

Title: 2024 Ethics Symposium: Harm Reduction and Opioid Use Disorder

Guest: Amy B. Cadwallader, PhD; Elizabeth Salisbury-Afshar, MD, MPH

Host: Christy A. Rentmeester, PhD

Transcript: Cheryl Green

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[00:00:03] CHRISTY A. RENTMEESTER, PHD: Welcome to the 2024 Ethics Symposium brought to you by the Council on Ethical and Judicial Affairs and the *AMA Journal of Ethics*. I'm Christy Rentmeester, managing editor of the Journal. In our time together today, you'll hear from two contributors to the Journal. You will hear first from Dr Amy B. Cadwallader and then from Dr Elizabeth Salisbury-Afshar, both of whom I will introduce momentarily. Following both speakers, my colleague Dr Amber Comer will field questions from in-person and online audience members. Everyone is invited to meet the speakers during the reception that we're hosting right here at 2:00. So, thank you to Mirsad and Peter and Demetrius and Ana Maria and Andrew and Amy from conference services, and to Kelly and Erik and Audiey, the ethics unit, all of whom worked behind the scenes on this event.

The Journal has now published two recent issues on opioid use, one in August 2020 and the current issue from July 2024 on harm reduction strategies. The July issue of the Journal considers harm reduction as an intervention or set of interventions that is part of a safety net to curb opioid-related morbidity and mortality.

Our two speakers today share their insights on state of the art in clinical, public health, and forensic approaches to harm reduction. Dr Cadwallader's background is in pharmacology, analytical toxicology, and forensic science. She directs regulatory and public policy development at the US Pharmacopeia. She leads the USP Quality Institute, whose charge is to generate high-quality, forward-thinking evidence that informs public policy and regulatory reforms that safeguard the global supply of quality medicines. Dr Salisbury-Afshar is board certified in family medicine, preventive medicine in public health, and addiction medicine. Her work focuses on expanding access to evidence-based substance use disorder interventions. She directs the Preventive Medicine Residency Program and teaches in the Addiction Medicine Fellowship Program at the University of Wisconsin School of Medicine and Public Health. She also directs harm reduction services for the state of Wisconsin's public health division. Colleagues, please help me welcome our guests. [applause]

[00:02:47] AMY B. CADWALLADER, PHD: Good afternoon, everyone. I hope you're all doing well. I'm excited to be here to talk to all of you. When Christy extended the invitation, she asked me to talk about a toxicologist's point of view to overdose and opioids and everything that we're seeing in the media today. And I'm very happy to do that. As she mentioned, currently my role is in policy development, working to safeguard the medicine supply for the globe and looking at the quality of medicines. But for the previous decade or two before that, I was at the lab bench doing analytical toxicology testing. So I've seen a lot of this firsthand. And today my talk is going to just provide to you some perspectives from that life as a forensic toxicologist and some of the observations that I've made moving from the toxicology world into working with physicians and clinicians and now health care providers across the globe, so...

On the first day of school learning to be a toxicologist, we heard the adage that the dose makes the poison, and I'm sure you've all heard that. It's from Paracelsus. He is considered the father of toxicology, and that is drilled into us every day from there on. Water: a poison if you get it at a high enough dose, right? And there's also a lot of art to toxicology as well. It's not only the dose, but it's the body of the person that it's in. It's the receptor in the body of

the person that it's in. It's metabolism. It's...it's a lot of environmental factors that play into this. So there's an art associated with it as well. So, I'm really excited to talk to you all.

And again, I have notes here to keep myself within the 20 minutes because I could stand up here and talk to you all about this probably for the next hour or so. So, [chuckles] that's my disclaimer. And I think Christy is going to tell me if I need to move on a little quicker.

But the first slide I have really talks about— Well, I guess I should say that the title I was asked to provide to you were *Five Considerations From a Toxicologist's Point of View*. And that's what I have drilled this down into. I have five slides that are these five considerations that I hope we can chat about today.

[00:05:21] So next slide, please. I think that many in the room understand that there has been an evolution of what we are calling the opioid epidemic. In the late 1990s, prescription opioids contributed to a lot of people overdosing and substance use disorders and addiction and the need for treatment. That progressed to a lot of heroin, heroin overdoses, which then progressed to what I've called pure synthetic opioids. And these have kept every toxicologist in the world up at night worrying about them because every day there is a new chemical structure of something that acts like an opioid, but that we can't, we don't know is out there yet until we find it in a biological specimen, or it's encountered in an overdose.

Following that, there were several years where stimulants gained popularity in illicit or recreational use. And then folks really started to use multiple substances at the same time: benzodiazepines, plus opioids, plus stimulants. And we saw a lot of toxicology data with multiple substances. And then we moved on into even scarier times where we see a lot of additives and adulterants in the drug supply. There are drugs out on the street being sold as Percocet or oxycodone and things that we know of and are common names of medicines. But when a toxicologist takes a look at that in the lab, it has some designer compound in it plus, you know, a medicine used in animals, plus some kind of filler that can cause toxicology symptoms or adverse reactions in patients.

[00:07:34] And what's really interesting from the toxicology side of this is that in the lab, we are analyzing biological specimens by the thousands every day. And we see all of these things probably a year, two years, sometimes even more before it gets into the mainstream media and before the medical system has the ability to catch up because we are analyzing these samples every day and are seeing these weird new compounds in our instrumentation, and we do our best to identify it and publish about it.

I think that it was probably in the early 2000s when the toxicology community really started to see the synthetic opioids in our labs, and we started to write the case reports and talk about them at our conferences. But it took five, almost ten years for everything else to really catch up. So we're kind of like that first line that sees all of these things.

And my takeaway here is that we really need collaboration, I think. One of the things I take back to my toxicology colleagues is that we have a responsibility to share this information as soon as we have it and to get it into the literature and to make sure that it is out there for physicians and clinicians and frontline folks working in harm reduction to understand what is in the drug supply and what we're up against. And this information sharing from all of these various sources is critical for all of us to help with harm reduction and to help with the betterment of public health. So, that's my takeaway from point number one. Next slide please.

[00:09:27] Point number two: Every body is different. Every single one of us are different. And of course, you're saying, of course I know that, right? We are. We continue to learn every day about pharmacogenomics and what it can do and what kind of information it can

offer us. So pharmacogenomics, for those who don't know, is the study of how a person's genes affects the body's response to certain medicines. It can help us understand if a medicine is going to be effective and work, it can help with optimization of dose, and it can help to predict toxicology that might happen in an individual or an adverse event. And it really has a lot of potential to improve opioid medication management and understand some of these risks. Individual variability in analgesic response is very real. We all metabolize things differently. The receptors that bind these medicines in our body are all different and will react differently to the medicines. We all have a different response to these medicines, and really understanding that, I think, can help a lot with opioid management, prescription, etc.

One of the key points here is that there are a lot of variations in enzymes, and this makes metabolizing these medicines very different. My husband, for example, is what's known as a rapid metabolizer for opioids. So if he takes an opioid analgesic for pain relief, it turns out it's really not effective for him because he metabolizes it and gets it out of his body within minutes, before it has time to really help with that pain relief. On the other side of that, there are people who are what we call poor metabolizers. So if they take an opioid analgesic for pain relief, it stays in their body for an extended period of time, much, much longer than it should. And it then starts to cause adverse effects. And there's a big spectrum of folks and how they metabolize these medicines out there. And it turns out that if we take a look at your genes and understand exactly what your characteristics are, we can do better with prescribing these medicines and make them more effective.

[00:11:56] And as I've alluded to, there are polymorphisms, which are what these differences are called. So all of the different enzymes, if there's, you know, version one, version two, it's called a polymorphism. And they're very well characterized now for several, several pain medications in particular. There are really, really well-known variations that can help predict opioid metabolism, non-steroidal anti-inflammatory drug metabolism, some for benzodiazepines, some for antidepressants. So we have a lot of knowledge here, and every day we're learning more. I was preparing for this and went down a rabbit hole digging into some of the new information about the opioid mu receptors, new findings, as well as an enzyme called catechol-O-methyltransferase, which is an indicator of pain relief. And there are variations in, turns out, our opioid receptors that these medicines latch onto that can dictate how you will react and what your body will do to an opioid receptor. So it's not just metabolism anymore.

We're learning about all of these things, and this evidence base is continuing to grow every single day. There are databases of information out there that explain this and provide clinical guidelines to help direct this. But the takeaway here is that every single one of us is different, and I am going to react to a pain medicine, a medicine different than Daniel will, different than Christy will, different than anybody else in this room will. And we have the capability to begin to understand that now. Next slide, please.

[00:13:53] [sighs] Drug testing. I, my time in the lab, in the toxicology lab, I did research and development, and I developed a lot of these tests. And to say it is nuanced kind of boils a really, really complicated topic down into four easy words, I think. I will preface this by saying I have written in the *Journal of Ethics* about this issue. I have written a really, really dense and long AMA report on the topic. So if you want more information, there's like a 27-page report out there that I'm sure it's a page turner, guys. [laughter] But there are pros and cons to drug testing. I think a lot of folks hear this and say, well, if you do a drug test, you can tell whether or not somebody is taking opioids or taking drugs that they shouldn't be. And it's a lot more complex than that. There are differences in kinds of tests. You can do a clinical test or a forensic test, which are different. Forensic tests are really, really rigorous and have something called a chain of custody behind it. So you're signing pieces of paper, and everything that you're doing can eventually be used as evidence in the legal landscape

should it be necessary. While clinical testing has a more patient-physician relationship sort of focus, and you are, you want to answer a clinical question and develop a relationship with a patient on that side. And clinical testing often has the advantage that it can be customized and individualized for your patients, which is also important.

[00:15:37] A lot of times in the world of drug testing, there's words used, "screening" versus "confirmation." What does that mean? You know, we can screen at the point of care, but what does that mean? And the takeaway here is that different tests do different things and have different capabilities. Screening tests, for example, I think we've all probably seen in pictures and in the media, dip cups and dip cards and those things. That's what's called a screening test, and you can do it at the point of care. But it turns out that they aren't really all that specific or all that great at telling you exactly what's in a sample. It may say that, yes, there's something here, but we don't know exactly what that is, and we don't know how much of it is in there.

And there's a lot of limitations also because what happens in these screening tests is there's an antibody that is coded to bind to a specific drug, and it does that. But a lot of times those aren't so specific. So if you have drugs that sort of look like what the antibody wants to bind to, it will as well, which means that there's a high likelihood for what we call a false positive. It's binding to something that is in your urine, that isn't actually a drug. You know, poppy seeds, think poppy seeds. That's a good example here. So there's differences there.

And the confirmation piece of this really means that you use analytical instrumentation in the lab. Some of these big digital instruments, big boxes that you may have seen pictures of that take a lot more time. They're a lot more expensive, but they can tell you exactly what is in the sample, exactly what the structure of something is, and how much of it is in there. And it really...it is what I, I hate to use the term, the gold standard, for really understanding what is in a biological sample.

[00:17:35] One thing that is really important to keep in mind that any drug test provides evidence of exposure only. It can't tell you how much, it can't tell you dose, it can't tell you how often this person has been taking a medicine, it can't tell you if they have a substance use disorder, it can't tell you any of these things. All it can say is, has this person been exposed to a drug? And I think that that is of critical importance when we think about some of these things that have been and can be used in legal settings. We don't want it to...we don't want to oversell its capabilities.

I already touched on the test method capabilities somewhat, but it's really important to know that not all tests are created the same. And if you are a clinician looking into providing urine drug testing, then you really need to do your due diligence and provide that individualized care. Look at the drugs that are in the drug supply in the community that you live in and make sure that you're detecting for those kinds of things. Make sure that you understand the capabilities of a point-of-care test and what it may or may not be able to detect. So all of those considerations are really, really important.

As are the reason that you're doing the test, right? Who? Why? When? What are you testing for? You know, is this, are you building a relationship with a patient? Sometimes this can be...sometimes this can really break those relationships apart if it's approached as, "I don't trust you, I'm doing this," as opposed to monitoring for your safety. I think it's really worth having those conversations about risk and high risk and understanding risk and knowing that a clinician is performing this test for safety as opposed to some punitive response. And that really helps with stigma as well. I think that understanding those things are really, really important.

[00:19:43] The final note here is that interpretation can be really, really complex. So the data that is provided from a lot of these testing is reams of paper and lines on paper. And they're called chromatograms, and they're really, really tough to understand. I went to school for like 11 years to figure out how to read one of these things, and it's what I did all day, every day. So I don't necessarily think it's reasonable for a physician or those at the point of care who have a lot of other responsibilities to understand all the minutiae that's associated with it because it's tough, and it's hard. And here's where I say a toxicologist can be your best friend, you know. In a former job, one of the favorite parts of my role was getting on the phone every day and helping physicians and nurses and pharmacists really understand the data that they had in front of them that came from our lab. What does it mean? What's in here? What's not in here? Can you help me understand this? And I mean, that's why we went to school. Like, we're nerds. We love it. That's what we do. So, make friends with your local toxicologist, you know. We'll talk to you about data. We love it. All right, next slide. Let's move on.

[00:21:04] Number four. There are a lot of myths out there. Myths persist every day, and misinformation really increases stigma, and it delays treatment. Full stop. That happens. Bystander overdose is really, really, the risk of it is extremely low. An incidental contact is highly unlikely to cause any toxicity. To date, there is no toxicological evidence that supports a conclusion that an individual who was a first responder at the scene where fentanyl or some of these opioids were found experienced an overdose. We have no toxicology data that shows metabolism and metabolites in these individuals. And it turns out that a lot of the symptoms, while not consistent with what you would see in an overdose, are consistent with anxiety and some of the symptoms associated with panic attacks. So these things are really important to understand. And I don't want to downplay the anxiety because it's a high-stress situation that you're going into. But continuing to talk about how it is toxicity or a potential overdose, I think, really harms some of the messaging and does contribute to the increased stigma that we have.

Naloxone works. That's a big one. I should probably put that in bold, maybe underline it. There are, you know, discussions out there about resistance to naloxone, or do we need more naloxone? The evidence base is still gathering. There could be a multifactorial list of reasons why people have seen resistance to naloxone. Could potentially have to do with variations in some of the opioid receptors that I talked about in the pharmacogenomics. It could be multi- or polydrug use, other drugs in the body. It could be because, you know, there's an underlying physical condition with the person. So there's lots of reasons why an extra dose of naloxone could be needed. But the bottom line is, is if somebody is overdosing, and it appears to be an opioid overdose, naloxone should be administered, and naloxone works. Full stop.

[00:23:41] The other, the next myth is that anybody who is using an opioid is at risk of an overdose. There.... I hear a lot about people at high risk or these people are at high risk or low risk. I think the bottom line is, is if you are taking an opioid, there is risk. There is risk associated with it. Even if you have, you know, two oxycodones for a sprained ankle or after a surgery, there is still risk associated with that. And I hesitate to talk about high risk, low risk, no risk. If you're taking an opioid, you're at risk. And if you are taking an opioid and other things like Ambien at bed or a benzodiazepine for anxiety or stimulants for ADHD or...even some antidepressants and things like that, the use of multiple drugs does increase that risk. So polydrug use is also a risk factor that I think we need to talk more about. Next slide.

[00:25:00] And I'll finish up here by talking about harm reduction. It works. I have a whole list of notes on this, but it turns out that Elizabeth and I planned this really well, and her talk really digs into all of the evidence about what I have listed on this slide. So, I'm gonna let her really talk about the evidence base for substance use disorder treatment, for medicines for

opioid use disorder, about naloxone, syringe services, drugs checking supplies, which happens to be one of my favorite as a toxicologist. I helped to develop some of these in the early days, and they are fantastic to help understand what is in your drug supply. Overdose prevention sites and drug alerts and early warning systems.

And that last one I'm going to say a little bit more about that ties back to what I said on the first slide talking about how we need to collaborate and work together and how toxicologists often see these data and this information years before the rest of us are. And we've been trying to do better with early warning and drug alerts, and a lot of big toxicology labs around the country now are working hand in hand with public health agencies for things like this in these early warning systems. If they see something in the lab, as soon as they definitively identify it, they let the community leaders know so that warnings go out, and folks know that there's something new or something weird in a drug supply. So, all of these are important, and Elizabeth will talk about it. So final slide.

I just want to say, if you have, next slide, any questions, there's my email. Let me know. I love to talk toxicology, and I love to talk data. I will say that in my final thoughts, I had a couple of honorable mentions of the five things that I wanted to talk about, and the five big ones I think made it on here. But that's not to say that novel compounds shouldn't get more of a focus; that better data, more data isn't necessary; that I need to harp more on collaboration; and that continued education aren't all also important. So, it was hard to whittle this down, but I'm glad that I could share all these thoughts with you today. So, Elizabeth, I'll turn it over to you. [applause]

[00:27:41] ELIZABETH SALISBURY-AFSHAR, MD, MPH: Thanks so much. While my slides— Oh, now I can only see myself. While my slides are being pulled up, I just want to say thanks so much for having us today. I really want to thank the AMA for all of their work in this space. AMA's been a real leader in a lot of the policy conversations around increasing access to addiction treatment, around harm reduction. And if you haven't checked out this month's issue of the ethics journal, I would highly encourage you to do so. There's some really great work in there. I'm sure we're not biased as contributors.

So, I'm going to, it's going to be hard. I'm going to do my best to keep it in 20 minutes, but to talk about harm reduction and its evolution, where we started and where I hope we're going. As was mentioned, my name's Elizabeth. I have been practicing addiction medicine for over a decade. I've worked in public health in Baltimore City, here in Chicago, was previously med director of public health here and now in Wisconsin. I see people who use drugs on at least a weekly basis. And so, this work is really meaningful to me. And again, really grateful to be here. We can go on to the next slide.

I live and work in Wisconsin, and so I always start with a land acknowledgement. I respectfully acknowledge the Ho-Chunk Nation on whose lands I live and work as a guest. In 1832, the Ho-Chunk were forced to cede their territory, and I respect the inherent sovereignty of the Ho-Chunk Nation, along with the other 11 First Nations of Wisconsin. Next slide.

[00:29:09] So, people have probably heard the term "harm reduction" at this point. You probably have heard a lot of the political discourse in the media. I think it's always really important to just remind ourselves of where this work started. So, the current harm reduction movement as we know it really started during the HIV/AIDS epidemic. In the mid '80s, we were increasingly aware that of course rates of HIV were very high among men who had sex with men, but there was a smaller population of individuals who inject drugs who we were increasingly understanding were being infected at very high rates. We knew by the mid '90s that sharing of needles through injection drug use was likely the contributing factor. And there really was not much press. ACT UP was really active at this time and really advocating

for the rights of gay men. We were not, at the time, seeing the same level of political activism around drug use. Being gay obviously had a lot of stigma in those days, injection drug use even probably more so. I guess that could be argued, but less activism.

And basically, what people who worked with folks who use drugs were seeing is that people were dying at really high rates. We knew that if folks had access to clean syringes or to sterile syringes, we could reduce transmission dramatically, and there was zero political movement. And people got fed up. And they said, look, we know that syringes, we know how to access sterile syringes. We know if we give them to people, we could dramatically reduce transmission of this disease. And at that time, this disease was a death sentence, right? But there was no movement.

[00:30:41] And so, the guy on the left is Dave Purchase. He was in Tacoma, Washington. This is around 1988. And he said, okay, I'm done. I'm going to set up a TV tray. I'm going to hand out clean syringes, and I might get arrested, and I'm going to do it because it's the right thing to do. People I care about are dying. And I would say most of the forward movement we've seen in the harm reduction space has been because we are fed up. We are fed up with people we care about dying, and we know we can do better. And the tools are out there, it's just about finding the funds and the political will, and sometimes the regulatory changes or the legal changes to allow it to happen.

The picture in the middle is what eventually became the National Harm Reduction Coalition. I'd just like to give a shout-out to the Comer Foundation, which is based here in Chicago. They funded this first meeting, and so they took, really, HIV/AIDS activists from around the country who were working with people who use drugs, who were trying to get access to syringes in the community. They brought everybody together kind of as this think tank. Now again, this really required private philanthropy because there was no governmental agency in the early '90s that was going to say, "Yeah, we want to support drug users. We want to support people who are injecting drugs. We don't want them to die." It really took the philanthropy of the Comer Foundation to bring these folks together and say, let's share our best practices. Let's share notes. There wasn't a ton of research on this practice at the time. This was sometime early '90s. The guy in the white shirt in the middle in the front row is Dan Bigg, who was a co-founder of the Chicago Recovery Alliance, also the picture on the right side.

[00:32:07] So, the last thing I just want to mention is partly because we're here in Chicago, at least those of us in this room, the Chicago Recovery Alliance was one of the earlier syringe service programs in the country but also was really the first organization to start distributing naloxone. And they did this work in the mid '90s, continue to do it today. And they basically said, Dan heard about this medicine, naloxone, that was being used in hospitals and ERs to reverse overdoses. And he said, well, that's stupid. Like, we have people dying in the community all the time. We know that people are afraid to call 911. This was before good Samaritan laws, right? Like, if you call 911, probably, somebody was going to catch a charge. Nobody wants to call 911. They're worried about how they're going to be treated. And so, people were just dying, often without getting any medical intervention. And so Dan said, if I could just find somebody to help me access this medicine, we'll just start handing it out.

It wasn't necessarily illegal, but there wasn't a legal framework by which to do it. So again, another example of saying, we're going to do this because it's the right thing to do, because people are dying, people we care about, and nobody else is making this move. So the CRA was the first. Dan's sometimes referred to as the patron saint of naloxone. There are t-shirts. I wish I had one of those. It like.... Really amazing work. But I just cannot say enough about many of the harm reduction efforts have been underground, have been often, have always been underfunded, continue to be underfunded, and have been because people are fed up

by the stigma, the criminalization, and preventable death. And this work continues today. And as it's become more mainstream, I think it's really important that we continue to acknowledge the tremendous risk many of these people took on. Next slide, please.

[00:33:45] So this is a definition of harm reduction from the National Harm Reduction Coalition, and they say that it's "a set of practical strategies and ideas aimed at reducing negative consequences associated with drug use." It's "also a movement for social justice built on a belief in, and respect, for the rights of people who use drugs." Next slide.

So, I'm often asked to give talks on harm reduction, and I've learned over time that I have to ask, "First, what does that mean to you? And do you want me to talk about harm reduction as a service line, as a specific thing that we're giving people or offering people? Or are you wanting me to talk about it as a philosophy or approach?" And I think these two things are very interrelated. But sometimes I, now, again, I give a lot of talks to clinicians, and people will say, "Oh yeah, Elizabeth, I'm doing harm reduction now." I'll say, "That's so great. What does that mean?" And they'll say, "Oh, because we give out naloxone," which is a form of harm reduction. But I'm going to start by just talking a little bit about the evidence base of the services on the left. And I'm going to end with talking about what does this mean as a philosophy. And I often argue that I don't care what, and again, speaking to clinicians, what your specialty is. I don't care how you, what your sort of interaction is with patients. We can all embed the philosophy of harm reduction into our work. Next slide.

[00:35:08] So this is going to be fast, and I'm happy to answer questions at the end, but I'm trying to keep an eye on time. So, evidence base behind syringe service programs. We've been doing this since the late '80s. There is now tremendous evidence supporting their, the syringe service program availability. We see tremendous reductions in HIV and hepatitis C when we deliver, when we offer syringe service programs. We also see significant reductions in soft tissue infections, so skin infections, as well as other types of infections in the body, infective endocarditis, or heart valve infections, being a big one. In the world of health care, these things are so expensive. If we can prevent someone from getting HIV, if we can prevent someone from getting hepatitis C, if we can prevent a six-to-eight-week hospitalization for infective endocarditis and valve replacement, right, this is tremendous savings. I hate that I even have to talk in the case of dollars, but in our current political environment, dollars talk.

They also have been shown, often there's a concern, if we give people this tool, everybody's going to inject drugs. Or if we create an SSP, all the sudden, lots of people are going to want to inject drugs, so there's going to be more crime. This has been repeatedly studied, and each time they have found it does not lead to an increase in injection drug use. It does not lead to an increase in crime.

I already mentioned that they save health care dollars. And because increasingly, syringe service programs are co-located with naloxone distribution, these programs can reduce overdose death. And it's really through that collaboration with naloxone, but the two can be really great engagement tools to engage more folks who use substances. Next slide.

[00:36:43] This slide you will see many times. And we have challenges with scaling harm reduction services across really all service lines. I'll just stay at a really high level with a few of them. So the legal environment around syringe services, despite all the evidence, despite health care savings, despite reduced death, it's still illegal in 13 states. Still illegal. So the legal environment is tricky, and even where it is legal, you've probably all seen in the news, it doesn't make it easy. And kind of depending on the jurisdiction, depending on the state, we still see that there are many, many counties across the country and still many states that don't have any access to legal syringe service programs.

Political environment, you know, obviously legal environment, political environment really go hand in hand. We can talk about this during Q & A. You probably have seen some in the news, but I think this constant sort of push-pull around the argument of moral hazard. Like, we don't want to enable people who use drugs. We don't want this in our community. It's going to bring more drug users. None of that's ever played out in the science, but as we all know, science and legislation don't always line up.

And finally, funding. There's still a federal ban on using federal dollars to purchase syringes, which means that entities are required to either find philanthropic funding, or if you're in a state that is willing to use state revenue or in a jurisdiction like a locality that's able to do that, great. But if you're not, there's not an obvious funding mechanism. Next slide.

[00:38:11] So naloxone, I actually sometimes take this one out because of the things I'm going to talk about, this is the least controversial. We also have— Today, least controversial today. There was a time when I would give hour-long talks about naloxone and how safe it is and why we should do it. And especially physicians would be so nervous about the liability, until finally, next slide, until finally, the Surgeon General, Jerome Adams, put this advisory out. I don't know if folks remember this. Physicians actually, anybody who is a prescriber, actually got a postcard that said hey, you should do this. And then my talking points changed, and I said, I actually think it's a liability not to do this as a prescriber. If you, if the Surgeon General just told us we should be doing this, and you're not doing it, then I actually think that's your liability. So this has become so much more mainstream.

There are still some challenges with scalability, but I think this is a perfect lesson to see when we get behind this politically, when we change regulations, so we have standing orders in many states that allow community organizations to not need a physician to do the order, when we have regulatory changes like making this over the counter, right, when we have tons and tons of CDC and other funding coming out saying purchase naloxone and get it into the community, we can see that we can make tremendous strides. So in my mind, we still have some room to go with naloxone, but naloxone has been a harm reduction win. And I think we have a lot of lessons learned politically from an education standpoint on what allowed that to happen. Next slide, please.

[00:39:39] I want to say just a few words on community drug checking. Are folks sort of loosely familiar with this concept? Can I just see, I see a couple nods. Okay, a couple shaking heads no. So, as Amy described, the drug supply is highly volatile. Now the conversation around why it's so volatile, I think, is complex and important, but not time for right now. And one of the greatest risks for my patients who are actively using illicitly purchased substances is that when they buy that substance, they don't know for sure what's in it.

So, for anybody in the room who's ever bought alcohol, if you think about going down the aisle, you can pick up a bottle, and you can look at exactly what proof of alcohol it is, and you know what's in there, right? Because we have regulation around that. When someone is purchasing a substance that is not regulated, they buy it, they have no idea what's in it. Now these days, if you're buying what you think is heroin or down or dope, whatever it's called in the region of the country you're in, you should probably assume that it's fentanyl. But you don't know if it's 5 percent fentanyl, 50 percent fentanyl, 95 percent fentanyl. You don't know if there's nitazenes in it, xylazine, right? The list is so long. You have no way to know. Most of the risk for my patients right now is that. Is the not knowing. So, the concept behind drug checking is that we're going to give people some tools to have a better sense, not a perfect sense, not 100 percent, not foolproof, but a better sense of what the heck is in what you're buying.

So there are sort of, and Amy, I'm embarrassed to say this in front of a toxicologist, my sort of lay view is there are a few different modalities that are predominantly being used right now. One is a test strip that's kind of like a COVID test. You use it—so fentanyl test strips are probably the most commonly available—you use it, and it says positive or negative. Is there fentanyl, yes or no? Again, it's not like 5 percent or 95 percent, it's just like yes or no. That's what you get.

There's more comprehensive drug checking, and I will just pat ourselves on the back. Illinois and Rhode Island/Massachusetts were the first two states to actually get CDC funds to trial and test more comprehensive drug checking. This one's a little different because people actually have to bring their substance to the place that has this machine, and they do an analysis. And the machine says, here's what we think is in your substance. Again, it's not perfect because newer substances they won't have in their library to be able to say for certain, but it gives you a better sense. So the goals behind these, this sort of concept of community drug checking is that we are trying to empower people with more information about what's in the thing that they're planning to use.

[00:42:13] And the secondary goal is really that we want to use that information to inform policy and harm reduction messaging. So what could that look like? Canada does a, many provinces in Canada do a brilliant job with this. So they literally have websites that say of the last 500 samples of like down or heroin-like substance that we tested, X percentage had fentanyl, X percentage had this, X percentage had that. So they give the information back to the community that then allows harm reduction agencies to help message. Next slide please.

Evidence behind drug checking is evolving. And so, there are more, and so this really the first, the first studies that came out started coming out in about 2017. So, we still have a lot more learning to do in this space. The short story is every study has found that there's been some change, whether it's an intention, direct behavior change. Harder to study actual health outcomes, but there's at least one study from Canada that did find when they gave someone a result of fentanyl, they were likely to change their behavior. When they changed their behavior, they were less likely to overdose. So I think we'll see more research in this space. Next slide.

But the thing I really wanted to draw on is more our hopes for the potential value of drug checking. So, obviously, at the individual level it provides information, but equally important, there's some hope that if we start making this information more public, it actually applies pressure back on the drug markets, right? Drug markets are markets. And if the people who are buying your product are saying like, "Hey, I saw that this blue package has all this other junk in it that I don't want, I'm not going to buy from you anymore," that that could increase quality controls. It's not a direct way to do it. It's not a regulatory arm, right? That is a different conversation. But there is hope that it can apply pressures on drug markets. There's also hope that it will lead to different conversations at the public health level and allows us, again, to get that information back to the community. Next slide.

[00:44:12] Still challenges here. We have seen that test strips, you can use federal dollars to purchase test strips. There are more and more states applying to use dollars to do the more comprehensive drug checking. But if you think about scaling that service, right? So Chicago has a machine. Just think about the size of Chicago, right? Think about how often, most patients I work with use drugs multiple times a day. To be able, just logistically, it would be really hard to scale this service and make it available everywhere. So, I think the funding and sort of the logistics around that is still complicated, but something that we're working through. Legal environments in many states. Testing equipment is considered paraphernalia. So, up until like a year and a half ago in Wisconsin, a fentanyl test strip was considered drug paraphernalia, so we couldn't pass it out. They had to change legislation. So there are still

legal barriers in many states. And again, political environment, kind of this constant moral hazard argument continues to come up. Next slide.

[00:45:06] So, the last service line I'm going to talk about is overdose prevention sites. So, the thing I'll, these are.... The thing I actually want to start with is overdose prevention sites were started in Western Europe, not because they had overdose outbreaks the way that we do here, not because it, but because they had a lot of public injection. And they said, you know, look, we understand people are using drugs in public because they don't have housing. Now the Europeans felt they couldn't make housing illegal. In the United States, we apparently have a different viewpoint. But they said, we can't make it illegal to not have a house. You don't have anywhere to go to use drugs. That's why you're using publicly. So maybe if we just make you a safe place to go, you will stop using drugs in parks and public spaces. So the original, the primary goal of many of the first overdose prevention sites was quote-unquote to "reduce public disorder."

And so, the concept behind them are that these are facilities where people can go to consume drugs. They are, it's not a place you buy drugs, but you get your drugs, you go to this place. It's a sterile, it's a hygienic environment where people can use drugs without fear of arrest. They have all the equipment there, so you can access clean equipment. If you have questions about safer injection technique, they can help you with that information. And then if you have an overdose while you're there, there's somebody who can respond in a humane way, and again, without this fear of legal repercussion. And so, the goals of overdose prevention sites are, again, in many places to reduce public disorder, to reduce harms from drug use, reduce HIV, hepatitis C, all of those transmission of infectious diseases, and to improve health.

And so, many of these sites around the world also serve as linkage points, linkage to housing services, linkage to other social services, linkage to treatment, if that's what folks are looking for, so really kind of serve as these hubs of services. Next slide, please.

[00:47:04] So, most of the evidence base around overdose prevention sites actually come from outside the United States, mostly because they have not existed in the United States until just a couple years ago. Canada has been really a leader in terms of scaling these sites as well as funding and researching them. So, a lot of this research comes from Canada. And what they've found so far is that these sites do reduce fatal and non-fatal overdoses for the people using the site. They reduce ambulance calls in the vicinity of the site. They reduce the risk of HIV, hep C, soft tissue infections. Again, they have not been found to increase injection drug use. They don't increase crime in those areas. In fact, some studies have found a reduction in crime in the areas where these sites exist. And some studies have found reduced public injection, and some studies have found reduced discarded syringes, injection materials. So, very, very positive evidence base for these sites. Next slide, please.

Yet they have remained highly controversial in the United States. So, under the Trump administration, Philadelphia was actually positioned to be the first to open an overdose prevention site. And basically, the Trump administration said, if you do it, we will prosecute. We'll use this thing called the crack house statute, and we're going to come after you. And so, they basically got caught up in legal battle, escalated through the courts before they even opened and really kind of were in a standstill.

New administration, New York City said, okay, we're just going to do it. We're going to announce it, and we're going to go full steam ahead. In December of 2021, there were two of these sites open in New York City. They have had really great success. I didn't include all the research. I'm happy to send it out just for the sake of time. But again, they have seen the same things that we've seen in previous studies. They are doing a great job of engaging people who are experiencing homelessness, a great job of engaging people who have very

high risk in terms of other psychosocial risk factors, a great job of engaging BIPOC community who have higher rates of overdose in their city. So, really meeting all of the stated objectives and have been doing very well. Rhode Island will be the next to open. They're due to open in the fall. This will be a state sanctioned facility. And I think really, the question from a policy lens for me is if we have a different administration after the election, sort of what will happen? TBD. Next slide.

[00:49:24] So many challenges here, the legal one being probably like the elephant in the room. Many other states and jurisdictions have tried to pass this legislation and have not been successful yet. I should acknowledge here that AMA put out their statement in support of overdose prevention sites when? What year? Five years ago, Daniel says with a shrug, so a while ago. The evidence behind these is great, but as we all know, evidence and policy don't always line up. Lots of challenges with the political environment, and funding, of course, another challenge. Obviously, federal funds are not being used for these purposes. Often, it's a mix of philanthropy and sometimes local general revenue. Next slide.

[00:50:04] So, that was fast on service lines. I want to spend the next five minutes just talking about harm reduction as a philosophy. So, as a clinician, I think that there, again, are many ways we can embed this philosophy of harm reduction into my work or into our work. Really at the core of it, it centers the experience of people who use substances and embraces the inherent value of people. And the sad truth is that many people who use drugs have historically been so stigmatized, and so stigmatized within health care, that they don't even feel welcome. And so, this is really a flip of the conversation. Harm reduction as a philosophy really commits to community engagement and community building, which we always like to say we're doing in health care, but the reality is we're not so good at. It promotes equity, rights, and reparative social justice. It offers accessible and non-coercive support and focuses on any positive change. Next slide.

So, often when I give talks on harm reduction to clinical audiences, and interestingly, especially substance use disorder treatment providers across the board, clinicians who work in substance use disorder treatment, people come into my talks sometimes ready to argue. I won't use the word fight, but ready to argue. They're like, "I believe in abstinence. Abstinence saved my life, and I can only stand for abstinence. I could never stand for harm reduction." And for a long time, the sort of, a lot of the controversy has been this idea that abstinence and harm reduction are antithetical. They're opposites. You can't do both. Next click.

And what I would argue is that abstinence is absolutely part of harm reduction. If we're talking about reducing the harms of substance use, I often also talk about reducing the harms of policies related to substance use, if you're not using a substance, you're not at risk for those harms. So abstinence is absolutely at one end of the spectrum, but if we only focus on abstinence, that means we are leaving a lot of people out. If I say I'm going to run a substance use disorder treatment program, and you can only come here for help if you're willing to say you're going to give up every single substance that you use, otherwise you're not welcome, which is what we've done in addiction treatment for decades, that means that anybody who doesn't feel that they're in a place to do that isn't, doesn't feel welcome. We did a qualitative research study here in Chicago, gosh, before the pandemic, so maybe 2018, 2019. There was a great quote. I wish I had it pulled, but basically this person said like, "look, I'm homeless right now. I have all these pressures on me. And I just don't think it's within my current capability to fully stop using. I have tons of stress, all these things going on. I'm willing to make all these positive changes, but abstinence? Not within reach right now. And because it doesn't feel within reach, I'm not welcome." That was their perception.

So we have to start changing the focus on like, we care about you, you're a human being, you deserve to live, you deserve support services, and it's not my job to set the sole goal for

you. It's my job to support you and talk about evidence-based services and help you get access to the ones that are available in our community and to really kind of think along this continuum.

So, the continuum could be abstinence. It could be that someone wants to reduce the amount they use. It might be safer use. So, like Amy talked about, maybe saying I'm not going to mix substances, or I'm not going to drink when I'm using opiates, right? So trying to have safer use. Or maybe instead of injecting, smoking. Maybe instead of sharing equipment, not sharing equipment. Tons of opportunities. Could be about a safer environment, trying not to use substances alone so that if there is an overdose, somebody can call for help. It's about safer supply, knowing what's in the substances you're consuming, and of course, preventing death. Next slide. Next, sorry.

[00:54:04] So, I just want to make sure folks are aware, for the first time ever, this is super exciting. Again, when you talk about sort of federal buy in, federal recognition, the Substance Abuse Mental Health Services Administration put out a harm reduction framework. So just for the feds to say we're going to give a framework. They did a lot of community engagement. Some would argue they could've done more, but I think, as a first step, they included over 100 people. There were lots of frontline harm reductionists who have been involved in this work for decades, and they really drew out a framework as a first step. And this is the first time that we've really seen this level of engagement from the White House or any of its organizations to give sort of a nod to harm reduction. Next slide.

So they lay out 12 principles of harm reduction. I will not read them all to you. But as I looked at these, the thing that really struck me, this was not written with just health care in mind or just addiction care in mind. But the thing that struck me as I looked at these principles, they very much align with sort of health care principles that are already in existence. So they align with patient-centered care. So, putting the patient in the middle and working with them to figure out what their needs are. They align with trauma-informed care. They align with the tenets of motivational interviewing that really focus on engagement, active listening, respecting autonomy.

And advocacy, I know some clinicians might not feel that advocacy is core to health care. I personally do, but this recognition that we have to work towards systems change because there are a lot of structures and systems in place that are causing harm to our patients. Next slide.

[00:55:39] And this is the last slide. So this is, I do not have appropriate permissions. I'm using it only for educational purposes, and I warned our ethics journal colleagues that I did this. But this is an image from one of the papers in the most recent issue, and I loved it so much I wanted to just highlight it today. So these authors spoke about the interrelation of structural determinants of health and harm reduction interventions. And so, I think in this space, we get a lot of flak about we don't talk enough about prevention. And I think one of the challenges is when the word "prevention" comes up, what people often jump to is DARE, which didn't work, or other educational programs, which have not been shown to be particularly effective.

And so, when I talk about prevention, I think prevention has to be part of the conversation. But the problem is that the version of prevention I want to talk about feels big and lofty because it's talking about systemic racism. It's talking about a criminal-legal system that has disproportionately impacted people living in poverty and people of color. It's talking about structural violence. It's talking about growing up in communities where you're constantly at threat of violence or you're worried about it. It's talking about adverse childhood experiences. And preventing those things or addressing those things is hard. It's talking about people living in poverty having much higher rates of mental health and substance use disorders.

Poverty alleviation, right? If we could alleviate poverty, think about how many health outcomes would improve across the board, no matter what your space.

But I love this because they really start to draw in, like, this is not an individual problem. This is a societal problem. These are societal problems that are impacting the rate at which people develop addiction, and they are factors that are influencing people staying in these cycles of addiction. Until we start talking about structural determinants as part of our prevention efforts, I think we're going to miss the mark.

And so, as we talk about harm reduction, I very much think that policies have to be part of that conversation. Yes, there are individual services, but there are broader sort of social and structural things that are contributing to the many risk factors for addiction. So this is my hope. My hope is that this is where the field of harm reduction is going. I know it feels big. I know it feels hard to get our arms around, but I think it's very necessary. And that is everything I have. I'm sorry. I was a few minutes over. [applause]

[00:58:11] AMBER R. COMER, PHD, JD: Thank you guys. Let's thank our guests. Again, that was really wonderful. [applause]

I'm Amber Comer. I'm the director of Ethics Policy, and I am the secretary of the Council on Ethical and Judicial Affairs. And my role today is to help moderate questions for our panelists. So, if you are online, you are welcome to place your question in the chat. And if you are in the room, I invite you to please come to one of the microphones.

[00:58:58] AUDIENCE MEMBER: Is it working? It's working. Great. I just had a question about something you had said about how they're tracking more information about the genomics involved with drugs and what's happening to bodies. Is there anywhere that they're coming up with a unified way of recording this or way where pharmacists can be, you know, putting this in files, doctors can be putting this in files? Because I currently kind of feel like it was on us. And so, since there is more information, is there anything they're trying to come up with to, I don't know, yeah—what's the word?—unify a system?

CADWALLADER: I, so, I think so. This is not my specific area of expertise. I know that there are lots of resources and guidelines for clinicians that exist and recommendations to do all of this. And I think as this information gets included in medical records, that it stays with the patient and that information is relayed to pharmacists, etc. But I would recommend, I have some resources if you want to shoot me a note. I can provide you some resources and some of the links to the databases and the guidelines that sort of list out all of these recommendations.

COMER: Thank you. For those of you who are online, it has just come to my attention that the chat is disabled, but we are working on trying to fix that. So, please keep your questions. Does anyone else in the room have a question? Yeah?

[01:00:29] AUDIENCE MEMBER: I just had a question about the community testing—oh, sorry—the community testing options available. It seems like there's a challenge between providing information that's precise enough to be useful, but not so complex that you need to be a toxicologist to sort of understand it. So, either of you, could you speak a little bit more to alternative options that are available, maybe tests that could be used more that aren't seeing as much use, maybe tests in development that could provide information?

SALISBURY-AFSHAR: Can I just ask a clarification? So, in this space there is.... So, drug testing meaning tests we use in the clinical environment for patients and then versus drug checking, which is like—

AUDIENCE MEMBER: I do mean checking, yeah.

SALISBURY-AFSHAR: So, I just want to— So you're talking about drug testing for clinical environment?

AUDIENCE MEMBER: No, I mean drug checking for people who use drugs for getting them information that's useful to them. You know, what else could we be doing? Are the tests that are available things that people use? Are they seeing actual uptake in them? Things like that.

SALISBURY-AFSHAR: I can start with the on the ground, and then I'll move to you for industry. So I think on the ground, fentanyl test strips were useful when the drug supply was very mixed. These days anybody who use opioids will tell you they're pretty worthless because it's going to be positive every time, and if it's not, it's probably a false negative. Now, it may be useful for people who are solely, like, predominantly use stimulants and don't want, don't want fentanyl exposure. So that's really who we're, but I think the challenge is, like, with every news, like, how many test strips are we going to have, right? So we have fentanyl test strips, we have xylosine test strips. And for many people, especially with lower resources—I predominantly work with folks who are experiencing homelessness—it's like, how many tests am I going to do just to try and figure out what's out there? The FTIR machine that I mentioned is just one of several different modalities that's used in the community, but it's expensive. It's about \$50,000. It requires a full-time technician who needs to have quite a bit of training, and it requires retraining and new libraries.

So, yeah, I mean, I think the question is, is industry going to see that there's enough money in this space to develop better stuff? I think from a technology standpoint, which is not my expertise, absolutely, the science is there. It's just a question of, is there going to be an industry that's willing to invest in it? Do they see enough potential for profit? And I don't know the answer to that. Maybe Amy can speak more to that part. But there is a massive group of people who focus on drug checking from around the country that get together, share notes. This is, again, a very, sort of grassroots, advocacy, activist oriented movement that's happening right now. And I think we'll see more, potentially, if there are more federal dollars, then there's more room for profit, which is usually what it takes for us to get new modalities.

[01:03:18] CADWALLADER: And I would echo what Elizabeth just said. It's about the funds and the money. I think we have the capability and the science and the knowledge to be able to do it, but it is not easy to do that front-end R&D to make sure that it's going to work as it's supposed to all the time and then to produce all of those supplies. Somebody somewhere has to pay for that, and getting that funding is very challenging.

COMER: For those of you who are online, you may now use the chat. You can go ahead.

SALISBURY-AFSHAR: If you want to say your question, I can repeat it for—

[01:04:08] AUDIENCE MEMBER: Yeah, I'll say it loud. I'll use my big girl voice. My question is related to informed consent for drug testing. And how do you see that as kind of like a part of the standard of care for substance use and substance use disorder for treating people who use drugs? And then also, how do you see it as part of the harm reduction philosophy?

CADWALLADER: Thanks for that question. One of the articles that I mentioned that I wrote for the *Journal of Ethics* talks about that at length. But I think in a clinical setting that it's really important that the drug testing is part of the patient-provider relationship and part of that relationship that they have, that any physician should be discussing it, talking about it, getting that informed consent, but also making it clear that it isn't punitive and that it is for

health care and individualized health care and minimizing the risk for that person, so I don't know if you have more to add.

SALISBURY-AFSHAR: Yeah, it's a great question. I still struggle all the time, right? I think when you carry a prescription pad and you're prescribing controlled substances, and I think because I work in public health and directly with patient care, we saw what unfettered access to pills looked like, right? We didn't, not as much of a problem in Chicago, but in a lot of parts of the country, it wasn't good, right? And so, then there was this push to put all these guardrails on, where physicians were in a lot of ways pushed to be like detectives. And clinical guidelines really tell us we should do this as standard of care, and if you're not doing it, I have colleagues who have lost licenses. There can be very real repercussions. And the climate looks dramatically different in different states.

And so, I feel like in a lot of ways, we're kind of in this tough spot, right? And so, I think, to Amy's point, it's really important. One, sometimes people order tests, and they don't know what they're going to do with the results. So a lot of times when I speak, like, we should not order a test if we're not ready to have a conversation about what the result shows. I do a lot of training on medications for opioid use disorder. And so, when we're prescribing controlled substances, my personal view is like, I do have a responsibility to my community to make sure that I'm not becoming, and I hate this word, but like a "pill mill," when I'm prescribing a controlled substance, because theoretically, they're controlled because there is some risk.

[01:06:37] But when I work with patients, I say, "Look, we use drug testing here. I want you to know exactly why we use it. We use it because we need to make sure that you're taking the medicine that we're prescribing. And if you're consistently not taking it, at that point, I don't feel like it's safe for me to continue to prescribe it. If you're taking other stuff, that's fine. We can work through that. We'll talk through it. I understand everybody's goals are different, but I need to make sure that you're taking what I'm prescribing. And if you're taking a lot of other stuff that adds risks, we also need to talk about that for your safety."

Is it the most—I think there are lots of harm reductionists out there who would say, "Elizabeth, that's terrible. You should never use it. It damages patient-physician relationship." And I think, again, if you have a license, and you're carrying a prescription pad, there are sort of responsibilities that come with that. And so, that's still the line that I walk. Ten years from now, I may, have a different answer. I think clinical guidelines matter a lot in this space because I'm not a lawyer. I don't play a lawyer, but I get asked a lot of questions about, "Am I at risk for losing my license if? Can I get a lawsuit if?" The thing I've learned over time, anyone can sue you at any time. We live in the United States. But, you know, if you are following a clinical guideline.

And so, when, if the clinical guidelines change and give us more leeway, I think the counter to that, sometimes I work with clinicians who say, "Oh, I only use it when I feel like there's something suspicious." For me, that's even more worrisome because we all know that we have implicit bias. And who are the people who we're going to think seem, you know, more suspicious? Probably people less like us. And so, I think there's risk in that too. So really having a level of like, this is what we do for everyone. We're super upfront. We're very transparent. I literally turn the computer screen around and say, "I want to talk about what we saw last time. Did you know that you had" this, this, and this? And sometimes people will be like, "Oh my God, no. I knew that that felt weird." But we talk about it in a very open way, and I'm very clear about how I'm using the results. And I think that again, I don't know that that's the perfect answer, but I kind of feel like it's where clinical practice is right now today.

[01:08:44] AUDIENCE MEMBER: Thank you both for this fantastic discussion today. I was curious about some of the harm reduction programs. A lot of them are really community based, community oriented, but with our members here at the AMA, I'm curious about if

there's any movement to bring some of these programs more in line with physician engagement and kind of that transition. We just had a talk recently internally about the differences between public health and population health. And if there's any movement within some of the states that are maybe a little more open to these programs to try to work with insurance companies and be able to prescribe, say, clean needles, test strips, naloxone, and try to have a slightly different point of contact with some of these individuals and be able to have discussions, maybe earlier on, before they end up at a point maybe where it's really necessary then to engage more of the community-level approach.

SALISBURY-AFSHAR: That's a great question. The focus on insurance companies, I think we've had a lot of conversations around medications for opioid use disorder, but I think for some of the other services we described today, I'm not as familiar with those conversations. I did just want to say one thing though. When we look at population-level data, in terms of, in particular, who dies, which is, we do a lot of studying who dies because we know exactly who people are. And when we track back and look at where were the points where we could've intervened, there are two or three primary points. What do folks guess they are? So folks who die of an overdose. When we look at all the health records and public data we have, where are the places where we most often miss? ED? People are not generally in primary care. ED, the jail, and the legal system writ large: probation, parole, you know. And so, I think, you know, one, we really have to understand where our highest-risk folks are. I think the prevention question is really important.

[01:11:06] Again, I don't think we fully under-, when it was mostly people were initiating use with pills, it was a different conversation. They were in primary care. We knew we could look at claims data and figure out who they were. I think the challenge is a lot of times when people are initiating their use, they're not touching health care at all, especially the younger folks, right? They're young, they're healthy, they're invincible, as we all are when we're young. And so, they're usually even not even being honest on the screening questions, you know, because why would you go in and say, "Yeah, I use cocaine on the weekends for fun, and it's not a problem?" That's, you don't want that in your health record, that your health insurance that your employer pays for. Mm-mm. Most people aren't going to do that, right? So we've created so many structural and systemic barriers. We don't really have a wellness system in health care in the United States, right? Like, we have a sick system. People only come end stage.

There's a lot we could do on the front end, but one of the reasons these programs are so community focused is because most people who are using substances currently feel highly stigmatized, do not actively engage in a lot of health care services outside of the emergency room setting. And so, finding them is tricky. So, trying to get into the places where people are has really been the public health strategy to finding people earlier. So it's not to say there's not more work to be done with insurance and prescribing. I think so far, most of the leverage has been through public health and sort of similar systems.

I will just end by saying at ACM this year, American Study of Addiction Medicine, we had a panel on harm reduction, which was a huge move for ACM. It has been a very controversial topic. And we had colleagues who talked about, Hansel Tookes talked about delivering health care at syringe service programs in Miami, Florida, a very conservative state. We had Marlene Martin talk about her work at UCSF, San Francisco General, actually giving people clean syringes at the point of discharge. We had someone talk about liberating some of the methadone regulations during the pandemic who came from Massachusetts. So, this work is integrating more with health care, but to your question of who's paying for it, it's largely not payers right now.

AUDIENCE MEMBER: Thank you.

COMER: We have time for just one more question. And for those of you whose questions have not been answered, you are welcome to stay for our meet and greet and ask our speakers during that time. Rock, paper, scissors?

[01:13:21] AUDIENCE MEMBER: Hi, good to see you all. I really loved this presentation. I'm interested, you know, I love the origin you talked about with the harm reduction and syringe exchange with him and the TV tray. I'd love to hear from both of you from a policy perspective and toxicologist and a practitioner perspective, what can you dream of in the future for what some of this harm reduction may look like, right? So, the TV tray is now mobile units and in all kinds of public spaces, right? I was really interested in the pharmacogenomic part of the prevention there and potentially the prevention with drug checking in a more broader sense. So what can you imagine? Where do you think it should go, and how can policy potentially allow that to happen more broadly that we maybe generate or support or think about as we're doing our own work?

CADWALLADER: I'll kick it off and let you go. I have a very real dream. A good friend and colleague currently has a grant with the US government to fund a pilot study that is 12 mobile RVs to live in big urban areas, to start, around the country that have all of the things that Elizabeth talked about. And to have this RV be mobile and go around and be funded and have the money that it needs to function and the expertise there to run the drug checking, to understand the toxicology, to have health care present. And that is my very real, tangible dream about this right now, is that there is funding for something like that and that it can thrive, that this pilot of 12 RVs then becomes 50 and then becomes 100 and then becomes more, so...

[01:14:13] SALISBURY-AFSHAR: I have a very, like...not a great answer. And I think, you know, I've been doing this work for over a decade, which isn't that long in the grand scheme of things, in different cities. I totally understand that we all want a simple cause and a simple solution. And I know you weren't asking for a single solution. I just think the longer I do this work, the longer I hear patient stories, the more I understand this is so complex. And, you know, I, when I worked in Chicago, we held a community event. And I don't, I am embarrassed, I don't even remember where. It was somewhere on the West Side. We were talking about increasing rates of overdose, and somebody stood up, and they said, "Y'all are talking about this like it's new. We've been living on the West Side our whole lives, and Black people have been dying for a long time. And now that White people are dying, it's a crisis." And there was a lot of pushback around some harm reduction services going into those communities, and the feedback we constantly heard was like, "You won't give us a Whole Foods, you won't give us a grocery store that actually sells the foods that we need to be healthy, but you're willing to give us syringes. What message is that sending?"

And so, again, it kind of goes back to my last slide. As long as we continue to work in the criminal-legal environment we're working in, where our primary response—and I didn't even include all the data on the legal system, I would've loved to, but there wasn't time—as long as we continue to incarcerate people for addiction, which is largely a response of our structural and societal problems that I mentioned. We incarcerate them, which then increases their risk of overdose when they leave, reduces their chances at having a successful reentry because now they typically have felony charges, they can't get housing, they can't get jobs, they can't reunite with families. So we are consistently taking predominantly poor people and people of color and putting them into a system that is pushing them out worse off than they started. As long as we continue to use that as the framework for how we're dealing with addiction in this country, I don't think we're gonna have, there is no silver bullet.

Now, I know decriminalization is like a bad word in a lot of places, and Oregon's experiment did not go super well for a bunch of reasons. But we have to keep having that conversation.

We have to talk about poverty alleviation. We have to talk about educational opportunities. We have to talk about housing and living-wage jobs. And until we have those things, it does continue to feel like a Band-Aid. It is like the conversation I had on the West side. Like, "you're willing to give us syringes, but not grocery stores and not schools and not afterschool programs and not the things that we think would really improve our community. And you're only willing to give us this thing." And I think the longer I work with people, I'm like, "Well, here's a fentanyl test strip. God only knows what's in the drugs, but here's a fentanyl test strip, good luck." That is a really, I'm probably not supposed to say bad words here, hard conversation to have on a regular with patients. And so, our systems are really broken. And I know it's hard, I know it's big, but I think we have to start deconstructing them. So, I hope you can carry that forward.

AUDIENCE MEMBER: Well, I guess, I guess the question, I like, I agree there's a lot of, like, retroactive things that we need to be doing, but it feels like we're just fighting things that are going wrong. How do we make things go right from the start? And I guess it's an and, not an or, and is sort of, we have strong policy here against the decrim and so forth. So, thank you, though, for your imagination.

SALISBURY-AFSHAR: Yeah. [laughs]

[01:18:34] COMER: I would like to invite all of you to join us and to join our speakers. So please stay after, but let's thank our speakers again for the wonderful presentation. [applause] Thank you.