1.34 Requirements for Chronic Pain

Oklahoma law sets legal requirements related to opioid prescribing, which should be fully reviewed by healthcare providers. The prescription of continuous opioids for 3 or months requires a review and documentation of patient progress every three months and assessing the patient before every renewal to determine if they are having any problems. The prescribing clinician must take and document reasonable efforts to stop opioid medication, unless contraindicated to do so. Prescribing clinicians must review the prescription monitoring program, documenting the date of review and findings at least every 180 days. The clinician and office staff must monitor compliance with the patient-provider agreement for chronic pain management.

Importantly, this requirement excludes patients with cancer, patients in hospice or palliative care, patients living in long-term care facilities or patients taking opioid agonist/antagonists for the treatment of opioid use disorder.

1.35

Question 4

1.36 Chronic Pain Recommendation #7

Chronic Pain Recommendation#7 is "start low and go slow." **An** initial opioid prescription should be for a short-acting formulation, at the lowest effective dose, taken on an intermittent basis, such as every 6 to 8 hours as needed. Increases in daily dose should be avoided, and if needed, made no more often than every 3-7 days. Remember, reserve opioid medications as a last resort, and only if expected benefits for both pain and function are anticipated to outweigh risks to the patient. Long-acting or extended-release opioid preparations should be reserved for use in patients with severe pain or pain from a life-limiting illness. Extended release opioids may rarely help with continuous pain, but should be taken only as directed, and not used in combination with a rapid acting opioid.

1.37 Chronic Pain Recommendation #8

Chronic pain Recommendation #8 is to perform regular monitoring for functional benefit. At follow-up, the clinician should determine what the patient is able to do now, or what he or she wants to do now, but pain prevents them from doing. The "P.E.G. score" can be used to numerically track progress. "P" is level of pain over the last week. "E" is Pain's interference with ENJOYMENT. "G" is pain's interference with GENERAL ACTIVITY. Ideally these will be built into the electronic medical record.

1.38 Chronic Pain Recommendation #9

Chronic Pain Recommendation #9 is to monitor during face-to-face visits every 1 to 3 months. The purpose of frequent follow-up visits is to actively evaluate benefits and harms of continued opioid therapy, including addiction and overdose. Continuing opioid therapy for 3 months substantially increases risk for opioid use disorder, so follow-ups earlier than 3 months are necessary. Screening **for harm or misuse of opioids** includes routine checking the ***Oklahoma Prescription Drug Monitoring Program (PMP)*** for other prescribers and other controlled medication prescriptions, performing random in-office or laboratory ***urine drug testing,*** possibly performing **random pill** counts, and checking for aberrant behaviors to help identify developing opioid use disorder or misuse. Many patients develop tolerance and may request dose increases. Tolerance or withdrawal symptoms can exist without a diagnosed opioid use disorder. However, along with other symptoms such as craving, obsessive worry about having enough opioids, and

appearance, behavior, and social changes, opioid misuse or disorder may be present and requires a thorough assessment.

Patients who are misusing opioids, or are developing opioid use disorder may be ashamed or reluctant to discuss their condition openly with their clinician. They may fear being cut off from their opioid supply. A non-judgmental, therapeutic approach discussing opioid use disorder to be a serious, but treatable medical condition, helps support patient safety and honesty.

1.39 Diagnosing Opioid Use Disorder (DSM-5 Criteria)

Opioid Use Disorder is a problematic pattern of opioid use leading to clinically significant impairment**.** In order to confirm a diagnosis of OUD**, at least two of the DSM-5 criteria should be observed within a 12-month period: Loss of control** exhibited by (1) taking opioids in larger amounts or over a longer period than was intended; (2) having a persistent desire or unsuccessful efforts to cut down or control opioid use; or (3) spending a great deal of time in activities necessary to obtain, use, or recover from opioid effects. (4) ***Craving*** is having a strong desire or urge to use opioids. ***Adverse consequences*** include: (5) recurrent opioid use resulting in a failure to fulfill major role obligations at work, school, or home; (6) continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids; (7) giving up or reducing important social, occupational, or recreational activities because of opioid use; (8) recurrent opioid use in physically hazardous situations; or (9) continued opioid use despite knowledge that persistent or recurrent physical or psychological problem are likely to have been caused or exacerbated by the substance. The last two diagnostic criteria, ***tolerance and withdrawal,*** without other symptoms***,*** are not considered to be met for individuals taking opioids under appropriate medical supervision. ***Tolerance***, is a need for markedly increased amounts of opioids to achieve intoxication or desired effect, or having a markedly diminished effect with continued use of the same amount of an opioid. There are two criteria for ***Withdrawal Syndrome***: A) after stopping or reducing opioid dose following heavy or prolonged use, ***or*** after administering an opioid antagonist; and B) within minutes or days, three or more of the following develop: dysphoric mood, nausea or vomiting, muscle aches, lacrimation or rhinorrhea, pupillary dilation, piloerection, sweating, diarrhea, yawning, fever, or insomnia.

1.40 Diagnosing and Managing OUD

When OUD is suspected, the diagnosis should be confirmed with a thorough history and physical examination, urine drug screen and review of the prescription drug monitoring program. Patients may show no physical signs of opioid addiction - the diagnosis relies on a respectful and supportive interview to learn the history of the patient's experience with opioids. Clinicians may use the DSM-5 criteria to make a diagnosis or arrange for an assessment by a specialist in addiction. Referrals for Oklahoma are found on the OKI'mReady.org website.

It is also important to remember that OUD exists on a continuum of severity. As a result, a scale for assigning severity was developed in DSM-5 and is based upon the number of criteria that have been met (2-3 for mild, 4-5 for moderate, and more than 6 for severe). This severity distinction has treatment implications.

When OUD is diagnosed, it is important to treat the patient like anyone with a serious, potentially fatal chronic illness. Do not dismiss the patient from primary care as they may have underlying or co-occurring diseases or conditions. Approach your patient with compassion to determine the effect opioid use has had on physical and psychological functioning. Empathize with the experience and outcomes of past treatment episodes, and the patient's potential for overdose. Risk factors for overdose include a past history of overdose, a past history of substance use disorder, opioid dosages >50 MME/day, and concurrent benzodiazepine use. Recommend naloxone when one or more of these risk factors are present, and educate the patient and his or her family about the symptoms of opioid overdose and how to administer naloxone. For more information about naloxone, visit OKI'mReady.org. Educate the patient that OUD is a treatable, serious medical condition and you will provide or arrange evidence-based treatment.

1.41

Question 5

1.42 Chronic Pain Recommendation #10

Chronic Pain Recommendation #10 is to continue to monitor for risks and benefits of stable opioid treatment with regular face-to-face visits even when goals for improved function and pain control have been achieved. Oklahoma law requires a visit at least every three months which may be extended to every six months when a patient's opioid use has been stable and achieving goals

for over a year. Objective scoring of pain and functional improvement should be performed. According to the CDC guidelines, clinically meaningful improvement is defined as a 30% improvement in scores for pain and function. That would be two points on the P.E.G. score. The PMP should be checked for multiple prescribers, dangerous combinations, and high cumulative dosage greater than 50 MMED. Random urine drug testing should be performed to identify prescribed drugs in the urine and the absence of non-prescribed drugs. Repeated checks and screening for development of high risk co-occurring conditions such as sleep-disordered breathing, kidney and liver insufficiency, advancing to older age, pregnancy, or the development of depression, other mental health conditions, or alcohol or other substance use disorders. All patients taking a MMED greater than 50 should be offered naloxone.

1.43 Chronic Pain Recommendation #11

Chronic Pain Recommendation #11 emphasizes a multidisciplinary approach which typically shows better outcomes compared to medications alone. Results generally indicate a reduction in pain, substantially better function, significantly reduced healthcare costs, reduced disability costs, and higher return-to-work rates. This approach involves a range of health care professionals from medicine, nursing, physical therapy, pharmacy, psychology, and behavioral health or social work. These disciplines are integrated to address a problem that reflects a complex web of biological, neurological, psychological, physical, and social dysfunctions. If a mood disorder is recognized, psychological intervention should be considered.

1.44

Question 6

1.45 Chronic Pain Recommendation #12

Chronic pain recommendation #12 advises clinicians to identify and treat causes of failed improvement in functional capacity or pain reduction. When opioid doses less than 50 MME/day fail to achieve goals for chronic pain management, the adverse effects of opioid therapy may be exceeding their benefits. Further dose increases should be considered very cautiously, if at all.

Failure of opioid treatment in chronic non-terminal illness pain is a firm indication for ending the trial, tapering opioids and amplifying other components of the pain plan, particularly the mind-

body therapies. Common reasons for opioid failure are development of opioid hyperalgesia, which is opioid induced hypersensitivity to non-specific stimuli. Another reason for failure to improve is developing tolerance to the analgesic effect or to the euphoria effect and needing higher doses. Dependence and withdrawal between doses causes patients to take more than prescribed and worry about running out. When these symptoms occur, the patient may be developing Opioid Use Disorder or the dysphoric mood and anxiety that may accompany opioid dependence.

Patients who have recovered from an overdose are at increased risk for a subsequent overdose and must monitored very closely, tapered to a safer dose, considered for Opioid Use Disorder therapy with addiction treatment medications, and prescribed naloxone to prevent death from respiratory depression caused by overdose.

1.46

Question 7

1.47 Chronic Pain Recommendation #13

Chronic Pain Recommendation #13 is to taper and discontinue opioids if opioid treatment is ineffective in reducing pain and improving function, if adverse effects outweigh benefits, if patients are taking high-risk regimens without evidence of benefit, if patient experiences a serious adverse event or develops warning signs of serious adverse events, if dangerous or illegal behavior is demonstrated, if patient requests a reduction or discontinuation, or if the patient has significantly violated the treatment agreement.

To discontinue opioids, a patient centered tapering plan works best to minimize symptoms of opioid withdrawal while maximizing pain treatment with non-pharmacologic therapies and non-opioid medications. A fast taper would be a 10% reduction in original dose once a week. If the patient has been taking opioids daily for a long time, a slow taper of 10% per month may be required. If the patient is diverting or has developed a moderate to severe opioid use disorder, then more rapid or supervised tapering and detoxification may be in order.

Even with informed consent, patients may be shocked when told their opioid regimen is not achieving the agreed upon goal and that it is best to lower, taper, or stop medications. Patients fear suffering will recur at greater levels and they may fear withdrawal. These fears may lead to demands that opioid and benzodiazepine regimens be left in place, potentially forever, or else the patient will find a more cooperative doctor.

Slow taper, consulting experts in opioid use, continuing a supportive relationship, and using alternate therapies to address anxiety or depression are important parts of the plan. Statements such as, “most people have improved function without worse pain” and “you can do this, I’ll stick by you through it” may be helpful. Clinicians should maximize pain treatment with nonpharmacologic and nonopioid pharmacologic treatments as appropriate and consider consulting a pain specialist as needed to assist with pain management.

Each practice should have a plan in place to help patients (and their caregivers) deal with their serious concerns about changes to their treatment, including mental health support if needed. Practices benefit from staff training in de-escalation techniques and safety plans to prevent high-risk conflict.

The video link below offers additional case training in collaborative opioid tapering.

1.48

Question 8

1.49 Chronic Pain Recommendation #14

Chronic Pain Recommendation #14 is do *not* use methadone for pain relief in patients who do not have a life-limiting illness. Methadone is a potent opioid analgesic and is used for palliative care and cancer pain. ECG screening should be performed on patients who will be receiving methadone. Extra caution should be considered when anti-depressants are taken with methadone as they may prolong the QT interval and risk of ventricular fibrillation, tachycardia, and cardiac arrest. Only clinicians experienced with the nuances of this drug should prescribe methadone.

1.50

Question 9

1.51

Question 10

1.52 Summary

In summary, the epidemic of opioid overdose deaths is due, in part, to opioid prescribing. Non-opioid and non-pharmacologic therapies are effective for acute pain management. Acute pain infrequently requires more than short, intermittent, doses of rapid acting opioids, if at all. Three days or less will often be sufficient; more than seven days will rarely be needed.

1.53 Summary

Notes:

Chronic pain is a complex neuropsychiatric condition in which function is rarely improved by continuous, long-term opioid therapy. Non-pharmacologic therapy and non-opioid therapy are preferred for chronic pain. Clinicians should use or continue opioid therapy only if there is clinically meaningful improvement in pain and function that outweighs risks to patient safety.

Patients must be informed that the goal of therapy is improved function and that opioids are associated with tolerance, dependence and withdrawal, and addiction, overdose, and death.

1.54 Resources

The references on this slide are provided for your additional information. Thank you for participating in this online program.

1.55 Closing Instructions

The University of Oklahoma Office of Professional Development is providing CE credits. MDs are eligible for AMA PRA Category 1 Credit, Physician Assistants for AAPA Category 1 Credit, and Nurse Practitioners for AANC contact hours and Oklahoma pharmacology hours.

Until March 1, 2020, the University of Oklahoma will waive the $25 fee.

Click on the web link which will take you to the Office of Professional Development web site where you may register, take a test of knowledge, evaluate your learning experience, and print your CE certificate.