Good afternoon. I'm Commander Ibad Khan, and I'm representing the Clinician Outreach and Communication Activity, COCA with the Emergency Risk Communication Branch at the Centers for Disease Control and Prevention. I'd like to welcome you to today's COCA call, HHS guide for clinicians on the appropriate dosage reduction or discontinuation of long-term opioid analgesics. You may participate in today's presentation via webinar, or you may download the slides if you're unable to access the webinar. All the slides and the webinar link can be found on our COCA webpage at emergency.cdc. gov/coca. Again, that web address is emergency.cdc.gov/coca.

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For those who have media questions, please contact CDC media relations at (404) 639-3286 or send an email to media@cdc. gov. If you're a patient, please refer your questions to your healthcare provider. At the conclusion of today's session, participants will be able to accomplish the following. Identify criteria for considering reducing or discontinuing opioid therapy.

Discuss important issues to consider prior to deciding to taper opioids. Describe steps to promote patient safety prior to initiating a taper. Identify practices associated with improved outcomes when opioids are tapered and discuss management approaches to consider when there are challenges to tapering. It is my honor and privilege to welcome our guest speaker, Admiral Brett Giroir, the 16th Assistant Secretary for Health at the U. S.

Department of Health and Human Services. Admiral Giroir leads the development of HHS-wide public health policy recommendations and oversees several of the department's core public health offices including the Office of the Surgeon General and the United States Public Health Service Commission Corp. In addition, Admiral Giroir serves as Senior Advisor to the HHS Secretary or Opioid Policy where he's responsible for coordinating HHS efforts across the administration to fight America's opioid crisis. I would also like to extend a warm welcome to our presenters Dr. Wilson Compton from the National Institute on Drug Abuse at the National Institute of Health and Captain Deborah Dowell from the CDC.

Well, thank you very much. I really appreciate that introduction and thank all of you for being on the call today. As you all know, the nation's substance use and addiction crisis is truly the most daunting and complex public health challenge of our time, and all of us across the government are absolutely committed to combatting this crisis by implementing programs and policies that yield long-term health and resiliency for individuals, families, communities, and our nation as a whole. No two patients or communities are exactly alike, but we know that everything we do must be based on the best possible science and evidence, and the U. S.

Department of Health and Human Services five-point strategy does exactly that. Our main five point, and they are very interrelated and synergistic, are number one, better addiction prevention treatment and recovery services. This is a public health emergency. Addiction is a chronic brain disorder and needs to be addressed as such. Number two, better data, and the predominant source of that data are our colleagues at the CDC on the call today.

Number three, better pain management. Number four, better targeting of overdose reversing agents, particularly Naloxone in all its forms, and finally five, better research. We need to now more tomorrow than we know today and have innovative new solutions. To achieve these objectives, we're working with state and local partners, the academic community, law enforcement and first responders, nonprofit organizations including faith-based organizations, the commercial sector, and of course, all of you, most importantly, our clinicians. It is now evident that our current opioid crisis, including the second wave of heroin and the third wave of synthetics like fentanyl was fueled by the over prescription of potent prescription opioids.

HHS has leaned into this problem, beginning in 2016 with the CDC guidelines for prescribing opioids for chronic pain, amplified by lectures, webinars, technical assistance, reference materials, and truly every possible option for communication. There were also innumerable contributions by professional societies, pharmacy and medical boards, nonprofit, and patient advocacy groups combined with support for PDMPs by the CDC. As a result, the amount of opioids prescribed in the U. S. has decreased by over 30% just since January 2017, and the mortality from prescription opioids is decreased over 11% in our most recent 12-month reporting interval.

And, as we announced today from the White House podium, in 2018 we saw our first overall decrease in overdose deaths year to year in almost 29 years. So, our overdose mortality rate was down 4. 6% and the numbers of actual fatalities was down 4. 1%. But, in our zeal to decrease the inappropriate prescribing of opioids, we must remember and focus on the 50 million Americans who live with chronic pain, of which 20 million experience debilitating pain.

So, it is critical to recognize that guidelines are just that. They are general principles that do work most of the time for most patients, but certainly not all of the time for all patients. So, clinicians must have the knowledge and latitude to treat severe pain in an individualized patient-centered way. This was the main theme of the May 2019 final report from the Pain Management Interagency Task Force led by my office. As a critical care pediatrician, I cared for thousands of children, many of whom were in acute pain, and indeed, some whose pain became chronic.

All of us are extremely empathetic to people living with chronic, severe pain which can also be debilitating. But, we also know, and it is my responsibility here at HHS to lead our national efforts to reduce deaths from opioid misuse and addiction. The bottom-line message is that we can achieve both goals. They are not mutually exclusive. Therefore, I convened a working group of subject matter experts from across HHS beginning in March 2019 to review the published peer reviewed literature from the past five years on appropriate opioid tapering and the national guidelines on opioid prescribing.

Captain Deborah Dowell and Dr. Wilson Compton who are with us today were leaders of the HHS working group and are both passionate, national level experts whose dedication and commitment cannot be overstated. Based on our analysis, we developed the HHS guide for clinicians on appropriate dosage reduction or discontinuation of long-term opioid analgesics. The guide serves as a resource to clinicians who are contemplating or initiating a reduction in opioid dosage or discontinuation of long-term opioid therapy for patients with chronic pain. The HHS guide stresses that in each case, the clinician should

review the risks and benefit of the current therapy with the patient, engage in collaborative communication, decide if a reduction in opioid pain medication is appropriate based on individual circumstances, and if so, proceed slowly in the majority of circumstances while integrating non-opioid treatments.

It is important to note, a majority of patients who work with their providers to reduce high opioid dosages and whose providers support them and work with them to slowly taper opioids experience stable or reduced pain levels after tapering opioids. However, in our analysis, HHS subject matter experts learn that some patients have had opioids rapidly tapered or abruptly discontinued despite a lack of support for such practices in the CDC guideline for prescribing opioids for chronic pain and despite the potential harm these practices pose to patients. Some of the risks of rapid reduction or sudden discontinuation of opioids include acute withdrawal symptoms, exacerbation of pain, serious psychological distress, and transition to illicit opioids such as heroin or fentanyl. We want to be clear that HHS does not recommend abrupt opioid dose reduction or discontinuation unless there are indications of a life-threatening issue such as warning signs of impending overdose. We need to maintain a balance.

It is a false choice to say we could only limit opioid use disorder or addiction or have pain withdrawal. We can have all by doing the appropriate prescribing and appropriate tapering when indicated and when collaboratively decided upon. Thank you very much for your attention, and now, I will turn this over to Dr. Compton.

Thank you very much, Dr. Giroir. It's a pleasure to be with everyone today to talk about how to improve practices related to opioid prescribing. Dosage reductions of opioids as well as, of course, of increases are a standard part of the care of patients who are treated with these medications for pain, and we are glad to be part of the team providing information about how to effectively and safely implement changes in dosages for patients who often have very complex conditions. If I could have the next slide, please.

As a key part of the background on chronic pain and prescription opioid use in the United States, it's important to recognize that there are approximately 88 million U. S. adults who report some use of opioids in any given year and an estimated 3% to 4% of the adults in the United States use opioids long-term to help manage their chronic pain. Of course, opioids provide an important and essentially treatment for many, but harms are significant. For instance, in 2017, some 17,000 persons of the 47,600 opioid related overdose deaths involved prescription opioids.

And, data just released today show a decline of about 2% in opioid deaths and a larger decline in the prescription opioid deaths between 2017 and 2018. So, that's good news that we're starting to see some improvements in this most serious harms related to prescription opioids. In addition to the overdose deaths, we know that about two million persons in the United States have an opioid use disorder. So, the potential for concerns related to opioids are significant. Next slide, please.

For those taking opioids, when and why might dose reductions be indicated? Of course, when the benefits outweigh the risks, opioids may be continued. But, when they aren't effective or leading to problems, what are the potential benefits of reduction in opioid dosages? What are the benefits of tapering? These include such potential benefits as using other approaches to treat pain which may end up being even more effective than the opioids were, particularly because long-term opioid therapy often diminishes in effectiveness over time while the risks and complications from using opioids may not be reduced. That suggests that there may be benefits in trying alternative approaches to opioids. It's also important to notice that the studies that have been conducted of patients who are successful in reducing

their long-term opioid dosages that patients often report improvements in their functioning, their quality of life. They may even report decreased pain levels or no worsening in pain.

So, they may not have the complications that opioids provide and may even have some benefits when opioids are tapered in those patients that are not benefiting from opioids in the long run. Next slide please. Of course, there are risks of tapering opioids, and that's really what our webinar today is all about is understanding how to safely manage this discontinuation and tapering process. Patients may find the idea of reducing or discontinuing therapy very anxiety provoking, and certainly, if the dosages are reduced rapidly or too rapidly, changes in dosages can put patients at great risk of harm. And so, the key theme here that we will be promoting is that changes need to be made in a deliberative, collaborated and extremely measured manner.

This is where the art and the details of clinical practice come into play. Next slide, please. The real risk that we're concerned about are relate to too rapid opioid taper. So, abrupt discontinuation after even a few days or and certainly weeks of opioid treatment can produce a significant withdrawal syndrome. It could also include, now what do we mean by withdrawal syndrome? Well, we mean things like upset stomach, feeling very anxious, having trouble with sleeping, having gastrointestinal distress, having sweats and goosebumps.

So, there can be significant physical symptoms related to withdrawal. There also can be a serious exacerbation of pain so that the pain that, even if it wasn't well controlled by the opioids can exacerbate significantly if there's an abrupt taper of the opioids. There can be severe distress. Some patients even become so hopeless that they may become suicidal. We're also concerned because patients may seek other sources of opioids as a way to treat their pain or withdrawal symptoms, and illicit sources of opioids are notorious for being associated with very high rates of overdose and severe complications.

We certainly may also see opioid related hospitalizations or emergency department visits when patients are abruptly discontinued or have too rapid a taper on their opioids. Next slide, please. The good news is that research has found that these risks of an abrupt or too rapid taper can be mitigated. So, many practices may improve the outcomes. For instance, integration of non-opioid related pain management.

Sometimes, this includes use of devices. Sometimes, this can include use of cognitive therapy or other psychological approaches to helping manage pain. Certainly, in the process of tapering opioids, shared decision making. That means working directly between the clinicians and patients in the process of planning and implementing a tapering protocol is essential. Significant behavioral support and perhaps the most important message is a very slow taper is typically indicated.

Sometimes, much slower than many clinicians expect has been documented to be beneficial in multiple studies now. Now, that's the purpose of our presentation today, to review these new practices that could improve tapering outcomes. And, I'm very pleased, now, to turn over the microphone to my colleague, Dr. Debbie Dowell from the Centers for Disease Control and Prevention. Dr.

Dowell will now discuss our new guidelines on ways to improve tapering outcomes. Dr. Dowell.

Thank you, Dr. Compton. Can I can have the next slide, please? As Dr. Giroir mentioned at the beginning of the call, to help clinicians reduce risks and improve outcomes, related to opioid tapering among patients prescribed opioids to manage pain, particularly chronic pain. HHS developed the HHS guide for clinicians on the appropriate dosage reduction or discontinuation of long-term opioid analgesics.

A working group composed of experts from HHS agencies considered systematic reviews on opioid tapering and national guidelines on opioid prescribing published after 2014, including the CDC guideline for prescribing opioids for chronic pain in the VA DOD clinical practice guideline for opioid therapy for chronic pain. The work group identified, and summarized evidence based clinical practices and guidance relevant to opioid dosage reduction or discontinuation, and six experts external to HHS reviewed the working group's summary and provided individual input. The resulting HHS guide provides advice to clinicians who are contemplating or initiating a reduction in opioid dosage or discontinuation of long-term opioid therapy. As Wilson has noted, it emphasizes the importance of shared decision making with patients, individualized and slow tapers, and integration of pain management and behavioral support. It was published on the HHS website on October, in October of 2019.

Next slide, please. And, it was highlighted in a JAMA Viewpoint released simultaneously with the guide. Next slide. The HHS guide covers eight topics related to opioid tapering. First, criteria for considering reducing or discontinuing opioid therapy.

Second, considerations prior to deciding to taper opioids. Three, steps to ensure patient safety prior to initiating a taper. Fourth, shared decision making with patients. Fifth, rate of opioid taper. Sixth, opioid withdrawal management.

Seventh, behavioral health support, and eight, challenges to tapering. Next slide, please. So, the first of these eight is when to consider opioid tapering. And, opioid tapering can be considered when patients pain improves. Sometimes, the patient requests dosage reduction or discontinuation.

If pain and function are not meaningfully improved, that's a time to consider whether the benefits are outweighing the risks of continuing on opioid therapy. So, if the patient is receiving, especially is the patient is receiving higher opioid dosages without evidence of benefits from the higher dose, that's a time to pause and reconsider. If the patient has current evidence of opioid misuse or the patient experiences side effects that diminish the quality of life or impair function, there can be flags to consider whether to continue opioids at the current dose. If the patient experiences an overdose or other serious event such as hospitalization or injury or if they have warning signs for an impending event such as confusion, sedation, or slurred speech that is important prompt to consider opioid dosage reduction. Other reasons to consider tapering would be if the patient is receiving medications such as benzodiazepines or has medical conditions, for example, lung disease, sleep apnea, liver disease, kidney disease, advanced age, or fall risk that might increase their risk for adverse outcomes.

Or, if the patient has been treated with opioids for a prolonged period such as many years, and the current benefit harm balance is unclear. That's a time to carefully go over the current benefits and risks of opioids with the patient. Next slide, please. The HHS guide includes a summary flow chart. This is on page three of the guide, and it is adopted from the Oregon Pain Guidance with key decision points and actions starting at the top with assessing benefits and risks of continuing opioids at the current dose.

So, we'll go over that in more detail. Next slide, please. In each case, the clinician should review the benefits and risks of the current therapy with the patient and decide of tapering is appropriate based on individual circumstances. Next slide, please. And, here are important considerations when deciding whether or not to taper opioids, consider whether opioids continue to meet the treatment goals, whether or not opioids are exposing the patient to an increased risk for serious adverse events or to opioid use disorder, and overall, whether benefits continue to outweigh risks of opioids.

Other important things to avoid are insisting on opioid tapering or discontinuation when opioid use may be warranted. For example, pain at the end of life or other circumstances where benefits clearly outweigh risks of opioid therapy. And, it's important to note that the CDC guideline for prescribing opioids for chronic pain does not recommend opioid discontinuation when benefits of opioids outweigh the risks. Avoid misinterpreting cautionary dosage thresholds as mandates for dose reduction while, for example, the CDC guideline recommends avoiding or carefully justifying increasing dosages of 90 morphine milligram equivalence or MME per day. It does not recommend abruptly reducing opioids from higher dosages, and it's important to consider individual patient situations.

And, very importantly, avoid dismissing patients from care. While safe and effective opioid use and discontinuation can be challenging, the CDC guideline and the HHS taper guide emphasize that clinicians have a responsibility to provide care for or to arrange for management of patient's pain and should not abandon patients. Next slide, please. When benefits outweigh risks of continuing opioids at the current dose, document your benefit risk assessment and reevaluate benefits and risks with your patients on an ongoing basis. Quarterly assessment is appropriate for many patients.

Next slide, please. However, when risks outweigh benefits of continuing opioids at the current dose, discuss with your patient. Educate your patient regarding the potential risks of continuing opioids at the current dose. Offer a taper and start a slow taper when the patient is ready. If the patient is able to taper down until benefits outweigh risks of remaining at the new dose, follow up and reevaluate benefits and risks with your patients on an ongoing basis.

Next slide, please. Before initiating a taper, these steps can improve taper outcomes. Let patients know they may experience temporary increased pain related to what we all hyperalgesia or to opioid withdrawal. Worsening of pain is a frequent symptom of opioid withdrawal that may be prolonged but tends to diminish over time. It can be helpful to know that this is usually time limited.

Advise patients that there's an increased risk for overdose on abrupt return of a previously prescribed higher dose. Strongly caution that it takes as little as a week to lose tolerance and that there is a risk for overdose if they return to their original dose. Provide opioid overdose education and consider offering Naloxone. Commit to working with your patient to improve function and decrease pain. Integrate safe and effective non-opioid treatments into patients' pain management plans.

Integrating non-opioid pain therapies before and during a taper can help manage pain and it can also strengthen the therapeutic relationship. Access appropriate expertise if considering opioid tapering or managing opioid use disorder during pregnancy. Opioid withdrawal risks include spontaneous abortion and premature labor. For pregnant women with opioid use disorder, medication assisted treatment is preferred over detoxification. Assess for and treat comorbid mental disorders.

Depression, anxiety, and post traumatic stress disorders can be common in patients with painful conditions, especially in patients receiving long-term opioid therapy. We know that depressive symptoms predict taper dropout and treating comorbid mental disorders can improve the likelihood of opioid tapering success. If your patient has serious mental illness, is at high suicide risk, or has suicidal ideation, offer or arrange for consultation with a behavioral health provider before initiating a taper. Importantly, opioid use disorder is common in patients receiving long-term opioid therapy for chronic pain. So, if a patient exhibits opioid use misbehavior or other signs of opioid use disorder, assess for opioid use disorder using Diagnostic and Statistical Manual of Mental Orders Fifth Edition or DSM V criteria, and if criteria for opioid use disorder are met, especially if moderate or severe opioid use disorder, offer or arrange for medication assisted treatment.

Next slide, please. Opioid use disorder was previously classified as opioid abuse or opioid dependence in the American Psychiatric Association's DSM IV, and it's defined in the DSM V as a problematic pattern of opioid use leading to clinically significant impairment or distress manifested by at least two defined criteria occurring within a year. Moderate opioid use disorder is manifested by four or more criteria, and severe opioid use disorder is manifested by six or more criteria. Next slide, please. The criteria for opioid use disorder are listed here and the next slide and are also provided in the HHS guide.

Examples of criteria include opioids taken in larger amounts or over a longer period than was intended, craving or a strong desire or urge to use opioids and continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids. Next slide, please. Note that the last two criteria, tolerance and withdrawal, are not considered to be met for individuals taking opioids solely under appropriate medical supervision. Next slide, please. Involving patients in decisions regarding continuation or discontinuation of opioid analgesics is likely to improve outcomes.

A recent systematic review found that when opioids were tapered with buy in from patients who agreed to decrease dosage or discontinue therapy, pain function and quality of life improved after opioid dose reduction. The HHS guide encouraging collaborating with patients whenever possible in making decisions about whether to taper opioids and outlines additional opportunities to share decision making with patients. If the current opioid regimen does not put the patient at eminent risk, tapering does not need to occur immediately. Take time to obtain patient buy in. Discuss with patients their perceptions of risks, benefits, and adverse effects of continued opioid therapy and include patient concerns and tapered planning.

For patients who are at higher risk of overdose based on opioid dosages, review benefits and risks of continued high does opioid therapy with your patient. And, for patients who agree to reduce their opioid dose, collaborate with your patient on a tapering plan. Whenever possible, include your patient in decisions such as which medication will be decreased first and how quickly tapering will occur. Next slide, please. The HHS guide and current guidelines emphasize that the tapering may, should be individualized and proceed slowly enough to minimize opioid withdrawal symptoms and signs.

Significant opioid withdrawal symptoms may indicate a need to further slow the taper rate. At times, tapers might have to be paused and restarted again when the patient is ready. Longer intervals between dose reductions allow patients to adjust to a new dose before the next reduction. Tapers can be completed over long time periods, several months to years, depending on the opioid dose. And, the longer the duration of the previous opioid therapy, the longer the taper may take.

Common tapers involve dose reduction of about 5% to 20% every four weeks and slower tapers. For example, 10% per months or slower are often better tolerated than more rapid tapers, especially following opioid use for more than a year. Tapers may be considered successful if the patient is making progress, however slowly, towards a goal of reaching a safer dose or if a dose is reduced to the minimal dose needed. Next slide, please. It can be helpful to counsel patients about what to expect.

Early withdrawal symptoms such as anxiety, restlessness, sweating, muscle aches, diarrhea, and cramping usually resolve after five to ten days following a dosage reduction, but they can take longer. Other symptoms such as dysphoria, insomnia, irritability can take weeks to months to resolve. As mentioned previously, worsening of pain is a frequent symptom of withdrawal that tends to diminish over time for most patients. Withdrawal symptoms should be minimal and manageable if tapering is

done gradually. And, again, if the patient is experiencing significant opioid withdrawal symptoms, this may indicate a need to further slow the taper rate or to pause the taper.

Short-term, oral medications can help manage withdrawal symptoms, especially with faster tapers. These are listed in the HHS guide, and they include alpha-2 agonists such as lofexidine for the management of autonomic signs and symptoms like sweating or tachycardia. Other short-term oral medications include NSAIDS, acetaminophen, or a topical menthol methyl [inaudible] for muscle aches, trazodone for insomnia, other symptomatic medications for nausea, abdominal cramping, and diarrhea. Next slide, please. Make sure your patients receive appropriate psychosocial and behavioral support.

Some key ways to do this, ask your patient how you can support them. Recognize that while motives for tapering vary widely, fear is a common theme among patients. Many patients fear stigma, withdrawal symptoms, pain, and/or abandonment. Acknowledge your patient's fears about tapering. Remind your patient that while their pain might get worse at first, most people have improved function without worse pain long-term after tapering opioids.

Tell patients, "I know you can do this," or "I'll stick by you through this. " If possible, make yourself or a team member available to provide support if needed, and follow up frequently. Watch closely for signs of anxiety, depression, suicidal ideation, and opioid use disorder and offer support or a referral as needed. And, collaborate with mental health providers and other specialists as needed to optimize psychosocial support for anxiety related to the taper. Next slide, please.

If patients experience unanticipated challenges to tapering such as inability to make progress despite their intention to taper or despite opioid related harm, it's important to assess for opioid use disorder using DSM V criteria. And, again, if patients meet criteria for opioid use disorder, especially if moderate or severe, offer or arrange medication assisted treatment. Note that there are important issues in timing the transition to medication assisted treatment for opioid use disorder when a patient has been taking long-term opioid agonists for pain. For example, Naltrexone should not be initiated before opioids are tapered because doing so can precipitate severe, prolonged withdrawal. Buprenorphine should be initiated when the patient is in mild to moderate opioid withdrawal and we'll touch on this again later in this presentation.

Next slide, please. What about if your patient is on high opioid dosages is unable to taper despite worsening pain and/or function with opioids or they have an unfavorable risk benefit profile for continued high dose opioid use, but they don't meet criteria for opioid use disorder? In these cases, you can also consider transitioning to buprenorphine, and buprenorphine can then be continued or tapered gradually. Next slide, please. So, buprenorphine is a partial opioid agonist that can treat pain as well as opioid use disorder, and it has other properties that may be helpful including less opioid induced hyperalgesia and easier withdrawal than from full agonist opioids. And, importantly, less respiratory depression and less overdose risk than with other long acting opioids.

As mentioned previously, transitioning from full agonist opioids requires attention to timing of the initial buprenorphine dose to avoid precipitating withdrawal and to avoid precipitating protracted withdrawal from full agonist opioids when starting buprenorphine, patients need to be in mild to moderate withdrawal including clinical opioid withdrawal score or [inaudible] objective signs before the first buprenorphine dose. And, on a practical level, how to do this, generally, you wait at least eight to 12 hours after the last dose of short acting full agonist opioids before the first dose of buprenorphine. If the patient's taking long acting full agonist opioids such as methadone, you need to allow more time before starting buprenorphine, for example, at least 36 hours after the last methadone dose. And, there

are more details about this in the HHS guide. In addition, if you're unfamiliar with the initiation of buprenorphine, it's probably a good idea to consult with a clinician experienced in its use, and the HHS guide provides additional details about how to find training, technical assistance, and mentors through SAMHSA's provider clinical support system.

Slide, please. For patients who are unable or unwilling to taper and who continue receiving high dose or otherwise high-risk opioid regimen such as opioids prescribed concurrently with benzodiazepines, close monitoring and mitigation of overdose risks are recommended. For example, provide overdose education and naloxone. In addition, periodic and strategic motivational questions and statements can encourage movement toward appropriate therapeutic changes. For example, nonjudgmentally asking what the patient likes and dislikes about opioid therapy can facilitate exploration of ambivalence and asking patients how they would like things to be different can empower them to imagine change.

Next slide, please. And then, I wanted to touch on the situation when patients are using both benzodiazepines. Some patients might require tapering either one or both of these medications to reduce risk for opioid, for respiratory depression. And, in this case, tapering decisions and plans need to be coordinated with prescribers of both medications if more than one prescriber is involved. Remember, that if benzodiazepines are tapered, they should be tapered gradually due to the risk of benzodiazepine withdrawal including anxiety, hallucinations, seizures, delirium, tremens, and in rare cases, death.

An example, benzodiazepine tapers, and guidance are available, including from the VA Pharmacy Benefits Management Academic Detailing Service. And, the link to this resource is at the bottom of the slide, and it's also provided in the HHS guide. Next slide, please. While evidence on the benefits and risks of opioid dose reduction or discontinuation is evolving and evidence on effectiveness of various approaches to tapering is limited, among studies rated by a recent systematic review as good or fair quality, when opioids were tapered following discussions with patients who agreed to taper, their pain, function, and quality of life improved after dose reduction. Overall, following voluntary reduction of long-term opioid dosages, many patients report improvements in function, sleep, anxiety, and mood without worsening pain or even with decreased pain levels.

It is very important to remember that these studies for which positive outcomes were found use specific opioid tapering practices including shared decision making, slow tapers, and patient support. Harm has been reported with other practices, and in particular, with rapid tapering or with abrupt discontinuation. So, unless there is a life-threatening issue such as eminent overdose, the benefits of rapidly tapering or abruptly discontinuing opioids are unlikely to outweigh the significant risks of these practices. HHS does not recommend abrupt opioid dose reduction or discontinuation. However, following slow, voluntary reduction of long-term opioid dosages, many patients reported improvements in function, quality of life, anxiety, and mood without worsening pain or with decreasing pain levels.

Next slide, please. Just briefly, I wanted to let you know about a few places to go for additional resources on opioid tapering. Next slide. The 2016 CDC guideline for prescribing opioids for chronic pain includes a section on opioid tapering. Next slide.

Translational tools for the CDC guideline including a tool for assessing benefits and harms of opioid therapy and a pocket tapering guide are available on CDC's website. Next slide. You can find a taper decision tool on the VA's website including example opioid tapers showing examples of faster and slower tapers and also outlining taper planning considerations and tips for managing opioid withdrawal. Next slide. As I mentioned previously, SAMHSA's provider clinical support system, available through pcssnow.

org offers training and technical assistance as well as mentors to assist those who need to taper opioids and have additional questions. Next slide. And, SAMSHA's website includes additional information on how to apply for a practitioner waiver to prescribe buprenorphine for opioid use disorder, how to find practitioners and treatment programs for patients with opioid use disorder, and more. Next slide, please. Finally, you can find the HHS guide for clinicians on the appropriate dosage reduction or discontinuation of long-term opioid analgesics at hhs.gov/opioids. Just search for taper. Next slide. And, here is the HHS guide. Next slide.

Thank you very much. I'll turn it back over to Commander Khan for your questions.

Thank you so much, Admiral Giroir, Dr. Compton, and Captain Dowell for providing our audience with such a wealth of information on this important public health topic. We appreciate your time and value your clinical insights on this matter. We will now go into our Q and A session. Audience, please remember, you must submit questions through the webinar system by clicking the Q and A button at the bottom of your screen and then typing your question.

Again, please do not ask a question using the chat button.

Our first question asks how much do we know about how well patients do after opioid tapers?

Thank you for that question. So, we need, we critically need more research to define optimal strategies for opioid tapering, and many of the available studies on opioid tapering have used uncontrolled designs and have been rated low in quality by systematic reviews. However, several recent systematic reviews summarize what we do know about how patients do after opioid tapers, and one of these by Joe Frank and others in the Annals of Internal Medicine looked at patient outcomes after tapering. They identified 67 studies, of which 11 of these were randomized trials, and 56 were observational studies. They found three of these studies were good quality and 13 were fair quality.

So, they focused on these 16 studies, and they found that among this set of studies with at least fair quality evidence, opioid tapering was associated with improved pain function and quality of life. But, again, it's important to remember that these studies, for which positive outcomes were found, did use specific opioid tapering practices that were described in this talk and in the HHS guide, including shared decision making, slow tapers, and patient support.

Thank you for that answer.

We have a couple of questions that have come in that both have to do with opioid withdrawal. First question asks that academically this individual has learned that unlike benzodiazepine withdrawal or alcohol withdrawal, withdrawal from opioids is not life threatening, and if this individual patient's not doing well on opioids, why not err on the side of stopping opioids as soon as possible?

So, that's a great question, and we, I remember being taught in medical school and training that unlike benzodiazepine withdrawal or alcohol withdrawal, opioid withdrawal is not life threatening. However, we now know, on the basis of some recent studies and from anecdotal reports that abrupt discontinuation or rapid taper of opioids can be very harmful to patients. And, the consequences range, as Dr. Compton described earlier, from mild withdrawal symptoms to serious psychological distress, and even suicidal ideation. There was a recent observational study by Mark and others involving almost 500 patients which found that half of patients who were rapidly tapered off of opioids or, in some cases, immediately

discontinued from opioids, half of the patients experienced an opioid related hospitalization or emergency department visit after that taper or discontinuation.

Importantly, that study also found that each additional week of tapering time before opioid discontinuation was associated with a 7% relative reduction in the risk of opioid, of adverse events. So, evidence is really accumulating that whenever possible, slower is better for opioid tapering. Another study at Stanford by Beth Darnall and others used a slower, more tailored approach to tapering with up to two 5% opioid dosage reduction in the first month and then adjusted according to patient response. Sixty-two percent of patients completed the study, and on average, of those who completed the study, patient's pain was no worse at the end of the study, was actually better by point estimate but not, without statistical significance. But, certainly, the pain was no worse than before.

So, I think this all underlines that what we're learning about the effects of rapid discontinuation of opioids is evolving and that it's important that when opioids are discontinued, it's done slowly.

Thank you.

We have another follow up question about opioid withdrawal, and the question asks what are the consequences of initiating buprenorphine after a patient has fully withdrawn from opioids?

Okay. I'm going to start this and see if Dr. Compton has anything to add. If a patient has fully withdrawn from opioids, we don't have the same concerns about triggering withdrawal. The issue is when the patient is not yet in at least mild to moderate withdrawal and you start buprenorphine while a patient is still on full agonist opioids.

You can actually precipitate opioid withdrawal in that circumstance. So, you have much, much less to worry about in the situation where the patient has already withdrawn. And then, I'm not sure if the question was asking about initiating buprenorphine for pain control or for opioid use disorder or both, but you know, you would simply weigh the benefits and risks of initiating buprenorphine at that point. And, you don't have to worry about precipitating withdrawal as one of the risks. Wilson, did you have anything to add?

Sure. Well, I think you hit the main point, which is that if somebody has completed withdrawal, then we're not worried about precipitating withdrawal with initiation of buprenorphine. But, inducing somebody onto buprenorphine is not a trivial issue, and so, we encourage you to pay attention to the support services that are available through the SAMHSA PCSS and also through the standard training for all the providers who wish to be registered and wish to be able to be able to provide buprenorphine in an outpatient setting. I also want to go back to the last question about withdrawal because one of the things to keep in mind, while all of us were trained that opioid withdrawal is generally not thought of as a fatal process, but there's an awful lot to healthcare beyond simply preventing mortality, and reducing the discomfort and severe issues that patients may experience during withdrawal is part of our responsibility. I also point out that when patients have suffered from chronic pain, withdrawal may be further complicated in those cases because they may not just have withdrawal from opioids and have the typical opioid withdrawal symptoms, but their pain condition itself may be markedly worsened during the detoxification or the withdrawal process.

So, you have sort of two issues working at the same time, and that's part of the reason for a particularly gradual taper in the more sensitive patients that have chronic pain in contrast to some of those that I took care of for many, many years in a substance use treatment program.

Thank you for that.

Our next question is regarding opioids use in combination with benzodiazepine as you had referred to during your lecture. The question asks is it necessary to taper patients who are taking over 90 MMEs of opioids in combination with a benzodiazepine?

So, another great question, and I think that this is something that would prompt, certainly prompt consideration of an opioid taper and carefully reviewing with your patient the benefits and the risks. There may be individual circumstances where this regimen is warranted, but both receiving high does opioids and receiving opioids in combination with benzodiazepines are risk factors for opioid overdose. So, that, you know, there's nothing in the CDC guideline or the HHS guide that says you must absolutely taper someone just because they meet they're over a dosage threshold, but I think that this is just something where you want to seriously consider the risks that this regimen might put a patient at and explore with the patient, you know, going back to the flow chart. Just start out by assessing the risks and the benefits. Dr.

Compton, do you have anything to add?

Well, I think this is a terrific question because it reminds us of the complexity of these patients and the difficulties in developing a care treatment plan. Much of the advice in the CDC guidelines released in 2016 would suggest that we should avoid these situations by not co-prescribing these two substances. But, yes, that doesn't provide the guidance on what do you do when people are already, when patients are already on these combinations which is all too common in practice. And, that's where measuring the, any signs of complications when you look for signs of intoxication or slurring. You know, I'd look for mental confusion or signs that, of toxicity with the combination of suggesting a greater need to consider and tipping the balance in favor of a taper versus continuing the treatment, looking for clear evidence of benefit in those patients where you might want to make a decision to continue.

But, in general, of course, we would recommend that you try to minimize those co-prescribing because that is a risk for complications.

Thank you.

We have another question regarding the use of buprenorphine, and our inquirer asks what can clinicians do to help their patients during withdrawal who happen to meet criteria to transition to buprenorphine.

So, I'm going to start to answer and see if Dr. Compton has anything to add. So, I'm interpreting this question as asking that a patient is being tapered is experiencing symptoms of withdrawal, and then you decide that they meet criteria for transition to buprenorphine. I'm not sure if the question, yeah, go ahead.

That they mean meet the criteria for an opioid use disorder.

For use disorder. Yeah.

And, that's when you would consider a transition to buprenorphine. If you yourself have the experience with use of buprenorphine for the treatment of patients with an opioid use disorder, this is a good place to consider those interventions. Buprenorphine may help with both the opioid use disorder, and it can be

a useful as treating the pain. Because I'm assuming that these are patients with, in this case, a comorbidity between pain and opioid use disorder, and that's a very reasonable case to consider such a transition.

Thank you.

Another question asks, and this is sort of the benefits of tapering versus outweighing the risk. Can you share examples of clinical cases where the benefit of tapering long-term opioid use outweighed the risk, and then conversely, can us hare some examples of clinical cases where the harm of tapering would have outweighed the benefit?

So, I think this question is asking about a patient with - a patient who has misuse or signs of [inaudible] disorders that right, Ibad?

Captain Dowell, could you please repeat your question to me?

I'm sorry. I'm just asking you to repeat the beginning of the.

Sure.

Question.

I'm happy to do so. **The question states can you please share some examples of clinical cases where benefit of tapering long-term opioids outweighs the risk of doing, you know, doing so. And then, the converse was can you share examples where the, of clinical cases where harm of tapering outweighed the benefit?**

Okay. Thank you. That's very helpful.

You're welcome.

Dr. Dowell.

Yes.

Let me take a stab at least the first one.

Okay.

When might you, you know, what are some easy examples of cases where you would want to considering tapering? Well, one obvious example to me, and this has been in the literature quite a bit, is when a patient has experienced an overdose event. So, they've been on chronic, high dose opioids, and they're hospitalized for an overdose. Their families found them with in respiratory distress and may have brought them to an emergency department. That's a case where the risks are clearly demonstrated and consideration of alternative treatments for their underlying pain condition and the, a taper of the opioids and/or sedative agents that they may be also prescribed would be clearly indicated. That's a case where the harms have been documented quite clearly.

What's more subtle would be patients that don't seem to be benefitting from their opioids, you know, so the dosages have been increased and yet the pain is still at exactly the same or even a worse level than previously. That's another case where the escalating dose of opioids no longer is producing the benefits that were hoped, and that's where switching to other agents and considering a taper make a lot of sense. The second half of the question is when might you want to, I think it's the converse. Some examples of clinical cases where the harm of tapering outweighs the benefit. Dr.

Dowell, maybe you can help us with a couple examples of harms of tapering outweighing the benefits.

Sure. So, you may have patients who have a chronic pain problem where the goal of the therapy is really to palliate their pain and not necessarily to extend their life. And, you know, both you and the patient have agreed that the most important goal is comfort, and in some cases, this might be an older patient or and may have contraindications to non-opioid treatments for pain such as, you know, cardiovascular diseases that, or renal disease that would make NSAIDS contraindicated. Or, somebody, maybe who has tried other therapies without benefit and has been tolerating opioids at a stable dose, unlike the situation that Dr. Compton described where somebody's going up and up and up on their dose and not getting pain relief.

Somebody has been maintained on a stable opioid dose and is actually still receiving significant benefits from those opioids. In some cases, it, you know, going through that benefit risk calculation with your patient, the conclusion might very well be the benefits of remaining on this dose outweigh the benefits of tapering in this situation.

Thank you for that great discussion to both of you. I have one last question.

We have time for one last question, and the question says that even though most clinicians would agree that it would be great to provide their patients with behavioral support while tapering opioids, but sometimes, there's just not enough time. And, what can they do if they don't have enough time with their patients to provide that behavioral support? What are some options they have?

That's a great question, and you know, the recommendation was based on some of the higher quality studies where significant psychosocial support was provided. For example, one study included ongoing, 30-minute motivational interviewing sessions throughout the taper. But, for practical reasons, this might not be possible for many clinicians. So, the HHS guide recommends that, you know, even if you don't have the time or the resources to provide this level of support, there are key components you can integrate into your regular visits. For example, reassure the patient that although their dose is being reduced, you're not reducing their level of care.

You're not abandoning them, and you're going to continue to care for them and work with them to address their pain. Let them, you know, reassure them again that while their pain might get worse at first, with each dose reduction, that most people have improved function without worse pain after tapering opioids, and you're going to stick by them, and you're going to be assessing that with them and making decisions together as you go along.

Thank you. On behalf of COCA, I would like to thank everyone for joining us today with a special thank you to our guest speaker Admiral Giroir and our presenters Dr. Compton and Captain Dowell. The recording of this webinar will be posted within the next few days to the COCA website and available on demand at emergency.cdc.gov/coca. Again, that web address is emergency.cdc.gov/coca. All continuing

education for COCA calls are issued online through TCEO, the CDC Training and Continuing Education Online system. The web address is tceols.cdc.gov. Again, that's tceols.cdc.gov.

Those who participated in today's COCA call and wish to receive continuing education should complete the online evaluation by March 2, 2020, and the course code WC2922. The access code is COCA013020. Those who will participate in the on-demand activity and wish to receive continuing education should complete the online evaluation between March 2, 2020 and March 3, 2022 and use course code WD2922. The access code is COCA013020.

Please join us for our next COCA call taking place tomorrow, Friday, January 31st at 2:00 PM Eastern time, and the topic will be the Outbreak of 2019 Novel Coronavirus - Interim Guidance for Clinicians. To receive information on upcoming COCA calls or other COCA products and services, join the COCA mailing list by visiting the COCA webpage at emergency. cdc. gov/coca and click on the join the COCA mailing list link. To stay connected to the latest news from COCA, be sure to like and follow us on Facebook at facebook.com/cdcclinicianoutreachandcommunicationactivity. Thank you again for joining us for today's call and have a great day.