Dr. Robin Masheb: Good morning, everyone. Welcome to today’s cyber seminar. This is Dr. Robin Masheb, Director of Education at the Prime Center of Innovation at VA Connecticut. I will be hosting our monthly pain call entitled Spotlight on Pain Management. Spotlight on Pain Management is a collaboration of the Prime Center, the VA national program for pain management, the NIH-VA-DoD pain management collaboratory and the HSR&D Center for Information Dissemination and Education Resources or CIDER.   
  
Today’s session is I’m Not an Addict, Patient Experiences with Taper and Discontinuation of Long-Term Opioid Therapy. I’m pleased to introduce our speaker for today Dr. Travis Lovejoy who is core investigator at the Center to Improve Veteran Involvement and Care at the VA Portland Healthcare System.   
  
Dr. Lovejoy’s translational research focuses on the design, testing and implementation of clinical and health services interventions that improve health of persons living with chronic illnesses as well as the communities to which they belong. His current research is found in multifaceted treatment approaches for the management of chronic pain in patients with comorbid substance use disorders as well as telehealth approaches to improve mental health functioning and reduce HIV transmission risk behavior in persons living with HIV.   
  
Our presenter will be speaking for approximately 45 minutes and will be taking your questions at the end of the talk. Feel free to send them in using the question panel on your screen. If you’re interested in downloading slides from today, you can go to the reminder email you received this morning and you’ll be able to find the link to our spotlight on pain management presentation. Immediately following today’s session, please stay on the call for a very brief feedback form. This helps us to provide you with great programming.   
  
Also on our call today to address questions about policy are Dr. Bob Kerns, who is Director of the NIH-DoD-VA pain management collaboratory and professor at the Yale School of Medicine. Also joining us will be Dr. Friedhelm Sandbrink. He is neurologist, the VA national program for pain management and director of pain management in the department of neurology at Washington DC VA pain medical center.   
  
And with that, I’m going to turn this over to our presenter.

Dr Travis Lovejoy: Thank you, Robin and thank you Heide. It’s great to be here with everyone back in this forum. It’s been a couple of years since I’ve presented at this forum on work that our team has been doing around opioid discontinuation. I’m excited to present to the group some of our most recent findings in this particular topic.   
  
  
Before I get started, I just wanted to provide some disclosures here. I do receive research funding from the U.S. Department of Veterans Affairs, NIH as well as innovative medical equipment. And today before I dive into some of our own research findings around opioid discontinuation, I wanted to provide a little bit of a tour on the topic over the past decade, generally as well as in the VA and then I’ll conclude with some clinical implications of the work that we’re doing.   
  
So this particular graph here shows trends in opioid prescribing in the VA from 2003 through 2017. You’ll see the blue dotted line here. That’s where we have an increasing slope up until about 2012. This is opioids dispensed within the VA. So total number of veterans who received opioids in any given year. And you can see that the prescribing peak in the VA was reached in 2012 and it’s been on a steady decline since that time. We see steady declines as well in high dose opiate prescribing. In this particular paper it was defined as 100 mg morphine equivalence or greater as well as co-prescribing of opioids and benzodiazepines. These are similar trends to what we see in the general U.S. population where we saw prescribing peak in 2012 and steady decline since that period of time.   
  
So why are we seeing these declines? Well there’s a number of reasons that I think we could surmise from various policies that have been enacted at local, state as well as federal levels. This particular study was conducted by some of our colleagues in the Ann Arbor by Allison Lynn. And they were looking at the impact of the VA’s opioids safety initiative which was implemented in 2013 and to try to understand if there was an association between the implementation of the opioid safety initiative and declines in various forms of opioid prescribing.   
  
So this particular graph here shows a solid line at the top and this is the projected rates of opioids decline in the VA. This is actually high dose opiate prescribing of 100 mg or greater. And this is what we would predict from 2013 on, this straight line here. But what we actually see in the data is that following the implementation of the opioid safety initiative in 2013 we saw a greater reduction in this high dose opioid prescribing. There are very similar graphs presented in this paper that look at even higher doses of opioid prescribing, 200 mg or greater as well as co-prescribing of opioids and benzodiazepines.   
  
So the paper concludes that there is an association between the implementation of the opioid safety initiative and declines in overall opioid prescribing above and beyond what we would expect due to just general trends.   
  
In 2016 as many on this call would likely know we saw the CDC release its guidelines around opioid prescribing for chronic pain. This was very important work. The recommendations were met with I would say mixed fanfare, but it really helped to provide some guidance, particularly to clinical teams in terms of how do we address this particular issue of opioids for long-term opiate therapy for chronic pain. There were some recommendations around acute pain as well.   
  
The guidelines were really intended to be a patient centered approach or guidance to working with this particular patient population. And then of course one year later the VA-DoD guidelines came out that were similar in many ways to the CDC guidelines.   
  
A couple of years after the guidelines from CDC were released there was a publication that came out and this was from Erin Krebs and her team in Minneapolis. They had conducted the space trial which was a randomized controlled trial for patients with chronic back pain as well as hip or knee osteoarthritis pain. And 240 patients in this trial were randomized, either receive opioid medications for their pain or non-opioid analgesic pharmacotherapy. What they ultimately found was that those who were prescribed opioids had no better pain function or pain interference as they measured it than those who did not receive opioids. And those who were on opioids also had slightly higher pain intensity and more adverse side effects related to the medication than did those who were not prescribed opioids.   
  
So this was a very important paper and certainly has been one that guided the field in many ways in terms of better understanding the longer-term benefits of opioids for chronic non-cancer pains.

Around the same time as that publication came out our group was doing some work around opioid discontinuation. And one of the things that we were interested in examining is better understanding what patients’ pain experience is like following discontinuation of opioid therapy. So this was a study that involved electronic medical record review. We randomly sampled 600 patients across the VA nationally and examined their trajectories of pain intensity scores as measured during clinical encounters in the year before and after opioid discontinuation.   
  
And this particular graph shows a one-year plot of average pain scores following opioid discontinuation. So as you can see, there were kind of four different categories of patients. Those who were experiencing low pain or subclinical pain down at the bottom line. Those who were experiencing more mild pain, on average around 4 on the 0 to 10 numeric rating scale. Those who were experiencing more moderate pain, around 6 or so. And those who were experiencing more severe pain at 8 or higher.   
  
Now one of the things that you may notice here is that these lines are almost parallel and flat. So what this ultimately says is that over time while patients may experience varying levels of pain in terms of pain intensity, it really doesn’t change. And if we extrapolate these or if we map these back in time prior to discontinuation, you’ll essentially see a flat line. So what they were experiencing before opioid discontinuation is very similar to what they were experiencing after discontinuation if you look at scores over a longer period of time.   
  
One of the findings from this particular study that I think is buried in the results, not purposefully. I thought it was actually one of the more profound findings but certainly doesn’t really get talked that much about, but is this particular graph. And what this graph shows is average within patient variability in pain scores over time. So if you look at the 12-month pre-discontinuation period, on average the patients are at about a 4.5, but you can see the wide variability. So these lines here at the end of each of the vertical bars represent the 25th and 75th percentiles. So you can see that on average patients really have a span of about 2.5 to near 7. So about a spread of 4.5 points on average per patient in the pre-discontinuation period. This narrows slightly. And you can see that again we’re still at about 4.5 on average and the spread is about four points.   
  
So what this ultimately suggests is that patients experience considerable within individual variability. Meaning that their pain scores oscillate quite a bit over time. And frankly if you’ve ever conducted a pain diary with a patient to have them plot their pain in a given day or over a period of a week for example, you’ll see considerable within individual variability. So this was not terribly surprising to us. But I think a really important thing to note. That even though the pain doesn’t change, there’s still quite a bit of variability both before and after opioid discontinuation.   
  
So that’s ultimately what we concluded from this particular finding. That while pain doesn’t necessarily change on average, it’s still going to oscillate quite a bit. And I think that’s a really important consideration for patients and certainly in patient education when a clinician is talking with them about opioid taper and discontinuation. The pain isn’t necessarily going to get worse, but it’s not necessarily going to get better. And like their experience prior to discontinuation, there will be considerable variability within a period of time and even within a given day.   
  
So pain doesn’t change if you prescribe someone opioids or if you prescribe them a non-opioid analgesic. It doesn’t change if they’ve been on long-term opioid therapy and they discontinue from opioid therapy. So this would suggest that maybe discontinuation is the right thing to do for all patients if it’s not going to change their pain intensity.   
  
Well, those of us in the pain field of course know that pain intensity is not the only outcome that is meaningful for patients. There are many others that are influential to patients, such as function and quality of life. There are also really important outcomes to healthcare systems.   
  
So one of the things we wanted to look at in this particular study that we did with the 600 patients is to examine suicide outcomes following discontinuation. So one of the things that we ultimately found was that patients who were discontinued had increasing rates of suicidal ideation as well as suicidal self-directed violence, so suicide attempts.   
  
An even better study on this particular topic was conducted by our colleagues in Palo Alto. They looked at national sample of veterans and wanted to look at the association between opioid discontinuation and overdoses and suicide related deaths.   
  
So this particular graph that you see here in the purple line shows patients who discontinued long-term opioid therapy and the dotted yellow line is patients with a prescription for opioid, so these are one that are still taking opioids. What you can see from this is that we have heightened rates of these adverse events overdose, suicide related deaths in the patients who discontinue opioids. And this is particularly notable in the about 75 to 100 days or so after discontinuation. That’s where they’re at the highest risk of having one of these adverse events and then it kind of flattens out over time.   
  
Interestingly there’s actually a little bump in the dotted yellow line as well when patients first initiate opioids is when we see the highest risk in that opioid using population of having an adverse event.   
  
Some of the other findings that were coming out or commentaries during this period of time were coming from National Institute on Drug Abuse. So this is a paper published in the New England Journal by Wilson Compton at NIDA. They were essentially looking at this association between opioid use or commenting on this, the association between opioid use, prescription opioid use, and heroin use and their question was are we seeing as patients are discontinuing prescription opioids, are there increased likelihood of these patients transitioning and staring to use heroin and potentially being at risk for overdose related to that particular illicit substance.   
  
These data here are from CDC and they plot overdose, drug overdose deaths, from 1999 through 2017. I’ve circled right around 2012 here because as you may recall from one of the very first slides I presented, it was around 2012 that we saw the prescribing peak of opioids both in the U.S. and in the VA. So here in 2012, this is kind of an inflection point. So the question might be are we seeing at this point increasing rates of overdose related to other illicit opioids.   
  
The light blue line that spikes up around 2014 are synthetic opioids. So fentanyl we’re looking at here. So these are fentanyl related deaths. Below that there’s kind of a darker kind of greenish brown. That is heroin. We’re also seeing right around 2012 that’s starting to increase. And then maybe somewhat paradoxically the green line just below that are natural and semi-synthetic opioids, our morphines, our Vicodins, our Percocets.   
  
And so even though we are taking these opioids out of circulation, both within the VA and across the country, we’re still seeing increases in overdose deaths related to those specific prescription opioid medications.   
  
So let’s take some of these data out a little bit further in time. So I put a red line here in 2017 where that last chart ended and unfortunately I wasn’t able to locate data that breaks it down in a similar way beyond that. But these are overall overdose deaths. And it got cut off a little bit here, the title. But these are overdose deaths data from the CDC and this is current as of last month.   
  
So what we see here in 2017 is that we actually saw a plateau in overall overdose deaths. And I should note that in any given time about 75% or so drug related overdose deaths are due to some form of opioid. So we saw a plateau of this from 2017 to about 2020 and then in early 2020 we started seeing a rise. So over the last two, to two-and-a-half years we’ve seen a rise in overall overdose deaths. Again approximately 75% of which are related to opioids.   
  
So we’re still seeing a rise in opioid related deaths. Again, even though we’re taking opioids out of circulation, prescription opioids.   
  
Then I guess the question is are we actually seeing these transitions that patients are going from prescription opioid use to heroin opioid use? Well, our colleagues in Ann Arbor had some work in this area funded by the CDC. This is National Claims Data, Optum databases. And they were looking at heroin overdose and trying to understand what prescription opioid use patterns were in a period of time prior to the heroin overdose. And ultimately what they found, I think it was upwards of slightly more than 40% of patients with a heroin overdose had had a prescription opioid in the year prior to that overdose. So that was quite common.   
  
What was not common was opioid discontinuations. So they didn’t see a very high proportion of patients. I think it was fewer than 10% of patients actually had an opioid discontinuation prior to the heroin overdose. So what we’re seeing here is that there is a particular profile of patient at increased risk, who is using multiple substances. They may be using heroin. They may also be obtaining somehow prescription opioids. And again, within claims data this is going to be obtaining the medications legitimately but there may be others who are also obtaining them illicitly either on the street or borrowing or buying from acquaintances and so forth.  
  
So there really is a profile of higher risk patients out there. And I think we’ve known that. Patients with histories of substance use disorder have increased likelihood of having an opioid related adverse event.   
  
One of the questions though that our group had was are we seeing this in the general patient population? Are those who are on long-term opioid therapy receiving that through primary care, have been on these medications for a long period of time, do not necessarily have histories of substance use disorder, are these patients going to have the same type of adverse outcome potential as those who are at a higher risk profile? That was an empirical question that we wanted to answer.  
  
So all of these data, and I’m almost done with the tour here and we’ll get into some of the data from one of our studies. But all of these things going on, there were some questions being asked. And this particular paper, this came out in New England Journal in 2019 and this is from the authors of the CDC guidelines for opioid prescribing for chronic pain. Ultimately what they conclude is that their recommendations they believe may have been over extended or maybe used in ways that they never intended. So here, this is a direct quote from the article. They note that there may be policies that are encouraging hard limits and abrupt tapering of drug dosages of opioid dosages resulting in sudden opioid discontinuation or dismissal of patients from practices.   
  
That is not the intention. That was never the intention. If you recall, I had underlined that the guidelines were meant to be a patient centered approach to managing opioid therapy for patients who are living with chronic pain. So there were a lot of policies that were happening that they felt were misconstruing or misinterpreting what the intention of the guidelines were.   
  
So right around this time all this is all kind of culminating around 2018, 2019. We were very fortunate to receive funding from VA Health Services Research and Development to conduct a perspective cohort study of patients in the VA on long-term opioid therapy. Ultimately what we did is we recruited almost 1400 patients nationally. We took a random sample of patients who are on long-term opioid therapy.   
  
We actually defined this as being on opioids for at least 12 calendar months, consecutive calendar months. So they're on opioids for a year. This is a little bit more conservative definition than the typical three months or six months of chronic opioid therapy. So we looked at it for a year.   
  
We also stratified our recruitment in this particular sample. So we stratified it across race and ethnicity and sex. We were able to recruit a sample that is approximately half female veterans and half of the veterans were identifying with a minoritized race or ethnicity.   
  
Once these patients are in our cohort, we’re following them for two years and they’re doing surveys every six months. Self-administered surveys. And what we’re also doing is running an algorithm on this particular cohort every two weeks. So we have an algorithm that searches their electronic health record to look at the pharmacy data, to identify patients who have gone at least two weeks without filling an opioid prescription. So they’ve gone past kind of the end date of their most recent opioid fill and they still haven’t filled. Then what we do is we have some of our staff go into the medical record and review the chart to see if there’s evidence of opioid discontinuation.   
  
And if there is, then they kind of enter into a sub cohort of patients who have discontinued opioid therapy. If there isn’t any evidence, then we continue to monitor them on a weekly basis to see if ultimately opioid discontinuation is happening or if for example a patient was on vacation and just took more than two weeks to fill the prescription. So we’ve been able to, as of this date, identify about 16% of our cohorts. So this is a little over 220 patients who have discontinued opioids since starting our study which we started recruiting patients in late 2019 and completed recruitment about a year later in late 2020.   
  
We haven’t followed all patients for the entirety of the two years. Those data are still coming in. But we’re nearing completion. We have about a year of data on all patients as of now and then the remainder of the data should be in by the end of this calendar year.   
  
  
One of the I think somewhat a unique feature of this particular study is we embed a longitudinal qualitative study within this larger cohort. So when patients discontinue from opioids, and we’ve identified that and confirmed that in the medical record, for a subset of patients we reach out to them and conduct a qualitative interview to try to understand their experiences with the opioid discontinuation process. We conduct that initial interview early on, as close as possible to the time of opioid discontinuation. Then we conduct another interview, or two additional interviews, one six months after the initial interview and one 12 months later. Those data as well are still coming in right now.   
  
But I’m going to be presenting some of our qualitative findings that came from this study from the initial interviews with some of our opioid discontinuers. This is from about 40 patients or so.   
  
This particular slide shows some of the themes that are popping up again reported by the patients during their qualitative interviews around reasons that they discontinued opioids. Some of the reasons they identified that were directed towards the providers. So these would be kind of a provider-initiated reason for discontinuation. Patients are telling us that they clinicians say to them bad things happen to people who take opioids. And that’s kind of a broad statement and there are some specific quotes that I’ll show upcoming. But that’s just kind of a general theme that we were seeing in the data.   
  
There’s an increased potential that patients will become addicted when they’re on opioids long-term. The system made me do it. So this is the patients are saying that the clinicians described it being a VA policy, not necessarily their decision but a larger system level policy that they had to abide by. Some clinicians just said I don’t prescribe opioids for chronic pain, that's not something that I do. And some of them actually specifically, and this is interesting to me, the patients used the word opioid safety initiative. So they’re saying that the clinicians are describing the opioid safety initiative as the reason that they’re being taken off of their long-term opioid therapy.   
  
There are some patients’ reasons as well. And so we do have patients who are deciding to come off of opioids because they’re saying that the opioids are not effective at managing their pain. They just have a preference to stop the medication, maybe they have a very robust medication regimen and they want to try to reduce the number of medications that they’re taking in addition to maybe the opioids maybe not being effective. This is would be a reason that the patient would want to come off of the medication. And then actually some patients admit to variant behavior. So they describe some things that they’re doing in violation of opioid agreements. Or maybe even suggest that they have concern about some of their own addiction potential and other drug related potential. We’ll show you some of those quotes upcoming.   
  
Some of the data I wanted to present are these qualitative data. These are quotes. So I’m going to present several of these. So what we have on the left of each of these is a quote from the patient during the interview and then this is juxtaposed with data that we actually pulled from the patient’s electronic health record. So we look in the EHR at the reason for discontinuation as documented in the medical record and we’re comparing this to what patients are saying.   
  
So here’s an example and bear with me, I’m going to read some of these out loud here. But this patient says well he just told me. He’s like I really want to get you off this. You’ve been taking it a long time and you know it’s time for you to get off of it. Because they want us to clear you off this stuff, you know. He said it was sort of a direction from the VA. It wasn’t his choice. It was, he was being directed to. So again, this was that example I was describing to you of patients indicating that their clinicians are telling them this is not my decision to take you off, this is the VA decision.   
  
And then in the electronic health record what we have here is a clinician documenting the patient has a history of chronic pain and anxiety, currently taking Tylenol and codeine #3 and Xanax. Recommended that we stop the Tylenol codeine and replace it with gabapentin to avoid potential adverse interaction between meds. The patient is hesitant to switch to gabapentin but agrees to give that a try. Will maintain her on Xanax for now, discontinue the Tylenol with codeine and start gabapentin 100 mg bid.

Different reason. And so what the patient is taking home and at least conveying to us is different than what is documented in the EHR. Clearly there’s risks for this patient being co-prescribed opioids and benzodiazepines. But for whatever reason, and we can certainly talk about this maybe in the discussion a bit, the patient is not describing this to our interviewer. They’re really actually focusing on these other messages that they say the clinician’s conveying to them.   
  
So here’s another one. The patient says well I went there and on my last checkup, which is about a month or so ago and she said, and this is she being the provider, I’m sorry buddy, I hate to break the news to you. I can no longer give you hydrocodone. And I never was told why. She said that I broke the contract. And I said what contract. You know, I know you signed a yellow piece of paper, I know you signed something that you don’t take medication Dr., and this is a surgeon, is the one that did the surgery on my prostate and took it out because I had cancer. She went ahead and took me off of it anyway.   
  
So this is the patient who is describing a situation where he had prostate cancer. Met with urology, ended up having surgery as a result of that and was provided opioid medication postoperative for acute pain. But these are the same opioids that the patient already had a prescription for from the VA. So this was all done within the VA. The patient was prescribed oxycodone and was also given this postoperatively. So kind of double dipping in some ways.   
  
So in the electronic health record it says discussed with vet breach of opioid contract with recent Percocet received from urology from this doctor on such and such date from procedure of penial implant and bladder sling. He had just received from VA provider on blank date, 14-day supply of Percocet and today vet states he told the surgeon that he had Percocet but still received Percocet. Understands provider stopping opioids.   
  
So there’s consistency in what the patient and the provider are saying. The patient doesn’t see this as a violation of the opioid agreement. This is all in the VA. Why would I be penalized if I have Percocet prescribed by primary care but then I go and have a procedure and they give me opiates, the same opiates for that postoperative pain? He doesn’t see this as a violation. The clinician does not have the same perspective as documented in the medical record.   
  
Here's a patient who says there was no case where I violated or misused or overdosed or anything in my medicine. They just took it. I was a number. They treated me like a number.

Not very descriptive, but clearly there’s an emotional reaction this patient is having to the experience of being taken off of opioids.   
  
In the electronic health record, we have additional information. It says bupropion may be a better option that Norco. And he, patient, expressed much concern over change of medication due to his past struggles with alcohol and cocaine. We discussed specifically how the medications work and why bupropion may be a better option.

So this is a scenario where the clinician is saying this patient has a history of substance use. He has some concern about continuing to prescribe opioids given this history and ultimately that lead to the discontinuation. From the patient’s perspective, certainly the patient is aware of their own substance use history, but didn’t view this as being a problem. Did not view it as being an issue. Did not view it as an active concern and so to be taken off of the medication felt very perplexing and maybe somewhat unjust to this particular patient.   
  
Another quote. I didn’t want to be an addict and I didn’t, I knew that it wasn’t working for me. And I know enough about addiction that I did not want to see myself go down a path where I was looking for something on the street.   
  
So here’s a patient. This would be a patient reason for discontinuation. Wanting to come off of the medication. Stating this to the reviewer. Alluding to this addiction potential. We get a little more clarification in the electronic health record.   
  
This is a correspondence I think via secure messaging through my healthy vet from clinician to the patient. Hello. I’m very concerned for your safety. You suffered a severe fall in August and with facial trauma, broken nose and need for stitches. Your blood alcohol was four times over the limit. In July your blood alcohol level was three times over the limit. I feel that narcotics or benzodiazepines, that is drugs in the valium family, should not be prescribed.   
  
So clearly this patient has behavior that is high risk, that is of concern to the clinician and rightfully so. A discontinuation was probably very warranted in this particular scenario. And I think the patient ultimately agreed but didn’t convey that level of detail.   
  
So we’re getting a lot of insight when we look at what patients say and then what is actually documented in the EHR.   
  
Here’s some other themes that are coming up in our qualitative data. This particular theme focuses on the relationship between the patient and the provider, which we are discovering is just I mean I think we know this, that it’s so fundamentally important but these qualitative data, these very rich qualitative data are really reinforcing that notion in the context of opioid taper and discontinuation.   
  
So here’s a patient who has concern about the relationship. But I will say, and I’ll read a little bit at the bottom here just before that second portion of the red, the patient says I mean I guess they’re so overworked they don’t have the time and they don’t have the time to I guess per se to spend the time with you. I guess I don’t know if it’s due to their work or patient load or I don't know, but it’s like a revolving cycle. You go in there, you sit down, you tell him what’s going on. They pump information into the computer and the next thing you know they’re giving you a list. Go do your x-rays, go get your medicine or whatever.   
  
So this is an experience that a patient has going to primary care. As we know our colleagues in primary care, very large patient panels, not a lot of time oftentimes to be able to spend with patients. And some patients actually they really feel like that is what they need and what they want. They’re not getting that experience. And this particular patient, again this is someone who had discontinued opioids, didn’t necessarily blame the provider. Felt like it was a systemic issue, that the providers were too busy, to overworked to be able to provide the level of attention, the level of care maybe that was warranted given the situation, the complexity of what the patient was bringing to the table.   
  
Another theme that comes up in the qualitative data is around addiction stigma. So this particular patient, I’ll read the whole quote here. This patient says but she looked at me and immediately assumed that I was lying about the pain. And she didn’t want to prescribe the medicine at all. But because I was on it, she didn’t want to suddenly withdraw. So she cut it in half. And she just treated me very poorly and told me about all kind of things about people addicted to it and people only wanting you know maybe taking it and selling it and I’m like what, I’m in here because I’m asking for help and you’re telling me all you know, you're just treating me like I was a criminal of the street is what you made me feel like.   
  
Okay, so this is probably a very well-intentioned clinician describing some of the risks around opioid use that are generally out there. And this patient is saying hey look, you’re putting me in a bucket, you’re putting me in a category that I don’t feel like I belong in. This feels like a lecture to me about people who are at high-risk. And I get it, there are people who are out there who are very much like this and this isn’t me. You’re not listening to me. You’re not hearing me. This isn’t me. So a very kind of stigmatized experience that this particular patient had.   
  
Another quote along these lines. I even told him the reason why that I didn’t have it in my system because I was doubling up on them because of my size and because of the … that I was getting a tolerance to them because of my back pain. And I told him I said you know I’m not abusing these. I’m not addicted to them. I just, I need them because of my pain. And like I told him I said you know if there was every any issue about this in the future, I said well look, I would make sure that I would take them right if I was prescribed the right dosage. I said but this can’t happen with the dosage I’m on because I mean I’ve been on them for so long that and my stature and my weight, it just wasn’t conceivable to do that with what I was on.   
  
So here’s a patient who’s describing being a large person, of having been on opioids for a long time, developing a physiological tolerance. This patient actually even admits to misusing opioid. Doubling up on the opioids, running out of the opioids early. And is ultimately saying hey look, if I just had the right dose, then things would be okay. So there’s something that’s missing here. Like there was a piece of education around kind of the opioids, around the mechanisms of action, trying to help the patient understand why tolerance was being developed, why there could be opioid induced hyperalgesia. All these other types of issues that could be going on that seem like if it was conveyed to the patient, the patient hadn’t retained that and wasn’t communicating it to our interviewer. And instead kind of felt stigmatized around the discontinuation process here.   
  
So again, these are topics that are kind of continually coming up in the interviews that we’re doing.   
  
I wanted to conclude some of these, the data presentation, with a little bit of the quantitative data that we have. These are some preliminary data that we’re looking at. So from the surveys we administer a number of different validated measures and some of those measures focus on shared decision making around opioid use, trust in provider, specifically the opioid prescribing clinician, as well as opioid use misuse behavior as measured by the current opioid misuse measure or the COM.   
  
What we find here, we’re interested at looking and see if there was an association between shared decision making as perceived by the patient and opioid misuse. And what we ultimately find is that there’s a negative association. So as we have greater perceived shared decision making between the patient and the clinician around chronic pain management including opioids, there is a decrease in patient reported opioid misuse behavior based on the COM.   
  
Again, these patients are on long-term opioid therapy. So this is our entire cohort of almost 1400 patients. These are baseline data, so none of the patients have discontinued opioid at this point in time.   
  
What we see is that part of that association between shared decision making and opioid misuse flows through the trust in the provider. So we see if there’s increased shared decision making, the patients have increased trust in that clinician which is then negatively associated with opioid misuse.   
  
These are some interesting findings from our perspective. We’re excited to be able to replicate this with some of our longitudinal data as well. A post doc who works with me, Vanessa Sumahana will be presenting these data at the college on problems of drug dependence coming up in a couple of weeks in Minnesota.   
  
So some of the conclusions from I think the tour and some of the work that we’ve been doing. Ultimately what we see is that decreasing opioids in circulation, meaning that we’re prescribing fewer opioids has helped our systems across the U.S. It’s not necessarily decreasing opioid overdose deaths. In fact we’re still seeing them increase and that's been most pronounced in the last couple of years.   
  
Who falls in the category of being at high-risk? The question that I think, and it’s an empirical question that we’re trying to answer, that other people are trying to answer is is it the general patient population? Is the general patient population who have been on opioids for chronic pain for long periods of time, a year, two years, a decade, two decades? Or is there a different profile of patients who is at heightened risk? Maybe those with histories of or propensities towards high-risk behavior including illicit substance use?   
  
We also know from some of our qualitative data and the quantitative data both from the cohort study that I was describing that the relationship is really important. The relationship between the patient and the clinician. There’s a way, I think, to go about an opioid taper process. And so many clinicians do it very well. And sometimes I think that sometimes it doesn’t get done so well. And there are ways to improve that. The patients really care about that. They want open communication. Even if it’s an outcome that they don’t want, they want to be part of that journey and part of that process. And that's really important. And it’s hard to do.

We also know from some of our qualitative data that patients don’t share the same perspectives as clinicians. The reasons that they perceive going off of opioids are different that what clinicians are documenting in the electronic health record. These conversations may have been had. What’s documented in the record, that conversation may have been had with the patient. But the patient is not internalizing that, at least not in such a way that they’re wanting to communicate this to a research team.   
  
And I will say that we were very clear with these patients. This is a research study that you’re part of. We in no way have any bearing on your care that you receive at the VA, within the VA or elsewhere. So what you tell me is not going to impact your care in any way. So I think with that, I think patients certainly feel a little bit more open to tell us what it is that they think, what their perceptions are. It’s had some degree of confidence that what they're telling us is actually what they’re experiencing and what they’re feeling. They’re not trying to sugarcoat things.   
  
And then how taper process occurs may have meaningful effects on the outcomes. I think that’s both our qualitative and maybe some of the quantitative data that we’re getting from this study will suggest that.   
  
I’m going to bring back this little figure here as well, around what happens after opioid discontinuation because it is, I think, again one of the more important findings that when patients go off of opioids, on average their pain isn’t going to change. It’s still going to vary widely and likely within a given day.   
  
So you might talk with a patient and you might say you know you’ve described that you wake up in the morning and you’re pretty stiff and your pain is a 6 but once you get moving and up out of bed and take a shower and have some breakfast, your pain drops to a 3. It typically goes to a 7 by midday when you’re out and you're pretty active and then you may take some medication and it subsides it’s much better. But then kind of spikes right before bed. This is a pattern that I’m seeing with you. And this is really common. And whether you're on opioids or not, this is probably a pattern that you’re going to experience. And I think our goal within a treatment context is to make sure that that pain isn’t interfering with your daily life in a way that you’re not able to carry out those activities that are most valued to you. We want you to live a valued life. We want you to be able to do the things that you want to do in spite of your pain. And that is really the goal of our treatment. Our multimodal pain treatment approach is to help you live the life that you want to live in spite of the pain.   
  
Wouldn’t necessarily need to say that verbatim but that might be the type of conversation that a clinician would have with a patient when talking about what to anticipate following discontinuation of opioids. And we try to support the patients. Of course, we try to support the patients in all the ways that we possibly can. But I think sometimes being very honest about what their experience will likely be like is important. It’s a really important thing.   
  
I wanted to acknowledge my many wonderful collaborators on this work. Very generous funding from the VA. Some of the work that I presented today has received funding from Query, from HSR&D. Also received funding from the VA Office of Rural Health.   
  
So at this point, look at that Robin and Heide, spot on. 8:45. We should have time for some questions and answers here if anyone has posted it the discussion portal.

Dr. Robin Masheb: Very impressive with the timing there, Travis. But even more impressive is your research and this presentation. Thank you so much. What an honor and joy to be able to hear about your work. I thought this was just fascinating being able to kind of be in the room and hear both the patient and provider perspectives simultaneously. It must have been infinitely fascinating to analyze this data.   
  
We have some questions coming in. Would like to encourage the audience to please continue to write in with some questions.   
  
But I’ll start us off with a big one which is that it seems so clear from your findings that everything should be focused on provider training on tapering and shared decision making and how to do that and how to do that well. So could you speak a little bit more to that and where you think things are going in terms of your research, other people’s research. Bob Kern, Friedhelm Sandbrink might be able to speak about this too.

Dr. Travis Lovejoy: Yeah, and I’d love to hear both Bob’s and Friedhelm’s perspectives certainly if they would like to offer those. I think that there’s a lot of work being done around shared decision making. Certainly within the pain world and even outside of the pain world, one of my colleagues is doing some work around osteoarthritic pain. She’s a rheumatologist and looking at shared decision making approaches to pain management. There’s a lot of work that’s happening.   
  
Shared decision making is a difficult process. It is one that involves strategies around kind of motivational interventions, like motivational interviewing. It requires a certain way of being with patients. Rather than I would way an intervention, it is more about a way of being with people. And that’s not always intuitive. I do a lot of work personally in the field of motivational interviewing and have a number of colleagues on different trials in which I work and I’m thinking about.  
  
  
I’m channeling my colleague Lillian Gelberg who is at UCLA and we did some work on a \_\_\_\_\_ [00:46:33] funded trial around arresting the progression from opioid misuse for opioid use disorder and we have a very strong motivational interviewing component that she and I co-lead. And she says you know, it’s always amazing coming from a primary care perspective where it’s about assessing and asking questions and then providing information.   
  
Whereas in motivational interviewing framework it is much more about obtain a deep and empathic understanding of what this person, this patient in front of you, is experiencing and genuinely knowing that and ultimately realizing that they are autonomous beings and have the power to make their own decisions around their healthcare. And that we, as clinicians, are there to help provide the level of expertise when needed, to help shepherd them you know through this system, to help provide them this critical care. But it’s ultimately their decision.   
  
And I think that when we are able to recognize that and take that approach, it changes the interaction with the patient in front of you. It changes the way that they experience the care that they’re receiving. I think there are ways to do this. And I hope, I genuinely hope, that because this is such a charge topic, nobody wants to deal with a patient who is irate about being tapered off of opioids. But to be able to do so and to do so skillfully and well, I think it’s critically important.

Dr. Robin Masheb: And I think the other thing that you’re competing with here is the problem of time, right?

Dr. Travis Lovejoy: Um hum.

Dr. Robin Masheb: It sounded like you had so many concerns raised about the clinicians not having the time and really being empathic and doing shared decision making is clearly doing motivational interviewing, it involves time. Right? I mean there’s training and

Dr. Travis Lovejoy: It does.

Dr. Robin Masheb: you know the clinician. I mean I also always like to hope that there’s always that thing about teachers, right? Can you teach it, teacher? And I think what they’re finding out in that field is that you can. And so can you train providers to be great providers to be able to do this? I think you can. I think it’s providing the training. But it’s also the time, right? And all of the other things that are competing with it.

Dr. Travis Lovejoy: Absolutely.

Dr. Robin Masheb: We see your face there, Bob. Did you want to chime in?

Dr. Bob Kerns: Well sure. I can’t help myself. Just terrific presentation, Travis. I just I keep thinking though that your work ultimately is about really looking at veteran data because we have easy access to veteran data. And I do think it reflects a broader issue that I think is sort of controversial, which is the sustained focus on the veteran even though our discussion in the last several minutes has been much more on the providers. And I remember when I was in Friedhelm’s shoes several years ago going with the undersecretary for health and meeting with Congresswoman Jackie Speier from California. This was in advance of the opioid safety initiative. Why all this focus on veterans? We need to pay attention to the providers who are prescribing the opioids, etc., etc., etc.   
  
So I do wonder, first of all, I’d advocate in terms of the focus on trying to identify risk factors at the veteran level. I think there’s a lot of caution about going in that direction. I’d much rather see a universal \_\_\_\_\_ [00:50:36] approach as opposed to anything that would lead to further you know I guess stigmatizing certain veterans and potentially in the process undermining their relationship which we all want. You know strong therapeutic relationship between the provider and the patient. Additional labels and targeting I think potentially has lots of unintended downstream effects.   
  
I’d rather see a focus on as we’ve been discussing about providers. But I do think what about looking at providers who are not … you know are either continuing to ignore the problem in their patients or providers that are you know it would be apparent in the records if they’re too rapidly reducing opioids for certain patients. So is there a way to actually shift the focus more to the clinician, prescriber, providers in all of this effort as opposed to the veterans?

Dr. Travis Lovejoy: Yeah. I mean I definitely think so, Bob. I think that that was always the kind of behind-the-scenes intent of this work that we’re doing was to think about how do we better equip our providers to be able to meet the needs of the patients. And one of the things that we thought was critically important was to understand the patient perspective. Truly understand the patient perspective so we could identify the types of things that would be best to train providers on.   
  
But you're spot on. This is really more of a downstream from here, we need to more of a provider directed work as opposed to necessarily intervening at the patient level.

Dr. Bob Kerns: [overtalk] Travis, are there simple things at the level of the providers, prescribers been examined? Like difference in prescribing patterns across discipline of the prescriber in subspecialty or specialty within medicine? Or setting of prescribing?

Dr. Travis Lovejoy: It’s a good question. [overtalk] Yeah, it’s a really great question. I actually don’t know that there has been work that has looked at that closely. That’s actually one of the intents once we have all of our data in and can characterize these patterns of discontinuation, we would be going in and pulling some data. So trying to better understand those types of provider level characteristics for patients who are discontinued versus those who stay on opioids. So all forthcoming but yes, really important question to ask.

Dr. Robin Masheb: Let me just jump in here with some questions that are specific to your presentation. Somebody had asked about the graph that you had showing that there was a similar level of pain after opioid discontinuation as there was before but it seemed like the variability was lower. Was there a statistical or clinically meaningful difference in that variability?

Dr. Travis Lovejoy: So there was a statistically significant difference in variability. But it’s also a relatively large sample size. Not many thousands but there are 600 patients. But patients could have as many as 50 pain scores. And so I think that the number of observations is in the thousands. So yes, there was statistically significant differences in variability suggesting a narrowed variability within patient pain scores following discontinuation. It decreased by about half a point. I think most would consider that not to be clinically meaningful if we think about how we consider clinically meaningful effects or sort of 10 pain sensing measure.

Dr. Robin Masheb: This is an interesting question. Did you do any kind of comparisons of patient provider dyads who were consistent in their interpretation versus not consistent in the decision to discontinue? And were there any things that characterized the patients who might have had more of a consistent understanding with their providers?

Dr. Travis Lovejoy: We haven't done that level of analysis. That's the next phase, \_\_\_\_\_ [00:55:13] these data. It’s a really interesting question and one that we intended to do. We’re in the process right now of tabling some of these data where we see very divergent opinions versus opinions that are a little more consistent.   
  
Perhaps not surprisingly that when a patient discontinues of their own volition, it tends to align more with what we see in the electronic health record. Meaning that a patient wants to go off and that tends to be what we see documented in the electronic health record. When it is a clinician decision, then we see more nuance differences.   
  
But we’re going to be diving into that more deeply forthcoming. Yeah, great question.

Dr. Robin Masheb: Another question is, I don't know whether you're able to, whether you plan to do this, whether you're able to do this with your data, but is to look at kind of how many contacts the patient has with the provider over time because you know people kind of feel like part of the relationship is not one time, right, shared decision making but kind of feeling that connection.

Dr. Travis Lovejoy: We certainly could and it’s a great point. I appreciate that comment and absolutely something that we could look at. I suspect that there’s probably not a lot of contact between the opioid prescribing clinician and the patient. Again, these are primary care and as we know, patients typically unless they have a lot of kind of comorbidities, typically are not seeing a primary care often. Some of our patients are only going to be seeing primary care once a year. However, we can look at this data. And I think it’s a great point. I’m making note of that. So thank you for that comment.

Dr. Robin Masheb: We have people writing in so happy to hear your presentation, feeling like this has been their experience in doing this type of work and any other recommendations you have about things that you can do when you’re in that setting to say to your patient, scripts that can be used for taper that might be available?

Dr. Travis Lovejoy: Yes, absolutely. I think those are important things to communicate. I think what we’re finding is that it’s less about patients not being able to tolerate a taper and discontinuation. There are many clinicians, and I’ll actually call out Friedhelm because I remember a conversation that Friedhelm and I had a number of years back when talking about a patient that he may have been working with where the opioid taper occurred over a two-year process. I think that we would say that that’s well beyond what is necessary for a patient to physiologically not experience adverse side effects related to the taper. But that’s what that patient needed. Psychologically that’s what that patient needed. For whatever reason this elongated or prolong discontinuation. I think that there are some clinicians who are willing to engage in that process.   
  
I think that there are others, and here’s where I think that it’s actually probably the most challenging, or at least one of the most challenging scenarios for clinicians, is when they are inheriting other patients. So you may have someone retire or leave the VA and so all of a sudden now their patients are part of your panel and you might not necessarily agree with the approach to opioid prescribing or management. And so then you initiate a conversation with the patient, this process, and the patient is like wait a second, I’ve been doing this same thing for five years and it’s worked great. Why all of a sudden are you changing things on me? So that’s a really challenging thing for clinicians to face is when they’re inheriting patients.   
  
I think in that process, it really requires more time and education. Maybe the wraparound services with the PAC team because I know it can’t always be the primary care clinician who can fully engage in those conversations. But working with the team, reinforcing communication, providing education. All of those things are critically important.

Dr. Robin Masheb: I’m so sorry we’re running out of time. We did have another question about slow taper and the effectiveness of that. Just want to encourage anybody in the audience if you have that question, would it be okay with you Travis if they reached out to you by email about that?

Dr. Travis Lovejoy: Absolutely, yeah. Happy to dial it.

Dr. Robin Masheb: Really appreciate your presentation and everybody for joining us today and writing in with some great questions. It made for a super interesting discussion.   
  
Please just take a moment to hold on and fill out the feedback form for us. This way if you are interested in this or any other HSR&D cyber seminars Spotlight on Pain Management, you can use the Spotlight on Pain Management pulldown choice on the menu. Our next cyber seminar is going to resume in the fall, in September. I’d like to thank everybody for joining this and for any of the other ones that you participated in academic year 2021-2022.