Risk reduction: Overdose prevention and management of misuse/risky use of opioids

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- [Debra] Of opioid overdose. Does everybody know what harm reduction or risk reduction is? I realized I don't know how you can answer my question but basically what we're looking at is even when you can't cure a problem, there are ways you can sometimes limit the risks. So with something like the opioid epidemic that we have, we may not be able to get everybody completely off opioids, that may not be realistic but we may be able to at least reduce the risk of overdose deaths and that's what we're gonna be looking at today, because I think that probably touches on everybody's practices. So I am looking at, and I have no disclosures, I don't know if that got updated.

You know what, let's work with your slides, can you? I'm sorry, let me try to do that again and I'll get with the program. Let's see if we can do that, okay. So we're basically what I'm hoping we can come away with today is knowing what is risk reduction or harm reduction, who may be at risk, specific evidence-based harm reduction interventions for opioid use disorders, and how to incorporate overdose prevention into primary care practice in particular. And let's go to the next slide.

Okay, so we're talking about taking precautionary measures to reduce the likelihood of a loss, or to reduce the severity of a loss. So things like a security system at your house, your business, can help to minimize break-ins, minimize theft. Seatbelts, airbags that we put into cars are another example of how we can reduce. They're not gonna limit the number of crashes necessarily, but they might reduce severity of loss or injury, and there's certainly evidence in the car industry and it says here that in 2015, nine car models recorded driver death rates of zero and they attributed this to those safety features. Those of us who live in Taos County, New Mexico don't have the recent cars that have all of these features. Okay, I'll have the next slide, thank you.

To getting back to the principles of risk reduction, some people just aren't gonna be ready or willing or able to stop using, and honestly I don't know that we have the treatment available yet for the number of people who really need it, so what can we do to reduce the risk, to reduce the deaths that are happening? There've been approaches that have been developed to reduce the most harmful aspects of the drug use, and then the quote here, as you can see, harm reduction is a set of practical strategies and ideas aimed at reducing negative consequences associated with substance use.

Harm Reduction is also a movement for social justice built on a belief in, and respect for, the rights of people who use substances. Okay, let's move on to the next slide, please. Some of the strategies, you know reducing the stigma and the prejudice around the problem. You know if somebody is addicted to

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IV injected heroin, you know we can supply needles, clean needles and syringes for them in the exchanges that you see somewhere.

In my mind, it's not gonna help as much to throw them in jail. We can increase the access to treatment, and we do have good evidence-based treatment for opioid dependence. We can teach safer injection practices and safer use as mentioned here, don't use alone, know your dealer, use a test shot, and sterile technique, some of that can make a lot of difference. I'm sure in primary care, you've probably seen the infections that can result from needle use. Places for safer injection, and I know that Portugal, I believe, really turned things around by just providing safer places for people to use, it was one of the things that they did. Increased access to naloxone for overdose prevention, I know New Mexico has been really at the forefront of making sure that naloxone is available.

One of the things I will mention a little later is that with the fentanyl scourge that we have now that naloxone may not be quite as effective, but we can talk more about that. Let's go to the next one. So I'm not sure how up to the minute this slide is, 46 people a day dying from prescription opioid overdose, and I think 91 a day, I think for 2016 or 17 it was around 90 something per day dying of opioid related use, and that could be in combination with other things, but I believe that that was the overdose deaths that we know of where there was heroin or another opioid in the picture, and I believe that translated to, I'd have to do the math, but it was something like 64,000 deaths last year. It's pretty astonishing and terrifying, really.

I think we may have another slide on age group, but you can see on this one that there's a big spike at the 45 to 54 range and what we're seeing and what I was seeing in the most recent CDC reports is that the two age groups that are growing at the fastest rate as far as opioid overdose deaths is the age groups of 45 to 54 and 55 to 64. I think the 55 to 64 group is growing faster than any other group, but that the 45 to 54 remains on top. I think we need to kind of wrap our heads around that that when we see patients in those age groups, the people you wouldn't necessarily expect, I think we think of the heroin trade as mostly targeting the young people, but I think what we're seeing in this older adult group is that most of them are probably starting with pain medications, their prescribed pain medications. Let's move on to the next one.

Okay, so risk factors in overdose. More than 100 milligrams of oral morphine equivalents daily, so that looks like that was a 2013 study and there were other studies behind it that showed that once you get into those ranges of daily use that that's where you're starting to get closer to that lethal dose. This is a big one that I see a lot, is the recent release from a controlled environment. So somebody who comes out of incarceration or treatment, you know where they've not had access to their pills or their heroin, whether they've gone through withdrawal the hard way or whether they've had some Suboxone or methadone or anything to help them.

Once they're out there on their own, their tolerance is lower and they're at really high risk and if they're not getting the kind of outpatient follow on treatment, you know whether it's IOP or something else, they're at very high risk and that's really worth knowing. You know, a lot of times people come out and they think they can go right back to the same dose of heroin that they were taking before they went in, and that's when you see people dying. They've lost that tolerance. Same thing, after release from
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Okay, mixing opioids with benzos, alcohol, other drugs, anything that's gonna be a central nervous system suppressant, muscle relaxers, Soma in particular can be nasty. That one gets metabolized to meprobamate, isn't it? I believe it gets metabolized too, gets a long half life. So you wanna be careful if you have patients on prescribed opioids, please make sure they understand the risks and please know the risks of what else you're prescribing or other doctors are prescribing. And then any of the medical conditions that are gonna diminish their capacity for metabolizing, renal, hepatic, pulmonary diseases, HIV. Let's move on, please.

So I found this one really interesting that where people are getting the pain pills for non-medical use. So now this is 2010, it's probably still the case only more so. Most people, the large majority, at least 55% are getting the pills free from a friend or relative and so they're not usually buying it initially. 80% of that group, those pills originally came from a prescription from one doctor. So your classic scenario is, you know, grandma's pills are in the medicine cabinet. She was given a 30 day supply, but she really only needed three days, and so the pills are just sitting there waiting for another time she might need them, and you know the teenager comes along and finds them, and that's a very classic way that somebody who hasn't prescribed them in the first place can start. Let's move on.

So abuse deterrent and resistant formulations. So there've been a lot of things that have been tried, you know, we know that over the years the Percocets and Vicodins and the oxycodone and hydrocodone preparations have been combined with acetaminophen, and the idea originally was that it would be a deterrent for people to not overuse it, because we know that the acetaminophen is toxic to the liver. But I think we all know that that really didn't work and what we have now is we have a lot of people addicted to opioids who also have liver disease, which just compounds the problem. So that's been a serious issue.

Other things, there really are no proven abuse deterrent or resistant opioids or formulations. Buprenorphine combined with, yeah thank you, that puts in the various things. So yeah, they've tried a lot of things with the physical barriers, the agonist-antagonist combinations, so something like Suboxone that combines the buprenorphine which is a partial agonist and the naloxone which is an antagonist. I've had just as much success with the plain buprenorphine, I don't know that the Suboxone combination really makes that much of a difference in terms of effectiveness.

Aversive components, I think the acetaminophen is supposed to be an aversive component but again I think people who really are stuck in that cycle of addiction are not thinking down the road to what happens with their liver down the road. Prodrugs, I'm not sure what's in the pipeline in terms prodrugs that have to be metabolized to actually create the opioid in the system. Various routes of administration, so something like prescribed fentanyl is used as a patch and it's not an oral formulation, again buprenorphine is taken under the tongue and not swallowed and it's not particularly effective. The naloxone, the blocker, is put in basically so that if people inject it, the antagonist will have an effect and they can go into withdrawals. So that can be somewhat aversive. I think it is to a small degree, not so much again, nothing proven. Let's move on.
So changes in use secondary to supply and demand. So things like the prescription monitoring programs which are available in most states and required in I believe a majority, are helping. So there's some reduction and I think physicians with education around that as well are getting more savvy, but it doesn't really address the issue of people who are already in that vicious cycle of addiction. And so what we're getting, unfortunately, is more people shifting to heroin.

You know, if you've been started on whether it's oxycodone or Oxycontin which was a big one in the '90s and still is, and then your doctor used to prescribe it regularly but is now kind of listening to concerns and is gotten concerned about it. What I've seen is a lot of doctors were told, okay, no, no, this clinic's no longer treating pain. This practice is no longer treating pain, and so doctors who are treating their patients, doctors, nurse practitioners, other providers have been treating patients for pain, they're suddenly told by their practice that they can't do it anymore and they're kind of forced, the patient is forced to either withdraw suddenly or they're referred to a pain specialist say, but there aren't enough pain specialists to go around.

So I think what we tend to see in psychiatry and addiction medicine is we see people who go to heroin. It's available, it's cheap, and it works, and whether they're getting high from it or not, it deals with the problem and it keeps them out of withdrawal. So let's see, we're seeing too a rise in the injection drug use, again, usually heroin, and more of the, I think this may also contribute to the demographics of the 45 to 65 year old age group, more people moving over to heroin as we all get scared and cut back on the opioid prescriptions, we're seeing more people moving over to the injected heroin and dying.

So, definitely there're still issues with accessibility to treatment and we definitely have some stuff to work on. So I mean, ECHO, that's what this is about is trying to teach people out in the trenches of primary care to be able to treat addiction. My feeling is, and I've said this to people, that to me anybody who is licensed to prescribe an opioid pain medication ought to be required to take the training and be able to prescribe buprenorphine to help people get off of that medication.

So to me, it's not just referring somebody to a psychiatrist and it shouldn't necessarily be referring somebody to a psychiatrist or addiction specialist. I really think that anybody who treats pain in any way with opioids really ought to be able to help people with the addiction side of it, because most people do become dependent to some degree on the opioids and they shouldn't be stigmatized, and they shouldn't have to be siloed into the behavioral health world. We should all be working together on that. So that's just, that's my two cents there. Whoops, I did something, I just lost my screen, wait a minute here. Can you still hear me?

- [Participant] Yes we can.

- [Debra] Okay, I somehow lost my screen with the slides, so I'm not sure what I did here.

- [Participant] Can you see the current screen?
[Debra] I got it.

[Participant] Okay, great.

[Debra] Sorry about that. Okay, so let's see, what page? Okay, we need to go to the next page. So yeah, CDC statistics 1999 to 2013, US drug poisoning deaths. So this shows you, basically it's showing us heroin in red and you see a sharp rise since 2010. That number continues to go up, I can tell you for sure, in the last five years, that that number continues a steep increase. We're seeing other opiates, and I think they're talking about morphine, and codeine, and the non-synthetic opiates there, and those are coming down a little bit, and I believe those continue to come down a little bit.

Methadone, I'm not sure what's happening. It obviously started to decrease as of 2013, and I'm not sure what that trend is at this point. And then the other synthetic opioids, the oxycodones, they have those flat line, but I think in the last five years if you add in fentanyl, which is a synthetic opioid, you would see a very steep incline in the last five years with fentanyl. That's a scary one and we can get into that a little bit more later. So let's move on to the next slide. Okay, this is also CDC data, and it's looking at law enforcement encounters, talking about fentanyl, testing positive for fentanyl between 2010 and 2015, and look at that steep incline. Really, it started in 2013. I'm not sure exactly what the dating event was that just flooded fentanyl in the marketplace but we're definitely seeing more fentanyl and then carfentanil.

So fentanyl is I believe, a hundred times stronger, more potent than heroin, and carfentanil is I believe another two orders of magnitude more powerful than that. So that's getting into scary. You know, with carfentanil even the emergency workers are at risk if they touch it, so what we do with that, that’s, I don't know. That's a whole nother discussion. Let's move on to the next slide.

Okay, so in terms of the age-adjusted death rates for three causes of injury, so we're looking at motor vehicle is the red one on top. That one's coming down. They have some good measures happening in cars. We don't see as many people dying on the roads. Firearms, you know, aside from what we see with some of the major shootings, the actual numbers of death rates due to guns is actually declining a little bit. But look at the bottom line that's becoming the top line, drug poisoning and that's as of 2013 that really five years ago, that one keeps going up. So let's move on.

So mandatory use of the PMP. Pharmacy management profiles? I think that's what the PMP is. So New Mexico, Arizona, Colorado, They're all in, I believe, the mandatory. I think the orange here is mandatory use of the PMP. I know here in New Mexico and in Arizona both and in Colorado, we're required to be using the PMP. There are various ways that gets enforced with licensure and it looks like this swath of orange states here it's a similar thing. We still have a lot of states where it's not required. You know, I'm just looking at this map now and I'm glad to see that states like West Virginia, and Ohio, and Kentucky, where the opioid epidemic has been just horrendous, are among the required states. But New
Hampshire's been hit really hard and it looks like they're not among the required states, but maybe since January of 2016 maybe that's changed. I don't know, that's a question in my mind and maybe I'll check that out. Let's move on.

So in primary care in particular, you're gonna be seeing so much of this and what can you do to address the problem, particularly of the overdoses with opioids? So there are some CDC guidelines, this gives you the link for the CDC guidelines, and then this is kind of the summary of those guidelines. So the three main principles are use non-opioid therapies, start low, go slow, and close follow-up. So first the non-opioid therapies, you want to do what you can with non-pharmacologic therapies and non-opioid pharmacologic therapies.

I saw something recently a study, I can't tell you where I saw it, where it looked like opioids didn't do any better than non-opioids in terms of treating chronic pain. So I'd really look at starting with other things. Figure out what your parameters are for measuring, you know, what are your goals of treatment? How are you gonna measure the outcome? And really work with the patient on and is it really helping? And as I said, don't use opioids routinely to treat chronic pain. If you do, make sure you have a very clear sense of working with the patient and measuring in some way of whether it's really effective.

Start low, go slow, so you wanna if you do need the opioids, you wanna start with the lowest possible effective dose, as we tend to do with most things. Start with the short-acting rather than the long-acting. My thought about this is, you know, you get a better sense of what works. I don't treat pain, but with anything like that I like to really get that feedback from patients and certainly if I'm using buprenorphine, I really wanna know exactly what the patient is experiencing. So if you're starting with a short-acting hydrocodone, oxycodone, you know, work with the patient, have them chart it, have them get a sense of how long does it take to be effective? What does it do? How much does it ameliorate their pain? How long does it last? What happens when it wears off? Only prescribe the amount needed for the expected duration of the pain. How many times have we seen people get, bought a 30 day supply of pain medicine from a dentist after a tooth extraction?

That doesn't make any sense, and I think that's changing some now, but I think we can look at that most acute injuries do not require a 30 day prescription for opioids. Taper and discontinue if there's no improvement or if the risk of harm outweighs benefits. Close follow-up, so you wanna be following the PMP, you wanna do urine drug tests, and this should all be spelled out at the outside. I recommend having a contract with the patient so they really know what's required of them.

Really try to avoid the concurrent benzos and opioids. We all know that one. And refer for treatment, if you think they have an opioid use disorder, try to refer for treatment or get the training yourself to do that work. Let's move on. SAMHSA has an opioid overdose prevention toolkit, so that can be useful as well and I think the link is on here somewhere. See that, it may be in a follow-up slide. Let's see what's next. Okay, so they have these five strategies basically. So strategy one, encourage providers, people at high risk, family members, and others to learn how to prevent and manage opioid overdose.

So that's gonna include identifying it, knowing what to do, hopefully having on hand some naloxone and how to use it. Ensure access to treatment for individuals who are misusing or addicted to opioids or
have other substance use disorders, yes. Obviously that's a good idea. We wanna have all of that available. Ensure ready access to naloxone, okay and then people need to be trained in how to use it. Encourage the public to call 911. Someone's in an opioid overdose, they need immediate medical attention. Know by the way that naloxone has a very short effective life. It does not last very long, it often doesn't last more than 45 minutes.

So you know in some rural areas, that's not even gonna get them through the ambulance ride to the hospital, so know that they may need multiple doses especially with something like fentanyl that lasts a long time and is extremely potent, they need multiple doses. Encourage prescribers to use state, okay yeah the PMP programs for sure. Let's move on. Okay, preventing, recognizing, managing opioid overdose, what an overdose looks like. Okay, blue lips, blue finger tips, small pupils, pale skin, shallow or labored breathing, non-responsive to voice or sternal rub. And you know obviously there are gonna be warning signs before that, before the person is on the bed or on the floor non-responsive, you know they might be confused, they might be dizzy, the might be falling down, the might be nodding off, you know so there are things that can come before you can be watching carefully. Reversing an overdose, you want to assess the scene for safety, assess the person, call 911, do rescue breathing if you need to, and administer the naloxone.

Do call 911 first, because you wanna get them on the way especially in rural areas it can take time and those minutes really, really matter. Okay, next. Okay, so on strategy two, so that was about recognizing it. Strategy two, ensuring the access to treatment. So yeah, effective treatment can certainly reduce the risk of overdose and help people attain a healthier life. I have seen people turn their lives around. It is the most rewarding thing I think I've done in medicine is really helping people turn around their opioid dependence and it also turns around everything for their families.

So, yeah reduced infections, reduced criminality, improved self-care and social functioning. Provide or know where to refer for treatment. So yeah, methadone or buprenorphine are the two pain opioid treatment programs and we'll get into those in detail now, in office based treatment, buprenorphine or naltrexone. I really encourage everybody who prescribes, get yourself trained in working with buprenorphine. It's not that hard and it's not that scary. It's way less scary than the potential for overdoses, so really, highly encourage that. We need more people doing that.

Counseling and other supportive services, we all know that a drug isn't gonna turn around somebody's addiction, so a patient really needs that support, they really need the counseling, they really need to. You know, in underlying addiction, we all know, there's always trauma. There are always issues. There are other life issues, so really need the wrap around treatment. So yeah, you can state health department, alcohol and drug agency, SAMHSA, there're all kinds of resources and I think a lot of them are listed here, they may be listed more at the end, I'm not sure. Let's move on, we're probably running low. How much time do I have? Anyway, whatever, we'll keep moving through.

- [Participant] Sorry, we just couldn't unmute, but we actually, we're hoping for someone to have some ad hoc or follow-up cases, but you are otherwise not in a rush because we didn't have any formal.
- [Debra] Oh, okay.

- [Participant] However, let me make that call while she's finishing. If anyone is interested in giving us a follow-up of someone we've already heard about, or just has someone on the fly that they're interested in asking about or telling us about, we'd be happy to hear that, so otherwise, thank you for taking your time.

- [Debra] Alright, and I might be able to come up with something, okay. Thank you. Alright, so strategy three in the toolkit, ensure ready access to naloxone. So, naloxone is an opioid antagonist. It has a high affinity for the mu opioid receptor which is the same receptor that the opioids all bind to, but it displaces the other opioids from the receptor. So it will out-compete heroin, oxycodone, and of the other opioids, it will out-compete them and it's powerful affinity. It will also prevent the other opioids from binding. It does work within minutes, it's like magic. So it lasts 20 to 90 minutes, and it is FDA approved for wow, IV, subcutaneous, IM, and internasal use and overdose deaths can be prevented when naloxone is administered.

However, one thing that you never hear about is that when naloxone is administered to somebody who's in an opioid overdose, what's gonna happen when you suddenly replace all of those heroin or oxycodone molecules from the opioid receptors? What's gonna happen? Your person's gonna go into acute withdrawal, so that's one of the reasons you wanna make sure that you're securing your environment and making sure it's a safe environment. People freak out when they come out of this blissful sleep that they're in, this near-death state that they're in, and you're suddenly yanking them out with painful withdrawal. They're gonna be pissed. Be aware of that, people get really angry sometimes when you save their life that way.

So let's move on, but it does still save their life and they'll later thank you hopefully. Okay, so prescriptions for nasal naloxone. Naloxone HCl, it's a milligram per mL. They come in two mL pre-filled syringes and I believe you get two of them in a kit, so two doses. It looks like you can get it as a, okay that's a needleless syringe and it gets squirted up the nose and you can get brief training on this, and you have a nurse in your clinic who can get trained up on this, it's a good idea to make sure that anyone who is being prescribed opioids or anyone that you think might have an opioid issue, and we all miss them, but it's a good idea to prescribe them the kit. And also if you can bring in family members to get trained in using it, because obviously the person who overdoses is not gonna be the one who's using it.

So you really wanna make sure that you have family members, friends, whatever, somebody who comes in that one time with the patient to get trained in using the kits. I know some clinics actually have the kits on hand and can dispense them directly, and I'm not sure how that works. I know now you can get them from pharmacies as well and I know Medicaid does cover them. So let's see, there's a high concentration naloxone product, the four milligram per 0.1 designed for, okay. And this reduces the amount of fluid insufflated into the nose allowing for greater retention. I don't know, I'm not in the
trenches with this and I don't know off hand whether the higher concentration naloxone is being preferred at this point or how much that's being used. Is there anybody who knows? Wants to pipe in on that? Any experience with that? I'm thinking that that high concentration one really should be looked at if it isn't already being used for suspected fentanyl overdoses, that that might be much more effective.

So okay, let's move on. So what you can do in the office setting. Provide patient-centered care, it's all about the patient and it's never really one size fits all. I always like to kinda gauge where my patient is at and kinda get in that same space with them, you know, at whatever level they're able to understand or handle. Let's get at that level and talk about it and figure out what they want, what they think they want, what they don't think they want. Consider medication treatment for any patient with an opioid use disorder, so I'm thinking if you're not equipped yourself to work with treatment for an opioid use disorder, please refer them to someone who is equipped to do that if the patient is willing.

Okay, so unconventional treatment sites. I'm not sure, this wasn't my slide, I'm not sure what that's suggesting but you know, if a person is open to or prefers something outside of mainstream medicine, there's some research happening now with MDMA and addictions. I know ibogaine is used in Mexico, I don't think it's used yet in this country. So I would be open to talking with patients about what they might want to do and what they have the resources for, certainly insurances aren't gonna cover most of the unconventional treatments.

Addiction counseling, for sure, again, there's no drug you can prescribe that's really gonna treat somebody's addiction. It doesn't work that way. People are way more complicated than that. And flexible treatment goals and desired outcomes, so again back to that idea of what does your patient want? How motivated is the patient? At what stage are they? Do they even recognize that they have a problem or a problem? And if they can't see that they have the problem, then you really wanna work with just the harm reduction and make sure they have the naloxone and somebody trained on that and you know that they understand the risk of overdose. But if they're motivated and they can see that there's a problem, then you can move further into treatment and work with them yourself or refer them on. Collaborative relationships, yeah, so make sure you know who's available, what's out there. Is there a methadone program? Are there inpatient detox programs? What do you have for inpatient, outpatient?

Make sure you know what's there so you can work together and also I would really, really, really emphasize that what I see around the state of New Mexico in particular is there're inpatient programs that are not well-coordinated without patient follow-up, and vice versa. And ideally what we really need is, let's use the inpatient programs as that safety net, but if you don't have the trapeze for your trapeze act, why do you have a safety net? You know, I think we really, really need to be amping up what we do on the outpatient basis. It's more cost-effective and it really deals with the person where they live.

Remember, when people come out of an inpatient setting they're at high, high risk, both because they've lost their tolerance and also because they've been in a controlled environment and they haven't had to manage their environment all by themselves. So when somebody comes out of a detox program or even a longer rehab program, they still need the support in getting back into their lives because that's
when they're at highest risk and I really feel like that's where we really need to focus a lot of our attention.

And in primary care in particular, you may be the one who sees that person first after a hospitalization for detox or rehab or whatever, and just be aware that they might not be plugged in to the system that they need. So it would be really helpful to know what may be out there that they're not tapping into. So integrating primary and behavioral health, right, using a harm reduction approach. Yeah, we've been siloed for too long. We all need to work together.

There are various models of bringing behavioral health into the primary care offices and also bringing primary care into the behavioral health offices. I've seen both, there are a lot of ways of doing it. I think we all need to be thinking a little outside the box if it's not already happening where we are, but we really need to work together. We share patients and we really need to look at them as whole human beings and not just the diabetes side or the schizophrenia side, or whatever. These are whole human beings we're dealing with.

Recovery oriented support services, peer mentoring, group therapy, social services, again, I can't emphasize that enough how important support is in particularly on that outpatient basis, especially when they're just coming from the acute setting. They really, really need the support. It takes a village to help somebody out of an addiction. Let's move on, I'm not sure what's on the next slide. So outreach and engagement. So yeah, reach out in your community to facilitate, so establish communication channels with potential patients with consumers of whatever services, peer counselors.

You want to establish contacts with agencies that offer various types of culturally-responsive treatment and support. So for example, if you're, I happen to be in Farmington right now and I've worked in Gallup and they're right on the edge of Navajo Nation and so there's a real need to have liaisons between some of the hospital systems and treatment systems outside of Navajo Nation and then those within Navajo Nation, usually IHS. And sometimes it's difficult to work together and really communicate together but it's really, really critical. Support syringe exchange for injecting drug users and I think we have pretty good laws around that here in New Mexico.

Advocate for improved access for homeless and other underserved populations to a broader range of interventions. Yeah, you know one of the biggest issues with treatment is transportation, transportation and communication. So think about it, people who don't have a home often don't have a phone, they often don't have a vehicle. How are they gonna get to treatment? I know some organizations are looking at outreach to really bring a team out to them, but again it's really challenging and I know in running Suboxone programs and working with dozens of people at a time.

You know, I've had quite a few patients who have difficult adhering to a contract because they don't have a phone. And you know things like, I might require in a contract if you relapse, I need to know. If you relapse I wanna know about it. You need to call so and so. Well if they don't have a phone to call or if they're missing appointments because they don't have transportation and they can't call to let me or somebody know that they're not coming in, then they're in violation of a contract. So we can't lose sight of really some of the basics that people need when they're stuck in this vicious cycle. Let's move on, we'll see what's next here.
So key points, so we can help our patients to stay safe even if they're not motivated or able to stop using drugs. It doesn't have to be black or white. Safer opioid prescribing and the use of the PMP programs is a way to decrease the supply of opioids, but do watch for signs of the street use, the IV drug use, because really a lot of our patients are crossing over. Syringe exchanges, needle exchanges, overdose prevention education for patients, for family members, for doctors and other prescribers, naloxone prescribing are all ways of decreasing the harms and the risks to people who use drugs. And I think that may be, is that it? I think we're down to the end here. So this just give you a bunch of references and I think everybody.