

ROUGH EDITED COPY

NAADAC  
UTILIZING COUNTERCONDITIONING  
NOVEMBER 5, 2020

TRANSCRIPT PROVIDED BY:  
CAPTIONACCESS LLC  
support@captionaccess.com  
www.captionaccess.com

\* \* \* \* \*

This is being provided in a rough-draft format. Communication Access Realtime Translation (CART) is provided in order to facilitate communication accessibility and may not be a totally verbatim record of the proceedings

\* \* \* \* \*

>> Hello, everyone, and welcome to today's webinar on utilizing counter condition of aversion treatment and effective CBT for substance use disorders presented by did. Eric Davis. It is great you can joint us today. I'm the director of training and professional development for NAADC, the association for addiction professionals. I'll be the organizer for this training experience. The permanent homepage for NAADC webinars is [www.NAADC.org/webinars](http://www.NAADC.org/webinars). Make sure you can bookmark this webpage so you can stay up to date on the lateness. Closed captioning is provided by caption access, every NAADC webinar has everything that houses everything you need to know about that particular webinar. That means the exact same website you use to register for this webinar will also contain your on-line CE quiz link right when our live webinar is over. Everything you needed to know will be permanently hosted as [www.NAADC.org slash aversion/treatment -- webinar](http://www.NAADC.org/slash%20aversion/treatment%20--%20webinar).

As you can see, we're using GoToWebinar for today's live event. You'll notice the GoToWebinar control panel that being loo like the one on my slide. You can use the orange arrow to minimize or maximize the control panel throughout any time throughout the webinar. If you have any questions for the presenter, type them in the question bongs and we'll gather those questions and give them to our presenter during the live Q and A.

Any questions we don't get to we'll collect directly from the presenter after the webinar and try to get posted on our website on a Q&A document later on in the month. Lastly, under the questions tab, you'll handouts session. You can download the PowerPoint slides in a three-page PDF file. There's also a user friendly instructional

guide on how to access our on-line CE quiz and immediately earn your CE certificate. Please make sure to use that instruction itself document if it is your first time trying to take one of our on-line CE quizzes.

Now let me introduce you to today's presenter, Dr. Eric Davis is currently the medical director of the Schick hospital in Seattle, Washington. He has been associated with this since 1979, including attending physician, president of the medical staff and chief medical officer. Dr. Davis has personally evaluated, diagnosed, detoxified or treated over 25,000 persons with substance use disorders. He's been ASAM certified since 1986 and certified by the American board of addiction medicine, now a recognized subspecialty board of the American board of specialty since 2017. We are so honored and really just fortunate to have Dr. Erick Davis with us representing some incredible work that they've done at Schick and so whenever you're ready, I'll hand this over to you.

>> Thank you, Samuel. Hello, everyone. This is Dr. Erick Davis, sitting in Seattle, Washington, where, as you might imagine, it is raining. So it feels very comfortable to be inside my house looking at the rain and speaking to you today.

I want to first of all make a comment about the program today. This presentation will hopefully inform you more about counter conditioning treatment and rehabilitation interventions as one of the choices you that would make for patients that you you that may want to make a decision about treatment. So that is one of the major goals of our presentation today.

During this presentation, I will be noting quite a bit of data that is the basis of how we make decisions about what we do. Those references are not going to be included in this presentation but I want to give you where you can go to if you would like to look you want basis for these data and these decisions and that is the textbook, the principles of addiction medicine, the 6th edition which just came out this past year. This is the major academic textbook that's used in the field of addiction medicine and addiction psychiatry. And, indeed, there is a chapter, chapter 70, of it, which is entirely dedicated counter conditioning treatment. So please go to that reference text if you would like to learn more or look at more he did talk about what we talk about today. The third point that I want to make before we get started in the presentation is that this treatment program that we're going to talk about today is unique. And I don't mean unique in a figurative way. I mean it in a very literal way. This treatment program is the only treatment program, the only extant treatment program, in North America that includes counter conditioning treatment, previously known as aversion treatment, and rehabilitation interventions, commonly referred to as miracle therapy or narco analysis as part of a multidisciplinary treatment program, and we will be dealing -- we will be delving into the details of that as we go through this presentation.

Samuel, would you like to take care of this?

>> Sure. Yeah, it looks like we skipped a couple of slides there so I'll just get us back there. So yeah, we were just wondering, how that you've heard a little bit from Dr. Davis, what is your profession? This will be someone of several opportunities to interact with your presenter today. You'll see five answer options on the screen, and for those of you who came in a little bit after we started, just as a reminder, you can ask any questions to our presenter using the questions box in the GoToWebinar control panel. We will collect those questions and ask them to Dr. Davis in the order in which

they are received. We will give you about ten more seconds to answer this polling question you see. The question again is what is your profession, you'll see five options there. Just feel free to select whichever one is close to your role.

>> Perfect. Thank you so much. About almost 70 percent of you have voted. There you are. We are going to go ahead and close the poll and share the results and I'll turn this back over to your presenter.

>> Thank you, Samuel for helping me with that. I see that most of you folks who are listening in today are folks who actually are on the front lines and counseling and taking care of folks with substance use disorders so I believe that you'll find this presentation speaks very much to you today in considering whether this is a choice for your patients. Okay. We're going to start this presentation before getting into the nuts and bolts of it of a little bit of history. Bear with me here. It is a long and fascinating history, and I'll try to be concise but point out some important points related to this history. Over on the right this you're seeing a picture of the entrance to the current hospital the hospital moved to in 1961. We'll get to that in a moment.

So in the 1930s there's a young man whose name was Charles Sheidl. Mr. Sheidl was not a clinician in any way. He was just a young man who recognized he had an alcohol drinking problem. He was looking around for some way to help himself and at that time, the big book had not been published and AA meetings were not available. As a part of his looking around and looking at what was available, he did a lot of reading. He came across a book by Benjamin Rush who was an alienist, which was the old term for a psychiatrist, practicing in Philadelphia, Pennsylvania, in the early 19th Century and the book that Dr. Rush called was medical inquiries and observations upon diseases of the mind. This remained the major textbook for psychiatry for about 50 years in the 19th century.

In that book, Mr. Sheidl found a description of several people who drinking problems who experience what we call a natural aversion and those folks benefitted from in that they were able to stop drinking and become abstinent.

This intrigued him and so he embarked on a pathway to try and treat himself this way and then subsequently other people. He began treating patients from local referrals in his house on Capitol Hill which is in the city of Seattle. The house no longer exists. There's an apartment building there now. And he then later moved to the facility in West Seattle which is another area of Seattle in a much larger house. That house also no longer exists. And then finally moved to the facility you see on the right in the picture on in 1961.

In the early 1940s, it was discovered by the King County medical society which is the county in which Mr. Sheidl was working that he was providing these services. The county medical society complained to the state that he was practicing medicine without a license and this resulted in a cease and desist order to Mr. Sheidl. So this is the late 30s and early 1940s. By that time the World War II was ending and a number of physicians were returning to the United States, three of which are noted on this screen. Mr. Sheidl decided that since he believed strongly in his treatment approach and wanted to make it credible and wanted it to make it a choice that he had to involve doctors in the program in order to accomplish those goals. So the first doctor -- so there were three physicians that is he involved this is in the early 40s to early 50s. Robert Voegtlin was the gastroenterologist, and his focus was to work with the medications with

the nausea that was part of the counter conditioning treatment. That was his major focus.

Mr. O'Halloran was an internist and his major interest was to work with Dr. Vogtlin with these medications and how to recover if necessary. He also contributed to the medication use and the medical detoxification service that was offered to people who needed medical detoxification and also for general issues that folks needed to have addressed because they have medical conditions in addition to their substance use disorder. And at this time we are only talking about alcohol use disorder being treated by the facility.

Dr. La mere was a psychiatrist who was on the battle fields of Europe during World War II and his major job was to treat patients who had combat fatigue. These are folks who were suffering from acute traumatic stress disorder, at that time known as combat fatigue, and his job was to get these folks well enough to go back on the field and fight. So he was very much involved in the development and use of the in drug assisted hypnosis therapy to help these folks deal with the issues so that they go back on to the battlefield and fight. He brought this knowledge and technology to the hospital and there were many discussions about whether to include this treatment as a part of the hospital treatment program.

In the early 1960s, Dr. James Smith, a general practitioner, living in the area of the hospital, went to work full time as the attending physician at the hospital. Shortly after he went to the hospital a man came to treat there whose name is Patrick J Frawley. I am allowed to say that he was a patient and I'll just leave that consent that way. He has now passed away. But Mr. Frawley was the president of the Shick raiser company. He treated for alcoholism. He was very successful and never had another drink the rest of his life. He has now passed away of causes unrelated to his past history of alcoholism. Anyway, he was so taken with the hospital and wanted to make it available for potential patients that he bought the hospital, the business and the licensing and the programs from the four physicians including Mr. Sheidl who was not a physician, at that time. Through the raiser company, he established a foundation which began to collect monies and spend those monies on the research of the hospital in terms of improving the treatment programs and as well as showing the efficacy of the counter conditioning treatment and the effectiveness of the treatment program. This occurred during the 1960s and 1970s and there were many publications during that period of time, some in-house and some out of house.

In the 1980s, this continued as Dr. Smith continued to be the executive director of the hospital as well as the chief medical officer and Michael Howard who is a Ph.D. experimental psychologist worked with him in terms of the design of various evaluation research and publications related to the outcomes of the treatment program.

I was hired by Dr. Smith in 1979.

During the 2,000's, Dr. Elkins who is a Ph.D. experimental psychologist also and one of the leading experts in the world on taste and smell conversion came to the hospital and he had several roles. First of all was to ensure that given the technology of counter conditioning treatment that the treatments were being properly and consistently delivered. Had he a major role in that. Two, he developed a new intervention called covert sense did I tags treatment which was initially developed in order, at the hospital, in order to apply to the very few patients who are not developing an adequate aversion

to allow them to develop an adequate aversion by the discharge. Basically it is a form of hypnosis and guided imagery. En and the third area where he made contribution is look at the opiate opioid patients who are some minor use of intravenous opioid use but that was not their major route of use. To see if they would benefit, in addition to the counter program, they had covert sensitization training related to this particular. That's a very brief history of this facility and this treatment program that has been around since about 1933. There's much more I can shared with you but I think that gives you an idea of its longevity. But I want to use this opportunity before we go to the next slide to segue in to a common question that comes up in these presentations. As I told you, this is the only treatment program in all of North America that is extant that uses counter conditioning treatment as part of its program.

The question is why? First of all, let's step back for a second in the 1970s and 80s the hospital had three hospitals, the one you're looking at in the picture, one in Santa Barbara, California, and one in Dallas-Fort Worth. In addition, the hospital leased space in five community hospitals up and down the west coast and implemented the treatment program in a dedicated space in those hospitals. In addition, in the late 1960s, a group of people that were trained to work at the hospital in the Seattle, left the hospital and formed a company called Raleigh Hills hospital. Its corporate headquarters are in Portland, Oregon, and they at one point had 23 freestanding hospitals, all west of the Mississippi, that included counter conditioning treatment and they did not incorporate rehabilitation interviews in to the treatment programs. So at one point we had with 30 facilities west of the Mississippi that are providing counter conditioning treatment as a major component of the treatment programs.

So what happened? What happened was a change in the health insurance industry in the late 80s to early to mid 90s called managed care. And without going into a lot of detail, this decision making utilization management decision making that managed care is use basically turned off the pig got of money flowing into these facilities. Managed care industry decided that substance use disorders could be treated as effectively and certainly much less expensively and in a less restrictive setting than an inpatient facility and/or even a residential facility. So the only reason that the hospital now survives because that a group of the patients at that time purchased the hospital.

Okay. With that brief history of the hospital itself and the industry and what happened in temples of the reimbursement environment, let's move on and talk about the treatment programs at the hospital. First of all, I want to disabuse the concept that many people have about chemical counter conditioning treatment. It has though the been since the Raleigh Hills hospital that that was the only component of the treatment program at the time. The hospital has always had a multimodal and multi disciplinary treatment plan that surrounds chemical counter conditioning treatment, at least in the modern era.

So in the hospital itself, we have multidisciplinary primary care team that takes care of patients. This includes physicians. The two current full time positions. Are both psychiatrists. One is the general adult psychiatrist who is a specialist in geriatric psychiatrist. And the other is general who has completed a fellowship in addiction psychiatry. I personally do not take care of patients anymore.

In addition, many of the nurses who work at the hospital have been there for many, many years and that's particularly true of the treatment nurses. And all of the counselors at the hospital are certified by the state as chemical dependency counselors

and many of them have masters degrees or even higher. So that is the treatment team that takes a primary care approach to the treatment of the patients who are in the hospital.

The treatment program also includes medical detoxification. Excuse me. We have at least ten beds that we can dedicate on a daily basis to medical detoxification. Our experience has been that about 50% of our patients arriving needing medical detoxification and about 50% do not. And we will assess that, of course, prior to their admission, as well as on early admission.

The other components of the treatment program include the counter conditioning treatments, and we have two types, and we will speak more specifically about very soon.

And then as I mentioned before, we have the rehabilitation interviews, previously known as narcoanalysis or narcotherapy, and I will refer to those in the future as rehabilitation interviews.

We have a number of cognitive behavioral therapies that are included in the individual, as well as the group counseling programs. Of course there are psycho education which includes skills training, all of the common sorts of things such as refusal training, redirection, avoidance, and all of this is accomplished in individual counseling sessions as well as group counseling and group education which I'll talk about more in a moment also.

In regard to the counter conditioning treatments I just want to step back for a moment and say, these are all delivered by nurses. We train and certify our nurses in house to be able to provide these treatments and we monitor them very carefully. In addition, in addition in our detoxification program, that is done by RNs. And they are also specially trained and monitor in the provision of those services.

I think I skipped a slide here so let me go back a moment. Okay. Let me finish up the components of the treatment program.

We all have begun to recognize the power and importance of contingency management in terms of success with patients and substance use disorders. We have a built in contingency management program and that's in the context of our 30-day and 90-day reinforcement treatments which we will speak more about in a moment. But when patients complete the inpatient treatment program of ten days, sometimes a day or two more but rarely, if ever, a day or two less, as a part of that treatment program and its completion, they receive two reinforcement treatments. Very quickly, at 30 days post discharge the patient returns to the hospital and spends two days and one night in the hospital and at 90 days post discharge, same thing. During those revisits, the patient receives one counter conditioning treatment, one rehabilitation interview. They meet privately with their counselor or therapist to update their aftercare and recovery plan and to deal with issues that may have arisen during that 30 or 60-day period.

There is no further charge for those reinforcement treatments after the patient completes the initial ten-day treatment. So this is a powerful contingency management aspect of the treatment program and extremely important to their success and abstinence.

In addition in the treatment program we include the use of the book called the four agreements which many of you may be aware of by Don Miguel Ruiz and also we include the use of smart recovery, and I'm sure most of you are familiar with that also.

Smart recovery is an evidence-based model that is self management and recovery training. This particular part, as well as four agreements, in part can be thought of as a substitute for self-help and or the anonymous approach to treatment. These deal with the issues ever spiritual and personal values and related aspects of a person in terms of dealing with those very, very important issues for success in treatment.

I will say that we do not include anonymous meetings in the hospital but we are extremely supportive and actually refer to anonymous self-help fellowship as a outpatient basis as a part of recovery. We want to be very clear about that. Even though we don't include it as a part of a treatment program as a inpatient, we're very supportive of people using this as a part of their ongoing abstinence and recovery.

Finally we allow and request and encourage the patients to be a part of the program and can provide at least one or two meetings with the family if necessary.

You may imagine we're not able to do that during these times of COVID but we are we have done that regularly in the past and we try to do it by Zoom if we can and need to at this point.

Finally we have incorporated medical assistive treatment into our treatment programs when there's evidence that it may be helpful in terms of long-term abstinence.

For our opiate, opioid patients, and for our alcohol patients we will use these therapies we do not use them for cocaine, cannabis or methamphetamine patients and there's really no convincing evidence that it may be helpful, and we'll speak about those choice as little bit later also.

Okay. Now I've sort of told you what is the comprehensive package of treatment that we can offer, let's speak for a moment about a typical patient experience. As I noted before, about 50% of our patients require medical detoxification and 50% come in abstinent, having about drawn on their own or had some medical management on a outpatient basis or he maybe even another inpatient facility.

The treatment program is post detox and our detox numbers are not unusual. Our average alcohol detox length of state is about 42, 78 hours. Our average length of stay for an opiate, opioid patient, depends on the half life of the opiate or opioids that are being used but it is generally anywhere from about three to five days. Rarely more than that.

I'll speak to the length of stay in a moment and then I have already mentioned the two, two-day reenforcements at 30 and 90 days post discharge.

In addition, the aftercare plan is individualized, it is reviewed the patient, developed with the patient, and signed off by the patient.

In addition we have a alumni groups. These are groups that meet outside of the hospital and they are headed by an alum news, successful alum news at the hospital who has been trained and certified by the hospital to lead these support groups, consistent with the hospital's treatment programs and philosophy.

As you can imagine these groups are not occurring right now because of COVID again but we are providing them by webinar and/or Zoom at the hospital for patients that would like to attend that way.

And in addition, some of our patients will be offered medical assisted treatment. For our alcohol patients the three medications that would be recommended if indicated would be in the following year. That is in the order of the data that supports their use. And for our opioid patients some form of naltrexone, whether that's an injection or it is oral.

We generally don't recommend medication assisted treatment for our alcohol patients after their first treatment. We tend more to use that for patients who have relapsed, either from another treatment program or even from our own treatment program. But it is an item for discussion on every patient on their first treatment as well as other treatments.

For our opioid patients on the other hand we recommend that all of them discharge and antagonist and for a very small group of patients who are not treated chemical counter conditioning treatments and we transition to an antagonist agonist, we will, of course, make sure that they were able to continue that treatment on a outpatient basis.

We want to go back second and address the issue of the number of days that we've talked about. Ten days, 30 days, and the 90 days, as there is science that underlies the choice of these days versus other lengths of stay and periods.

As many of you I'm sure know, the greatest period of risk for relapse after a residential or inpatient treatment is in the first 90 days and the vast majority of those relapses occur within the first 30 days. So that is one of the reasons we chose 30 and 90 days for these reinforcements. And you are also aware probably also, there is data, strong data that suggests, more than suggests, confirms that if a person is abstinent at 30 days, that is the most predictive in being abstinent. And that is the most predictor factor of being abstinent at one year and so on and so on. So that's one of the reasons that we choose 30 and 90 days for the reinforcements. Willing the other is that based upon our experience, that appears to be the best time to reinforce or to boost the aversion from the time of the initial inpatient treatment program. And I'll talk some more about that in a little while also.

I'll also talk about ten days. Why ten days. As most of you know in this industry, the average length of stay in residential treatment for substance use disorders is 28 days. The Hazleton or Minnesota model which I'm sure you're all very, very familiar with. And here we are at ten days.

So let's talk about this for a second. All of us know that detoxification only results in little, if any, predictable long-term abstinence. It is essentially no better than self treatment, if you will. There is strong evidence to support that. Back in the 1960s and 70s, there was a number of publications that looked at the length of stay either in a residential or inpatient treatment program and looked at that as a correlative to abstinence post treatment. So inpatient lengths of stay following detox were looked at one day, two days, three days, four days, five days, on up to 30 days. Data shows for nine days or less post detox in residential or inpatient treatment, there was no significant increase in abstinence compared to no treatment at all.

Looking at day 11 all the way up to day 30, there was no incremental improvement in the length of abstinence following inpatient treat. So it was at day ten where you got the biggest bang for your buck if you wanted to think of it that way and that's the data and science that underlies the treatment programs at the hospital of being ten days post detox.

Okay. Let's talk for a moment about some more information about a typical treatment for a patient. The typical patient will receive five counter conditioning treatments. This is in the ten day period. Four rehabilitation interviews. A minimum of six hours of individual counseling. A minimum of 30 hours of group education and counseling, including substance use disorder education.

We do offer limited family and couples counseling, as I noted, at least in the past, that's been suspended at this point because we don't allow visitors to the hospital at this point because of COVID. And there is the patient care services division of in the hospital meets on several occasions with the patient to finalize the aftercare plan and make the referrals to the psychiatrists and other follow-up providers and practitioners as necessary.

I'm going to talk about the counter conditioning treatments and detailed interviews a little more later which I'm sure you're going to be interested in learning about the nuts and bolts and details of what that kind of experience is like, so we'll get to that in a few moments but I wanted to give you this general overall view of typical treatment experience. And as I noted before, at the 30-day and the 90-day post treatment the patient receives one booster or reenforcement counter conditioning treatments, one rehabilitation interview, means metes with the counselor, updates the aftercare plan and can also go to the other groups and meetings that are occurring in the hospital.

In addition, oftentimes patients come back for these reenforcements, if you will, at the same time that many of their peers who they treated with during the ten days come back in order to have the social support of that group that they spent ten very intense days with.

Samuel, would you help me out on this one?

>> Yes. Hey, Dr. Davis. It is Samson, by the way. Let me go ahead and launch this third poll. So this polling question is asking what types of treatment do you suggest for patients with substance use disorders? You will see five answer options there pop up on occur your screen it. Looks like about ten, 15% of you have voted already, awesome. Thank you so much. And just as a reminder, those of you who have sent in questions, thank you so much for those questions. We will have a live Q&A towards the end of the webinar. For those of you who have not, feel free to send million in questions in the questions box, if you go of your GoToWebinar control panel and we will ask those questions of Dr. Davis in the order they are received. It looks like about 60% of have you voted. I'll give but five more seconds here. Perfect. Thank you so much, everyone. We're going to close this poll and share the results, and I'll turn this back over to your presenter.

>> Thank you, Samson and I apologize for getting your name incorrect. There's no excuse for that on my part.

All right. It looks like IOP is the most common type of treatment experience that the attendees, patients experienced and after that 30-to 90-day residential treatment programs and a good number with alcoholic's anonymous.

So that was very helpful information. And it will be interesting, as for you folks, to contrast your treatment experience, outcome treatment experience with what I'm going to share with you later about counter conditioning base treatment programs.

All right. I went a little too far here. We are on the correct slide thank you for bearing with me. All right. So there are certain characteristics to refer a patient to our hospital and to treat them. First of all, the person must be an adult age 18 or older. There's really no limit on the age of a patient that we will admit it is rare for us to admit somebody over the age of 80 but there have been a few patient that we have admitted over the age of 80 throughout the years. The patients need to be psychiatrically stable.

Now, of course, we will admit patients who have chronic psychiatric disorders, the most common of those being major depressive disorder. Sometimes folks with thought disorders. And certainly folks with anxiety based disorders. Anxiety based and depressive disorders would be the two most common categories of chronically or recurrently psychiatrically ill patients. But these patients must be psychiatrically stable. Preferably in outpatient treatment with a therapist and/or taking a medication that is keeping them in remission. So that is an important characteristic of patients that we look for.

Patients must also be medically stable. We, of course, provide medical detoxification and we can provide medical detoxification at the 4.0 level using ASAM criteria. So that is next to the very highest level of detoxification. In general if the patient requires more than just more than intravenous hydration, we may have to refer them to a ICU. But up to that point we are able to safely and adequately handle those patients. But for patients post detox they also need to be medically stable. And our physicians would evaluate the perspective patient to ensure that that's the case. As you can imagine, with chemical counter conditioning treatment and because of the [naurz](#) I can't and the vomiting, our patients need to be in good health to be able to tolerate that, so we'll talk about that more later also.

Patients also need to qualify for a primary substance use disorder, at least one of five substances, and those include beverage alcohol, opiate opioids, cannabis, myth amphetamine, and cocaine. At our particular hospital, we call folks who use four or more substances poly substance use disorder persons and we in general are not able to offer them comprehensive chemical and/or treatments for four or more substances. We will talk about this a little bit more in a moment but essentially we can only incorporate two substances in a particular counter conditioning modality. Otherwise, are a process occurs called dilution and the person will not develop an adequate and/or strong' version to the substance that's being used in the counter conditioning treatment. So we can use two in each modality but we prefer to use two in one modality and a third substance in the other modality but when we get to four or more we really can't do it and we have data to show that this curse and that it is not as efficacious for four or more substances.

Also, we do not admit and treat patients who are primarily intervene us substance use disorder persons. And the obvious reason for this is since in the counter conditioning treatment we try to reproduce as best we can the experience that the person has in their real life, substance used administration, we cannot allow patients to place a needle inside vein to bypass the skin barrier. This is illegal in the state of Washington to allow someone to do this in an inpatient setting. Or actually any healthcare setting at this point. So that's the obviously reason we can't treat these folks.

The other is that in general in the industry folks that are intravenous drug users have very complex and complicated use histories and at least the evidence appears to suggest that they do much better in very long-term residential treatments treatment programs which we are not able to offer.

Okay. Since many of you or most of you are actually out there in the field, seeing and taking care of patients, I wanted to just talk for a second about what you could do to help prepare a patient to come to a decision about a counter conditioning based treatment program so that they're not surprised.

And let me say first of all, the vast majority, well over 90% of perspective patients that come through our front door are very well-informed and very knowledgeable about what we have to offer. Our website is visited very frequently by these folks and they can send in questions, they can ask questions that may come up with our admissions staff. In the past we also used to allow perspective patients to actually come to the hospital in order to tour the hospital and ask questions to be interviewed prior to admission mission. We can't do that anymore. But we do as much as we can over the phone and over the e-mails.

So back to patient preparation. The patients who seem to do best at our hospital are those patients who view their substance use disorder as a medical condition that they don't view it as a moral choice or a choice of will or other sorts of situations like that. So those folks who look, substance use disorder mostly being a disease or a medical condition are better prepared to benefit from the treatment program. It is also very important patients have insight in to the fact that there are certain situations, emotional states, real life situations, that these situations are queues or triggers then having a slip or a relapse. That realization and having some insight is also very helpful to patients succeeding in the treatment program. I don't need to mention the readiness for change issue as you folks are all very well of this. But sometimes assessing that and doing outpatient motivational interviewing and meeting with family can be very helpful to prepare the patient for what they're going to experience in the hospital. The vast majority of our patients, as I said, come to the hospital well-informed and they're already motivated for treatment and we don't necessarily have to spend a good amount of time or energy related to motivational interviewing.

So that is something that you folks can do if you are going to be referring patients to our hospital so they're not surprised and so they're ready to start that treatment right away and so the benefit from this very short and intense treatment program. So I have pretty much already summarized what's on the next slide but let me say it again. How is this different than others? It involves counter conditioning, the rehabilitation interviews, the two reinforcements and again I want to stress those are not charged separately. They are a part of the original cost of the treatment program but on the other hand if the patient misses them they get no reimbursement and/or they don't get any credit if they should come back to the hospital and retreat again.

The brevity of the inpatient treatment program is unusual as most of you know and covert sensitization is a new aspect of the treatment program in the last decade and can be very, very helpful in those very small number of situations in which patients have difficulty developing an aversion. So these are the major distinguishing features compared to most other treatment programs.

Okay. Now we're going to get to the nitty-gritty of technology and treatments of what we do at the hospital.

So I want to talk about counter conditioning. Counter conditioning is a form of learning which has traditionally been called Pavlovian or classical conditioning to distinguish it from Skala Rickann learning or conditioning. I'm sure all you know the Pavlovian story about the dog and salvation so don't really need to repeat that metaphor. But essentially the counter conditioning that we do is very similar to that in terms of the technology and how it works.

Very simply, we pair the experience of the smell, the taste, the sight and related acutiman or paraphernalia with nausea and we'll talk in a moment about how that's actually done. It is important to realize that counter conditioning is not punishment and indeed, although it can be extremely unpleasant, it is a limited period of unpleasantness and it should be no experience. We are very careful to let the patients know if they are actually experiencing pain, they need to let us know because the pain will distract them and will not contribute to the development of an aversion. And counter conditioning is also not like the use of antiabuse or dicelafaram which I'm sure you are all aware of because that is fear based, the psychological basis of that is if I'm taking this drug and I should drink, I could get very, very sick and/or I could be seriously injured and/or die. So that is a fear based psychology that is not a learning based psychology.

Okay. So we're going to talk a little bit more about counter conditioning treatment. And the basis for it.

So this is typically referred in the academic literature and science literature as taste self aversion which is a little bit odd since it really is smell taste aversion. 90% of a person's taste is basically smell. And you will note in a moment when I describe the actual conduct of the treatment how important that is. So basically this form of counter conditioning treatment is to learn or develop a revulsion to the smell or taste much a substance. Simultaneous to the onset of nausea. So I think it as good step back for a second at this point and talk about how the counter conditioning treatment, at least the chemical counter conditioning treatment is actually delivered. Over the years, we've used a number of different stub substances in order to create nausea that we can control.

We currently use HIPAKACK orally which is a medication that used to be available over-the-counter and for any of you that are parents, I'm sure you're very aware of this medication to have in the house if necessary. So what we do is prior to the actual treatment which is conducted privately with a treatment nurse in a room, the patient is administered orally a small dose of IPICAP. We generally know they're in the treatment room, it has been swallowed, the patient is sitting with a basin in front of them and a mirror in front of them. It is set up to look like a bar. There's various alcoholic drinks bottles sitting around. And based upon prior drinking history, there are a number of glasses of alcohol. Alcohols. That are sitting close to the patient. This is important to get the timing so simultaneously with the smell, or very, very shortly thereafter, seconds, microseconds, if you will, the patients begins to experience nausea. On this first drink, they are then requested to put some of the alcohol in their mouth swish it around and spit it out. This increases the sense of smell, of course, of the alcohol and as well as now the taste. Which this time, the patient is getting nauseated and may already be vomiting even though they haven't swallowed anything.

That would be a very good sign. And then the treatment nurse proceeds to instruct and help the patient to actually consume alcoholic can beverages for a period depending on which treatment it is that may last only a few minutes or up to about 20 minutes. And the patients will usually regurgitate or vomit up the alcohol at various times during this period of treatment so that they don't absorb the alcohol and become intoxicated.

The patients are very clearly instructed that if they get a little bit of a buzz on they are to let the nurse know immediately because it is impossible to learn or develop an

aversion if one is intoxicated. And we go to great lengths to avoid this. Even to the point of inducing mechanically vomiting if the patient is not doing it spontaneously, although that is rarely necessary.

So after this treatment in the treatment room, the patient is taken back to their hospital room where they are generally alone and they are exposed to alcohol by sight and by smell. No further consumption and they will be nauseated off and on for a period of two and a half or three hours. May or may not vomit. They don't have any alcohol in their stomach at this point. But they have these waves of resurgent and ongoing nausea. They're also given other instructions about things to read and what to think about and those sorts of issues. So each of these treatments lasts about three hours total. Then the patient recovers very quickly. If they don't, we have medications to help them recover and we instruct them how to request that and when to request it. But most patients spontaneously recover during that period of time or shortly thereafter. And the only thing that really changes over the number of treatments for is that we will move from preferred beverages to many different choices of beverages but always coming back to the preferred beverages. The number of alcohol drinks that the patient is exposed to over the five treatments increases. But never beyond what the patient is able to tolerate. So that is generally how the treatments go.

For other substances the treatment is delivered in the same way but you can it would be different if the route of use is smoking. Or snorting or oral for other substances also. And if there are two substances that are going to be used in a treatment we have to make decisions about the primary substance, the secondary substance, and they are combined in the treatment. This gets pretty complicated but it is basically based upon the patient's history of use and an episode of using and as well the application of the technology in order to develop the aversions in this case, if you will.

And we have dedicated treatment spaces for smokers. It is like being in an old phone booth which properly ventilated so that the treatment nurse is protected and then so that the ventilation occurs also. This is particularly important if we're smoking the opioids in order to protect the patient and the treatment nurse. So as I said in general, we give patients five of these treatments, one every other day, no matter what the substance is. The vast majority of the patients by the time they have treatment No. 3 are well on the way to developing an aversion. Treatment No. 4 extends it and treatment No. 5 is just basically consolidates the aversion. That is 90% of our patients.

Okay. Let's go back to smell and taste aversion or taste smell aversion. As you folks probably know, the, we could use lots of different types of physical experiences to develop an aversion. But we have chosen to use smell taste aversion because our brains have developed in a way evolutionary that smell is the strongest and most indelible memory that gets implanted in our brains, that we make memories of. It is very, very normal human experience for most people to develop a natural aversion at some point in their time related to a substance, a food, a beverage, flora is, something, and I imagine if each one of you were to think back during the life, you would think yeah, I wouldn't drink that again, I wouldn't eat that again, I would avoid that again. And that particular memory can be very strong and very long lasting so these treatments are based on the evolutionary biology. The simple story is that as we evolved over the Linia in order to survive we would have to avoid substances that were toxic, that would make

us I have sick or disabled and kill us. If we were very sick, our neighbor would see that weakness and take advantage of us and maybe even kill us. So it wasn't good for survival to become sick and disabled, certainly not to die. So the brain recognized a way of a way to avoid the types of substances in order to survive. It is basically as simple as that. Nausea based conversion, as I stated, is the basic of a medic or what we call chemical aversion at this point. Okay. We're going to next go to the next slide and I'm going to talk about the immediate goals of counter conditioning and then the long-term goals.

The immediate goal, of course, is to develop an aversion to the smell, taste, sight, and thought of use in situations in which one would usually have a desire, a craving, or an urge to use the substance. So that is the immediate goal. In regard to treatment program, the experience has been only one patients walk out of the hospital saying they don't have an aversion. So as most, that's one out of 100 patients. In retrospect when they come back for reenforcement treatments, which are 30 days and 90 days, they actually report that they do have an aversion they just didn't realize what they did or what was until they got out in the real world. And oftentimes they will simply say these small number of patients will say, I just have a neutral response to situations in which I used to have a craving or an urge or thoughts about drinking and a neutral response is on the continuum of an aversion. One of the things we have to educate patients about is that there is no right aversion. Every individual will develop their own aversion which will be helpful to them.

I've just mentioned one type of aversion on a continuum and that's simply a neutral response. There are other patients who will have a full exuberant response of nausea and even up to vomiting sometimes and have to remove themselves from the situation in which the stimulus is there because it is making them so sick. That is strong and indelible response to the treatment that is transmitted into the real world or exploited into the real world. And some patients just say, I don't care one way or the other in these situations about using and I just move through it and it's okay. Usually somewhere on that continuum but most of the patients have some kind of physicality to the response to these situations and certainly on occasion some anxiety. So the immediate goal is to develop an aversion which may lie somewhere along this continuum and also to reduce or eliminate the hedonically memory, very fancy word, hedonically of course meaning and simultaneously develop a distaste and/or avoidance to the substance.

As most of you will probably know the word aversion comes from the Latin root aver which means to turn away from. So we hope to also be successful at teaching patients how to avere or turn away from those situations in which they would usually experience a desire, craving, or an urge to drink and a large part of that is related to life skills training, cognitive behavioral training and other aspects of helping patients learn how to manage situations which are dangerous, if you will.

So we're going to move on now to the long-term goals of counter conditioning.

>> CART Provider [Staci]: Captioner reconnecting audio.

So the mechanism for learning tends to extinguish or expire as time goes on. Especially those are nonsmell taste related. Memories that may related to other types

of memory formations, whether it is pain or some other kind of emotion may expire much more quickly and we tell our patients that it is unlikely that their aversion will be lifelong but it is possible but the point is to give them this period of time so that they're free of cravings and urges to proceed with recovery items.

Let's move on to the second treatment that differentiates us from everybody else and that's basically rehabilitation interviews. These are essentially sedative hypnotic interviews. Over the years we've used a good number of different medications for these treatments. We currently use a drug called Propofol or Diprivan which is a very short acting general anesthetic or sedative. These treatments are administered by nurse anesthetists in a private room that includes all of the necessary safety equipment if something should go wrong which it generally does not. And in that room also is a scribe and an interviewer who conducts the scripted interviews and the hypnotic portion of the experience while the anesthetist maintains the state of minimal sedation. These treatments usually last about oh, 28 to 30 minutes. When the patient awakens the influence of the medication then there is usually about a 45-minute to an hour recovery period which is also accomplished under the supervision of RNs and the anesthetists. So the purpose of rehabilitation interviews is several. First of all, it is another mechanism for uncovering the triggers or the cues that patients have to become aware of in order to be successful in their rehabilitation and recovery when they leave the hospital.

In addition, this situation is basically like being hypnotized. So we are able to deliver a series of positive suggestions which are scripted, that is general, and also some that are individualized. We have the patient with the counselor prior to the treatment develop a list of positive discussions that, if appropriate, can be included into these rehabilitation interviews. Patients really appreciate being able to contribute to that part of the treatment and find it very helpful.

Another really important part is the rehabilitation interviews is an objective measurement of how the aversion is developing our monitoring of that. We had many different mechanisms for doing this so this is just one of them. And what we do is we can create imagery or scenarios of situations in which the patient has traditionally been tempted or cued or have cravings or desire to drink or use a drug and see how they respond verbally under the influence of a drug related to those kinds of situations.

Finally rehabilitation interviews provide a day of respite for patients. Our treatment program is extremely intense and the chemical counter conditioning treatments are very demanding. So it provides a day of looking forward to having some rest, relaxation, a little bit of a sleep, and something that is a pleasant change from the chemical counter conditioning treatments.

So moving on with these interviews, again, we let patients contribute to the interviews and then we have a number of questions that we ask patients, the answers of which can be used with the patient with their counselor on the inpatient or aftercare setting to explore issues that they deal with in a different way.

Since these patients are under the influence of a mild sedative, one can say that they tend to be a little more truthful or forthcoming or actually may respond in a way that's a little bit surprising to them, ie, from the subconscious mind, if you will.

As I told you, these are verbatim transcribed. We don't audiotape them, we transcribe them. They are given a copy to go over with their counselor. They also have a copy of

the proceedings and what they say and what has been done to take with them when they leave the hospital. And those can be used if they wish, with their outpatient counselor for further exploration and for use in their recovery activities.

As I mentioned before, we usually give patients four rehabilitation interviews during their initial ten days with alternate with the counter conditioning treatments and then one on each reenforcement.

There's going to be a number of slides here basically just to ascribe an aversion. This is the definition that we post all around the hospital and that we try to get patients to understand. And I'm just going to read this to you. An aversion is the absence of a desire to use the substance and circumstances that a person has ordinarily desired and craving to use that substance. On the next couple of slides you will see some expanded definitions of an aversion, I'm not going to review these with you, you tend to be more academic and scientific to explain what be a aversion is and sometimes it can be helpful with some patients to go more in to detail about what an aversion is. But generally after several treatments they understand pretty clearly what an aversion is. Okay. I want to talk for a moment about safety. We treat patients who our average age of a patient is about 40 years of age. And when patients use substances excessively for many years, they are liable to develop many medical problems because of malnutrition, trauma, ignoring their self care, and also, quite simply, from the toxicity of the substance that they are using. So a good number of our patients are unable to tolerate chemical counter conditioning treatment because it is a very demanding treatment and requires that the patient be able to tolerate it safely. So we're very, very careful about selecting patients for that treatment, very careful, and have a long list of conditions which we respect that are both absolute as well as relative counter indications to these treatments.

I do want to say, related to, that we have never had a death from a counter conditioning treatment nor have we had one from a rehabilitation interview. And we have never had anyone seriously injured from either one of these treatments also. And again, we're very, very careful approximate our selectivity for these particular treatments. So let's talk now for a moment about what you can expect for patients that you may refer to treatment for the programs I just told you about.

First of all, many of the patients who come to the hospital have never received any other treatment for their substance use disorder and then there are American patients who have come, who have treated elsewhere and who have relapsed.

Our outcome data shows that there is no significant difference between those two groups of patients in terms of the effectiveness of the treatment program at the hospital. So we measure abstinence at the two reenforcement treatments, of course, at 30 and 990 days, and then 12 months after the second reenforcement treatment, that is 15 months after the initial discharge, we conduct a survey to determine the patient's be a science in at that time and during the period prior to that time. If we can get a collateral report we does the patient for that and we'll try to get that information also. We have done this survey inhouse for decades. Back in the 1980s we hired an out of house survey company to conduct this follow-up for us in order to objectify more the data for publication purposes and these particular companies were incented, of course, to get ahold of the patient and to get a response and they were very good at getting ahold of patients, a little bit better than the hospital is internally, but generally about 80%

of the patients were able to get a hold of and/or a collateral to get a self report. Interestingly, we did this for a number of years and the data that the companies were able to get, other than a slightly improved response rate was no different than the data we had been gathering for decades in-house. So we suspended using out of house and continued on an annual basis to get in-house data from patients who have been discharged. And this seasonal for patients who comply the initial ten days.

If a patient leaves against medical device or is transferred because they can't complete the treatment for a medical or other reason, we don't follow-up with them. So we have decades of data here. And this is generally what you can expect for a patient who is a primary alcohol use disorder, primary cannabis use disorder or a primary stimulant use disorder which includes methamphetamine and stimulants who complete the ten days and return for the two reinforcements, you can expect about two-thirds of them to be abstinent during that entire period of time at 15 months post discharge. For our opiate, opioid patients, you can expect about half of those patients to be abstinent at 15 months post initial discharge.

If the person comes to the hospital and is treated for more than one substance use disorder, you can expect those folks to be abstinent at about 50% of the time. And this is for the entire period, if you will, and again these data are supported by out of house data and decades of in-house data. Samson, it is your turn.

>> Awesome. Thanks you so much, Dr. Davis it. This is just such incredible information, pages and pages of notes filling up on my side. Everyone you'll see this polling question pop up on your screen, our last one for this webinar. This poll question just simply asks based on this presentation, are you more likely to consider counter conditioning treatment as an option for your patients? You'll see five answer options here and by the way, we've got some excellent questions in the queue. We will start those who sent them in earlier, and go down the list. Please feel free to send them in the questions box. If we run out of time and don't get to your question, don't worry, we'll send it to Dr. Davis and try to work with him over the next couple of weeks or so to see if we can get the questions written out in a Q&A document on our website at a later date. About five more seconds to answer this polling question and then we'll turn it back over.

>> Perfect. Thanks so much, everyone. All right. We are closing this poll, sharing the results, and I'll turn it back over to Dr. Davis.

>> Thank you very much, Samson. Look at these responses. It looks like I may have been a little successful in providing a little more information to you folks who are in the position to treat patients or refer patients. So thank you very much for your positive response to this presentation. Samson, are we moving on to questions now?

>> Yeah definitely. I wanted to make sure you were ready. Okay. So we will go on to questions. So our first question comes from Barbara, Barbara asks how many clients are in this treatment facility at any given time?

>> Excellent question, Barbara from Georgia. I'm sure it is not rang there, so I'm a little jealous. But the hospital is currently licensed for I believe 60 beds, within several beds one way or the other. And as I mentioned previously, we are able to dead eight minimum of ten of those beds and I believe up to 15 beds for acute medical detox.

>> Thank you. The next question is do they have access of transcripts.

>> Yes. What we do is give a actual hard copy of the actual instrument we do, the tools we use and we give that to the patient at discharge and they can do what they want with it and if they wish to share it with their outpatient counselor that's perfectly fine. We don't consider that to be proprietary in terms of the questions or the tool that we use.

>> Perfect. Thank you. And the next question comes from Rita, hold on one second here, sorry. I had it and I lost it. There it is. Sorry. Rita asks is counter conditioning only done in a hospital setting or can it be done in outpatient treatment and is only one drug used for counter conditioning. I know there was two questions, is it done in a hospital setting or can it be done in outpatient treatment and is only one drug used for counter conditioning from Rita.

>> Thank you, Rita. Very good questions. In North America at this time, to the best of my knowledge, chemical counter conditioning treatment is only offered on an inpatient basis and I distinguish that from a residential basis because most residential settings are not medical. They generally the folks who work there are generally not RNs, the majority of the staff or physicians. So and it would be actually unsafe in our opinion to offer chemical counter conditioning treatments on the basis other than inpatient. Our inpatient services are at 3.7 if you're familiar about with ASAM levels criteria of care which is the highest level of care other than complicated medical detox. And I think the second part of that was about the medication used, Samson. Was that it?

>> Yes. The second part of the question was one second, sorry, I'm grabbing it up here again. Is only one drug used for counter conditioning.

>> So over the many years, many different medications have been tried to produce the most predictable, reliable and intense nausea. I will give you a couple of examples. Lithium has been used in the past. Able morphine has been used in the past. And also an extract from the IPICAC plant called impasefaline has been used. Currently only medication we use is liquid oral IPICAC which is derived from the plant, although there's a long history of using other medications. And I actually want to go back to reanswer or additionally answer the first part of your question, Rita, that was the second form of counter conditioning treatment that we used is called Foratac or electrical counter conditioning treatment, basically used as a modified tense unit which you may be familiar with the treatment of chronic pain. We used to use that to treat people on an outpatient basis for tobacco use disorder. So that treatment can be given on an outpatient basis if it is aversion treatment. But since we use it as an alternative to chemical counter conditioning treatment and don't have outpatient clinic here we can also deliver that treatment on an inpatient basis.

>> Great questions. Great answers. We have a lot more. I'm going to try to get as many in as I can. So I guess along the same lines, Ana from California asked are injections part of the overall treatment plan?

>> Fab why you us will question, I'm happy to report and the answer is yes in the following situations. So the vast, vast, vast majority of our let me talk about first who are opiate, opioid, come to the hospital for can he toxification and counter conditioning treatment. We are able to give those patients a shot of Dibutrol the day before they are discharged and to arrange for them to have a follow-up appointment with an approved and a experienced place, as you know, this requires certain training in searches of how to give the shot education of the patient in things of that nature. So we recommend that all of our opiate patients get that which is now intra muscular at the day before

discharge and then to follow-up. And we used to in the past give them a prescription but we are now able to get them to have Vivitrol. There are a second group of patients who come to the hospital who are opiate opioid dependent and they just want to simply detoxify and go home. Or go to some other outpatient or residential treatment besides what we have to offer at the hospital.

For those patients we can also administer a shot prior to their discharge from medical detox and we strongly recommend it and we can also set them up for follow-up. As that point at that point, once they leave the hospital, they are no longer our patients because they're not coming back for the reinforcements, they've just been detox phi. And the third group comes in to get what is called transition management to get off of their opioid or open otherwise of choice and to go on to be discharged on that medication. Those patients, of course, we don't recommend Vivitro for because their on the Saboaxon replacement. Going to alcohol patients, as you know, FDA has now pro of this as the first medication of choice to assist people ins have reduced urges and desires and cravings and also if they should lapse or slip it seems to decrease the amount of consumption if the person relapsed, so we, in general, don't offer that for our first team treating patients, as I noted, but if the patient requested it, we probably would do it and certainly if it is a relapse patient, we would have a strong conversation about that. Excellent question. Thank you for giving me the time to explain that. From the other substances, cannabis and the stimulants of course not that has not been shown to be of any help so we don't recommend that or give that.

>> Perfect. Thanks for that. So the next question is can patients stay in touch with friends and family during treatment?

>> Excellent question. Yes, we do not sequester patients from their real life. We allow them to bring their smartphone cell phones. There is the telephone in every room for local calls. And in addition, in the past, we used to allow visiting hours. We, of course, can knowledge no longer do that now. And we've been very successful in protecting our staff and patients from COVID and I'm just so happy about that, we're doing a really good job of that. But yes other than when the patients are in a treatment, per se, like counter conditioning treatment or rehabilitation interview, counseling session or educational session, they may use their smartphones and cell phones to their heart's content and also we have Wi-Fi so they're able to use their laptops if they wish.

>> Perfect. Thank you so much. And the next question is from Evan. Everyone asks what are reasons for this not being more popular clinically indicated treatment model?

>> How much time have you got, Evan? Well, I gave you the major reason which is the people who chrome prior authorization, utilization, management decision making, develop these guidelines, implement these guidelines have made decisions that treatment is as effective in a less restrictive outpatient stud setting that does not include counter conditioning treatment. That is the major reason. In the distant past certain agencies have considered it to be investigative or experimental. In general, most agencies do not consider it to be experimental although there are some who will still invoke the adjective investigative. I can tell you that it is in general not the position of most health insurers because we treat patients mostly who are insured by commercial insurers. All of the big five that you will know about. And I guess the other reason is just that it is not that widespread or well-known about. And finally, as you folks know,

self-help is the dominant treatment model in the United States. That's my short answer to your question, Evan, but very good question.

>> And great answer, Dr. Davis. Thanks for breaking that down. So kind of along the same lines, some are asking would this program work well with a 30-day program?

>> I don't know how to approach that but let me just give some thoughts about that.

You mean, I assume the person is asking as a part of a 30-day program or in addition to a 30-day program?

>> We'll have to guess.

>> Well, let's guess both. One of the attractions of the program that we have is its brevity.

>> Oh, in addition to, my apologies for interrupting, in addition to.

>> In addition to. Can't hurt. It can only help. I mean, if you put the power of time, length of stay, with the efficacy and power for an aversion, I would think that that would only synergize and help the situation but remember, my comments about length of stay and outcome. So I'm going a little bit against what I quoted in terms of data before but let's put it this way, it won't hurt. Awesome.

And ironically we have another Ana, so Ana from Wyoming I think we had a question from Ann a in a in California, welcome to both of you, Ana in Wyoming asks, our resources are very limited, how many counter conditioning treatment centers or programs are there? Or are they more available than I know of? And also can other states rope will I indicate this type of program?

>> So I think I answered that question before in Wyoming but I'll be happy to answer it again. You are talking to the medical director of the only known facility in North America that provides chemical counter conditioning treatment counter conditioning treatment. It is as simple as that. I believe there may be a facility in Thailand, there used to be one, I don't know if it is still operating, that uses chemical counter conditioning treatment and there used to be a facility in eastern Europe that also did it. Otherwise I am unaware of any other facilities that offer this treatment. Excellent. Oh, go ahead.

>> I'm sorry, Samson. And the person asked a question about steals. I am unaware of any state laws or regulation that would dis allow conditioning treatment because I know when the 30 or 40 facilities were in operation, they were all west of the Mississippi but it was pretty much in all of though I states so I don't think there's any state reasons why it wouldn't be done in another state.

>> Thank you, Dr. Davis. The next comes from Dave, most of my SUD clients are responding to trauma. How are you addressing trauma in your program?

>> I assume this person is talking with psychological trauma. So certainly we have the usual required screening tools to screen for domestic violence, sexual assault, other types of traumatic experiences that a person would have had sometime in the distant past. In addition to other sources of PTSD, for example. So we do all of this prior to screenings and if we identify someone that this seems to be important in terms of their health, their abstinence, if you will, and their success and recovery, then it will be incorporated in to the counseling program while they're in the hospital and will also be identified as an issue for continue addressing on a outpatient basis. I think that's basically the simplest answer in the rehabilitation interviews when the person is under the influence of medications, sometimes these issues also get brought up. It is not necessarily the purpose of the rehabilitation interview but sometimes it is also a source

of information and then we can share that with the patients for them to talk to the counselor about also. Sometimes these things are uncovered or repressed or suppressed, if you will, but we purposely don't look for suppressed or repressed memories but it does happen on occasion.

>> Perfect. Thanks, Dr. Davis. And next we have some good ones. So Aaron is asking what are some of the protected factors or strengths that you look for when seeing if a client is appropriate for this type of treatment?

>> Thank you, Aaron, that's a very good question and let's see if I can elaborate on that. I am sure I won't say anything that's particularly surprising. You remember the slide that has the required characteristics and then the slide that has some favorable characteristics also but in general, the kinds of characteristics or parameters or favorable progress naps particular factors that apply to any substance use disorder patients apply to patients coming to counter condition treatment program and those are not having a severe psychiatric disorder, that's number one, even if it is under good control and in remission. Two, a favorable factor is having a stable employment job and/or income. Three, having a stable primary intimate relationship that is long-term. Or partner, if you will. In general being in good health. And the next important thing would be not having any pressing crisis in one's life, for example, a DUI or something like that. So those are five very common prognostic factors which only help our patients to do just as well to help your patients do well.

>> Perfect. Thank you so much. And the next question is from Sharon. Sharon asked, what are, you mentioned some of the big forms of patients, you mentioned the big five, but what are the forms of payment accepted for the aversion program, do people fly in from out of state and then what is the average cost?

>> Okay. Three questions in one. Thank you.

>> It sounds like she has a referral in mind. That's what I'm taking.

>> Excellent question. Let's see if I can remember all of the components. First of all, about two-thirds are patients come from the Pacific Northwest region, west coast, and I include British Columbia and Alaska in that area. So that accounts for about two-thirds of our patients. We have patients that fly in from all over the world. And I'm not joking you. They arrive at SETAC international airport which is a 10-minute Uber or Lyft to our hospital. We are ten minutes from the airport by Uber or Lyft. It takes a little longer if you want to take public transportation but there's taxis also. So we're very close to the airport. We are more than happy to receive patients out of the region. And we can actually admit patients 24 hours a day. Our doctors are available 24 hours a day. It just needs to be arranged in advance but we can admit someone at 2:00 a.m. if they're flying in from France or something like that.

In regards to payment for treatment, as I said, most of the major insurance companies in the United States will cover some part based upon the patient's benefits of our treatment programs. The cost structure is such that medical detoxification is a little more expensive per diem rehabilitation but I believe the last numbers I heard from the CEO of the hospital was that medical detoxification is about \$1,800 a day and I believe that the rehabilitation portion is about \$1,500 per day. And that includes the two reinforcements at no further charge if the patient returns and if they abstinent and have been so at that time. We, of course, will accept cash. And since we treat a good number of Canadian patients, they come with cash. I do want to say we don't accept

Medicaid and we do not accept Medicare. We are nonparticipating with both of those insurance schemes and since we have a signed agreement with the federal government as a nonpartisan in the Medicare, as long as we inform the Medicare patient that we do not accept and will not bill Medicare, they may come into the hospital but they're going to have to be private pay. But we can accept Medicare patients under those conditions but not Medicaid. I hope I answered your question.

>> Great. Great. Great. We're going to speak sneak in two more here. Erika from South Carolina asks, do you have testimony as or testimonies from patients that we can show other patients who have gone through this patient? I know you mentioned alumni earlier.

>> Didn't. Go to the website which is should be on the screen in front of you, [www.kchickshadel.com](http://www.kchickshadel.com) and you will find many, many, many testimonials, and it is possible that if you call the admissions department at the hospital, the number of which I don't see it is there, but it is 1-800-CRAVING is the admissions department, 1-800-CRAVING they could possibly arrange with an interview with a testimonial of a previous patient. In addition, there's a little book that's called drink up and it is written by one of our successful patients it. Is a little paperback and explains in detail the patient's experience of being at the hospital, and I believe that on request, we can even send one of those out free to someone.

>> Perfect. Thank you, Dr. Davis. One more question and just about what you asked on your screen on the slide here is that the contact information, resources or if you had questions about the program, so feel please feel free to e-mail Mark, he left his contact information there for that purpose. So Dr. Davis, last question, do you elaborate more on the types of education your patients receive in that section on the slide where you mention education?

>> Yes, well, of course, thank you very much for that question. Of course we try to do a good job of educating patients about various substances, everything from their toxicity to their effect on patients's physical health and psychological well-being so very complete information and education from a medical standpoint by the substance itself. We try also to help people understand how it is they arrive at living in a different way and making different decisions related to a substance, per se, and substances in general. And so some of that is done usually in a group educational sessions. The doctors, of course, do meet with patients and see them on a daily basis for rounds. So there is always that opportunity. And of course we have written literature in our library. We have a fairly extensive library in which patients may go to and get information to learn about substance use disorders.

>> Awesome. Dr. Davis, thank you so much for this incredible presentation and wonderful detail and expertise, and leadership in the field. Everyone, you know, thank goodness for technology, Mark Woodward just texted me and offered that if you do send an e-mail to [Mark.Woodward@uhsinc.com](mailto:Mark.Woodward@uhsinc.com), he will e-mail you back the book that Dr. Davis was mentioning earlier and some additional information about patient stories. So, again, feel free to e-mail [Mark.Woodward@uhsinc.com](mailto:Mark.Woodward@uhsinc.com), the e-mail address you see on the screen, and he will be able to e-mail you that book and additional resources. Thank you so much, Mark. Dr. Davis, thank you. Everyone, just a quick reminder, every NAADAC webinar has its own webpage that houses everything you need to know

about that particular webinar. So immediately following the live event, you will find the on-line CE quiz link on the exact same website you used to register for this webinar. That means everything you need will be permanently hosted at [www.NAADAC.org/aversion/treatment/webinar](http://www.NAADAC.org/aversion/treatment/webinar). And here is the schedule for our upcoming webinars. Please feel free to tune in if you can as there's some really interesting topics with great presenters just like today. For example, you could actually join us tomorrow, Friday, November 6th, 2020, at 12 noon eastern time to learn from Dr. David Fawcett who will be presenting on stimulants, sex and the search for connection. We're really fortunate to welcome these incredible presenters the last quarter of the year as part of our 2020 post conference virtual trainings.

If you haven't already, make sure to bookmark this webpage, [www.NAADAC.org/culture-hundred huh mitt-resources](http://www.NAADAC.org/culture-hundred-huh-mitt-resources). This is our cultural humility resources page. You can stay up to date on critical topics and expand your cultural competency as a professional helper by visiting this resources page, you'll immediately have access to our new eight-part culture humility webinar series which is free to view, all our highest viewed webinar in 2020 actually which is substance use disorder and the African-American community and virtual town hall event currently bringing ranking at over 3,000 total archived on demand views and climbing. Many more resources and we will just add more in 2021.

As an additional resource, NAADAC the association for addition professionals has provided a COVID-19 resources page. It includes six excellent free webinars that cover top concerns in the addiction profession and presented by leading experts in the field.

If you haven't gotten this book yet, make sure to go to the NAADAC bookstore and grab a book of the new clinical supervision workbook by Dr. Thomas, protege of the late Dr. Powell, visit the bookstore to purchase this new collection. You can also take the on-line training sear crease provided by Dr. Durham and other colleagues and specialists in the field.

Our second specialty training series is on addiction in military and veteran culture. This series will prepare you to earn a certificate of achievement on this specialty on-line training series and specialty group. As a NAADAC member, a quick review of action a member with us. As you know, you'll immediately have access to a well over 125 free CEs as a the part of your membership. For nonmembers, there is a small processing fee CE requests.

NAADAC receive quarterly advances in the Magazine which has over 75,000 additional subscribers and is eligible to CE and instantly becoming a part of our national initiative for advocacy wonderful opportunities to be a part of connections and communities and committees that are advocating for the workforce and clients we serve.

Visit [www.NAADAC.org/join](http://www.NAADAC.org/join) to join us now.

All right, everyone. Short survey will pop up at the end. Please take some time to give us some feedback, share any notes you have for us or for our presenters. You can tell us how we can improve and just continue to sharpen your learning experience with us. Thank you, again, everyone, for participating in this webinar, Dr. Davis and for the valuable for the research and support in the field, we're really honored to have you here

and I encourage you all to take some time to browse our website, learn how NAADAC helps others.

You can stay connected with us on LinkedIn, Facebook and Twitter. Be well.

>> Hello, everyone, and welcome to today's webinar on utilizing counter condition of aversion treatment and effective CBT for substance use disorders presented by did. Eric Davis. It is great you can join us today. I'm the director of training and professional development for NAADC, the association for addiction professionals. I'll be the organizer for this training experience. The permanent homepage for NAADC webinars is [www.NAADC.org/webinars](http://www.NAADC.org/webinars). Make sure you can bookmark this webpage so you can stay up to date on the latest. Closed captioning is provided by caption access, every NAADC webinar has everything that houses everything you need to know about that particular webinar. That means the exact same website you use to register for this webinar will also contain your on-line CE quiz link right when our live webinar is over. Everything you needed to know will be permanently hosted as [www.NAADC.org slash aversion/treatment -- webinar](http://www.NAADC.org/slash%20aversion/treatment%20--%20webinar).

As you can see, we're using GoToWebinar for today's live event. You'll notice the GoToWebinar control panel that being look like the one on my slide. You can use the orange arrow to minimize or maximize the control panel throughout any time throughout the webinar. If you have any questions for the presenter, type them in the question box and we'll gather those questions and give them to our presenter during the live Q and A.

Any questions we don't get to we'll collect directly from the presenter after the webinar and try to get posted on our website on a Q&A document later on in the month.

Lastly, under the questions tab, you'll find a handouts section. You can download the PowerPoint slides in a three-page PDF file. There's also a user friendly instructional guide on how to access our on-line CE quiz and immediately earn your CE certificate. Please make sure to use that instruction itself document if it is your first time trying to take one of our on-line CE quizzes.

Now let me introduce you to today's presenter, Dr. Eric Davis is currently the medical director of the Schick hospital in Seattle, Washington. He has been associated with this since 1979, including attending physician, president of the medical staff and chief medical officer. Dr. Davis has personally evaluated, diagnosed, detoxified or treated over 25,000 persons with substance use disorders. He's been ASAM certified since 1986 and certified by the American board of addiction medicine, now a recognized subspecialty board of the American board of specialty since 2017. We are so honored and really just fortunate to have Dr. Erick Davis with us representing some incredible work that they've done at Schick and so whenever you're ready, I'll hand this over to you.

>> Thank you, Samuel. Hello, everyone. This is Dr. Erick Davis, sitting in Seattle, Washington, where, as you might imagine, it is raining. So it feels very comfortable to be inside my house looking at the rain and speaking to you today.

I want to first of all make a comment about the presenters today. This presentation will hopefully inform you more about counter conditioning treatment and rehabilitation interventions as one of the choices you that would make for patients that you that may

want to make a decision about treatment. So that is one of the major goals of our presentation today.

During this presentation, I will be noting quite a bit of data that is the basis of how we make decisions about what we do. Those references are not going to be included in this presentation but I want to give you where you can go to if you would like to look you want basis for these data and these decisions and that is the textbook, the principles of addiction medicine, the 6th addition which just came out this past year. This is the major academic textbook that's used in the field of addition medicine and addition psychiatry. And, indeed, there is a chapter, chapter 70, of tome, which is entirely dedicated counter continuing treatment. So please go to that reference text if you would like to learn more or look at more he did tails when about what we talk about today. The third point that I want to make before we get started in the presentation is that this treatment program that we're going to talk about today is unique. And I don't mean unique in a figurative way. I mean it in a very literal way. This treatment program is the only treatment program, the only extant treatment program, in North America that includes counter conditioning treatment, previously known as aversion treatment, and rehabilitation interviews, commonly referred to as miracle therapy or narco analysis as part of a multidisciplinary treatment program, and we will be dealing -- we will be delving into the details of that as we go through this presentation.

Samuel, would you like to take care of this?

>> Sure. Yeah, it looks like we skipped a couple of sides there so I'll just get us back there. So yeah, we were just wondering, how that you've heard a little bit from Dr. Davis, what is your profession? This will be someone of several opportunities to interact with your presenter today. You'll see five answer options on the screen, and for those of you who came in a little bit after we started, just as a reminder, you can ask any questions to our presenter using the questions box in the GoToWebinar control panel. We will collect those questions and ask them to Dr. Davis in the order in which they are received. We will give you about ten more seconds to answer this polling question you see. The question again is what is your profession, you'll see five options there. Just feel free to select whichever one is close to your role.

>> Perfect. Thank you so much. About almost 70 percent of you have voted. There you are. We are going to go ahead and close the poll and share the results and I'll turn this back over to your presenter.

>> Thank you, Samuel for helping me with that. I see that most of you folks who are listening in today are folks who actually are on the front lines and counseling and taking care of folks with substance use disorders so I believe that you'll find this presentation speaks very much to you today in considering whether this an a choice for your patients. Okay. We're going to start this presentation before getting into the nuts and bolts of it of a little bit history. Bear with me here. It is a long and fascinating history, and I'll try to be concise but point out some important points related to this history. Over on the right this you're seeing a picture of the entrance to the current hospital the hospital moved to in 1961. We'll get to that in a moment.

So in the 1930s there's a young man whose name was Charles Sheidl. Mr. Sheidl was not a clinician in any way. He was just a young man who recognized he had a alcohol, drinking problem. He was looking around for some way to help himself and at that time, the big book had not been published and AA meetings were not available. As a part of

is his looking around and looking at what was available, he did a lot of reading. He came across a book by Benjamin Rush who was an alienist, which was the old term for a psychiatrist, practicing in Philadelphia, Pennsylvania, in the early 19th Century and the book that Dr. Rush called was medical inquiries and observations upon diseases of the mind. This remained the major textbook for psychiatry for about 50 years in the 19th century.

In that book, Mr. Sheidl found a description of several pages who drinking problems who experience what had we call a natural aversion and those folks benefitted from in this in that they were able to stop drinking and become abstinent.

This intrigued him and so he embarked on a pathway to try and treat himself this way and then subsequently other people. He began treating patients from local referrals in his house on Capitol Hill which is in the city of Seattle. The house no longer exists. There's a apartment building there now. And he then later moved to the facility to west Seattle which is another area of Seattle in a much larger house. That house also no longer exists. And then finally moved to the facility you see on the right in the picture on in 1961.

In the early 1940s, it was discovered by the King County medical society which is the county in which Mr. Sheidl was working that he was providing these services. The county medical society complained to the state that he was practicing medicine without a license and this resulted in a cease and desist order to Mr. Sheidl. So this is the late 30s and early 1940s. B that time the World War II was ending and a number of physicians were returning to the United States, three of which are noted on this screen. Mr. Sheidl decided that since he believed strongly in his treatment approach and wanted to make it credible and wanted it to make it a choice that he had to involve doctors in the program in order to accomplish those goals. So the first doctor -- so there were three physician that is he involved this is in the early 40s to early 50s. Robert Voegtlin was the gastroenterologist, and his focus was to work with the medications with the nausea that was part of the counter conditioning treatment. That was his major focus.

Mr. O'Halloran was a internist and his major interest was to work with Dr. Vogtlin with these medications and how to recover if necessary. He also contributed to the medication use and the medical detoxification service that was offered to people who needed medical detoxification and also for general issues that folks needed to have addressed because they have medical conditions in addition to their substance use disorder. And at this time we are only talking about alcohol use disorder being treated by the facility.

Dr. La mere was a psychiatrist who was on the battle fields of Europe during World War II and his major job was to treat patients who had combat fatigue. These are folks who were suffering from acute traumatic stress disorder, at that time known as combat fatigue, and his job was to get these folks well enough to go back on the field and fight. So he was very much involved in the development and use of the in drug assisted hip know therapy to help these folks deal with the issues so that they go back on to the battlefield and fight. He brought this knowledge and technology to the hospital and there were many discussions about whether to include this treatment as a part of the hospital treatment program.

In the early 1960s, Dr. James Smith, a general practitioner, living in the area of the hospital, went to work full time as the attendings physician at the hospital. Shortly after he went to the hospital a man came to treat there whose name is Patrick J Frawley. I am aloud to say that he was a patient and I'll just leave that consent that way. He has now passed away. But Mr. Frawley was the president of the Shick raiser company. He treated for alcoholism. He was very successful and never had another drink the rest of his life. He has now passed away of causes unrelated to his past history of alcoholism. Anyway, he was so taken with the hospital and wanted to make it available for potential patients that he bought the hospital, the business and the licensing and the programs from the four physicians including Mr. Sheidl who was not a physician, at that time. Through the raiser company, he established a foundation which began to collect monies and spend those monies on the research of the hospital in terms of improving the treatment programs and as well as showing the efficacy of the counter conditioning treatment and the effectiveness of the treatment program. This occurred during the 19640s and 1970s and there were many publications during that period of time, some in-house and some out of house.

In the 1980s, this continued as Dr. Smith continued to be the executive director of the hospital as well as the chief medical officer and Michael Howard who is a Ph.D. experimental psychologist worked with him in terms of the design of various evaluation research and publications related to the outcomes of the treatment program. I was hired by Dr. Smith in 1979.

During the 2,000's, Dr. Elkins who is a Ph.D. experimental psychologist also and one of the leading experts in the world on taste and smell conversion came to the hospital and he had several roles. First of all was to ensure that given the technology of counter conditioning treatment that the treatments were being properly and consistently delivered. Had he a major role in that. Two, he developed a new intervention called covert sense did I tags treatment which was initially developed in order, at the hospital, in order to apply to the very few patients who are not developing an adequate aversion to allow them to develop an adequate aversion by the discharge. Basically it is a form of hypnosis and guided imagery. En and the third area where he made contribution is look at the opiate opioid patients who are some minor use of intravenous opioid use but that was not their major route of use. To see if they would benefit, in addition to the counter program, they had covert sensitization training related to this particular. That's a very brief history of this facility and this treatment program that has been around since about 1933. There's much more I can shared with you but I think that gives you an idea of its longevity. But I want to use this opportunity before we go to the next slide to segue in to a common question that comes up in these presentations. As I told you, this is the only treatment program in all of North America that is extant that uses counter conditioning treatment as part of its program.

The question is why? First of all, let's step back for a second in the 1970s and 80s the hospital had three hospitals, the one you're looking at in the picture, one in Santa Barbara, California, and one in Dallas-Fort Worth. In addition, the hospital leased space in five community hospitals up and down the west coast and implemented the treatment program in a dedicated space in those hospitals. In addition, in the late 1960s, a group of people that were trained to work at the hospital in the Seattle, left the hospital and formed a company called Raleigh Hills hospital. Its corporate headquarters

are in Portland, Oregon, and they at one point had 23 freestanding hospitals, all west of the Mississippi, that included counter conditioning treatment and they did not incorporate rehabilitation interviews in to the treatment programs. So at one point we had with 30 facilities west of the Mississippi that are providing counter conditioning treatment as a major component of the treatment programs.

So what happened? What happened was a change in the health insurance industry in the late 80s to early to mid 90s called managed care. And without going into a lot of detail, this decision making utilization management decision making that managed care is use basically turned off the pig got of money flowing into these facilities. Managed care industry decided that substance use disorders could be treated as effectively and certainly much less expensively and in a less restrictive setting than an inpatient facility and/or even a residential facility. So the only reason that the hospital now survives because that a group of the patients at that time purchased the hospital.

Okay. With that brief history of the hospital itself and the industry and what happened in temples of the reimbursement environment, let's move on and talk about the treatment programs at the hospital. First of all, I want to disabuse the concept that many people have about chemical counter conditioning treatment. It has though the been since the Raleigh Hills hospital that that was the only component of the treatment program at the time. The hospital has always had a multimodal and multi disciplinary treatment plan that surrounds chemical counter conditioning treatment, at least in the modern era.

So in the hospital itself, we have multidisciplinary primary care team that takes care of patients. This includes physicians. The two current full time positions. Are both psychiatrists. One is the general adult psychiatrist who is a specialist in geriatric psychiatrist. And the other is general who has completed a fellowship in addiction psychiatry. I personally do not take care of patients anymore.

In addition, many of the nurses who work at the hospital have been there for many, many years and that's particularly true of the treatment nurses. And all of the counselors at the hospital are certified by the state as chemical dependency counselors and many of them have masters degrees or even higher. So that is the treatment team that takes a primary care approach to the treatment of the patients who are in the hospital.

The treatment program also includes medical detoxification. Excuse me. We have at least ten beds that we can dedicate on a daily basis to medical detoxification. Our experience has been that about 50% of our patients arriving needing medical detoxification and about 50% do not. And we will assess that, of course, prior to their admission, as well as on early admission.

The other components of the treatment program include the counter conditioning treatments, and we have two types, and we will speak more specifically about very soon.

And then as I mentioned before, we have the rehabilitation interviews, previously known as narcoanalysis or narcotherapy, and I will refer to those this the future as rehabilitation interviews.

We have a number of cognitive behavioral therapies that are included in the individual, as well as the group counseling programs. Of course there are psycho education which includes skills training, all of the common sorts of things such as refusal training, redirection, avoidance, and all of this is accomplished in individual counseling sessions

as well as group counseling and group education which I'll talk about more in a moment also.

In regard to the counter conditioning treatments I just want to step back for a moment and say, these are all delivered by nurses. We train and certify our nurses in house to be able to provide these treatments and we monitor them very carefully. In addition, in addition in our detoxification program, that is done by Ring Ns. And they are also specially trained and monitor in the provision of those services.

I think I skipped a slide here so let me go back a moment. Okay. Let me finish up the components of the treatment program.

We all have begun to recognize the power and importance of contingency management in terms of success with patients and substance use disorders. We have a built in contingency management program and that's in the context of our 30-day and 90-day reinforcement treatments which we will speak more about in a moment. But when patients complete the inpatient treatment program of ten days, sometimes a day or two more but rarely, if ever, a day or two less, as a part of that treatment program and its completion, they receive two reinforcement treatments. Very quickly, at 30 days post discharge the patient returns to the hospital and spends two days and one night in the hospital and at 90 days post discharge, same thing. During those revisits, the patient receives one counter conditioning treatment, one rehabilitation interview. They meet privately with their counselor or therapist to update their aftercare and recovery plan and to deal with issues that may have arisen during that 30 or 60-day period.

There is no further charge for those reinforcement treatments after the patient completes the initial ten-day treatment. So this is a powerful contingency management aspect of the treatment program and extremely important to their success and abstinence.

In addition in the treatment program we include the use of the book called the four agreements which many of you may be aware of by Don Miguel Ruiz and also we include the use of smart recovery, and I'm sure most of you are familiar with that also.

Smart recovery is an evidence-based model that is self management and recovery training. This particular part, as well as four agreements, in part can be thought of as a substitute for self-help and or the anonymous approach to treatment. These deal with the issues ever spiritual and personal values and related aspects of a person in terms of dealing with those very, very important issues for success in treatment.

I will say that we do not include anonymous meetings in the hospital but we are extremely supportive and actually refer to anonymous self-help fellowship as a outpatient basis as a part of recovery. We want to be very clear about that. Even though we don't include it as a part of a treatment program as a inpatient, we're very supportive of people using this as a part of their ongoing abstinence and recovery.

Finally we allow and request and encourage the patients to be a part of the program and can provide at least one or two meetings with the family if necessary.

You may imagine we're not able to do that during these times of COVID but we are we have done that regularly in the past and we try to do it by Zoom if we can and need to at this point.

Finally we have incorporated medical assistive treatment into our treatment programs when there's evidence that it may be helpful in terms of long-term abstinence.

For our opiate, opioid patients, and for our alcohol patients we will use these therapies we do not use them for cocaine, cannabis or methamphetamine patients and there's really no convincing evidence that it may be helpful, and we'll speak about those choices a little bit later also.

Okay. Now I've sort of told you what is the comprehensive package of treatment that we can offer, let's speak for a moment about a typical patient experience. As I noted before, about 50% of our patients require medical detoxification and 50% come in abstinent, having about drawn on their own or had some medical management on an outpatient basis or he maybe even another inpatient facility.

The treatment program is post detox and our detox numbers are not unusual. Our average alcohol detox length of stay is about 42, 78 hours. Our average length of stay for an opiate, opioid patient, depends on the half life of the opiate or opioids that are being used but it is generally anywhere from about three to five days. Rarely more than that.

I'll speak to the length of stay in a moment and then I have already mentioned the two, two-day reinforcements at 30 and 90 days post discharge.

In addition, the aftercare plan is individualized, it is reviewed with the patient, developed with the patient, and signed off by the patient.

In addition we have alumni groups. These are groups that meet outside of the hospital and they are headed by an alumni nurse, successful alumni nurse at the hospital who has been trained and certified by the hospital to lead these support groups, consistent with the hospital's treatment programs and philosophy.

As you can imagine these groups are not occurring right now because of COVID again but we are providing them by webinar and/or Zoom at the hospital for patients that would like to attend that way.

And in addition, some of our patients will be offered medical assisted treatment. For our alcohol patients the three medications that would be recommended if indicated would be in the following year. That is in the order of the data that supports their use. And for our opioid patients some form of naltrexone, whether that's an injection or it is oral. We generally don't recommend medication assisted treatment for our alcohol patients after their first treatment. We tend more to use that for patients who have relapsed, either from another treatment program or even from our own treatment program. But it is an item for discussion on every patient on their first treatment as well as other treatments.

For our opioid patients on the other hand we recommend that all of them discharge and antagonist and for a very small group of patients who are not treated with chemical counter conditioning treatments and we transition to an antagonist agonist, we will, of course, make sure that they were able to continue that treatment on an outpatient basis.

We want to go back second and address the issue of the number of days that we've talked about. Ten days, 30 days, and the 90 days, as there is data that underlies the choice of these days versus other lengths of stay and periods.

As many of you I'm sure know, the greatest period of risk for relapse after a residential or inpatient treatment is in the first 90 days and the vast majority of those relapses occur within the first 30 days. So that is one of the reasons we chose 30 and 90 days for these reinforcements. And you are also aware probably also, there is data, strong data that suggests, more than suggests, confirms that if a person is abstinent at 30 days, that

is the most predictive in being abstinent. And that is the most predictor factor of being abstinent at one year and so on and so on. So that's one of the reasons that we choose 30 and 90 days for the reinforcements. Willing the other is that based upon our experience, that appears to be the best time to reinforce or to boost the aversion from the time of the initial inpatient treatment program. And I'll talk some more about that in a little while also.

I'll also talk about ten days. Why ten days. As most of you know in this industry, the average length of stay in residential treatment for substance use disorders is 28 days. The Hazleton or Minnesota model which I'm sure you're all very, very familiar with. And here we are at ten days.

So let's talk about this for a second. All of us know that detoxification only results in little, if any, predictable long-term abstinence. It is essentially no better than self treatment, if you will. There is strong evidence to support that. Back in the 1960s and 70s, there was a number of publications that looked at the length of stay either in a residential or inpatient treatment program and looked at that as a correlative to abstinence post treatment. So inpatient lengths of stay following detox were looked at one day, two days, three days, four days, five days, on up to 30 days. Data shows for nine days or less post detox in residential or inpatient treatment, there was no significant increase in abstinence compared to no treatment at all.

Looking at day 11 all the way up to day 30, there was no incremental improvement in the length of abstinence following inpatient treat. So it was at day ten where you got the biggest bang for your buck if you wanted to think of it that way and that's the data and science that underlies the treatment programs at the hospital of being ten days post detox.

Okay. Let's talk for a moment about some more information about a typical treatment for a patient. The typical patient will receive five counter conditioning treatments. This is in the ten day period. Four rehabilitation interviews. A minimum of six hours of individual counseling. A minimum of 30 hours of group education and counseling, including substance use disorder education.

We do offer limited family and couples counseling, as I noted, at least in the past, that's been suspended at this point because we don't allow visitors to the hospital at this point because of COVID. And there is the patient care services division of in the hospital meets on several occasions with the patient to finalize the aftercare plan and make the referrals to the psychiatrists and other follow-up providers and practitioners as necessary.

I'm going to talk about the counter conditioning treatments and detailed interviews a little more later which I'm sure you're going to be interested in learning about the nuts and bolts and details of what that kind of experience is like, so we'll get to that in a few moments but I wanted to give you this general overall view of typical treatment experience. And as I noted before, at the 30-day and the 90-day post treatment the patient receives one booster or reinforcement counter conditioning treatments, one rehabilitation interview, means metes with the counselor, updates the aftercare plan and can also go to the other groups and meetings that are occurring in the hospital. In addition, oftentimes patients come back for these reinforcements, if you will, at the same time that many of their peers who they treated with during the ten days come

back in order to have the social support of that group that they spent ten very intense days with.

Samuel, would you help me out on this one?

>> Yes. Hey, Dr. Davis. It is Samson, by the way. Let me go ahead and launch this third poll. So this polling question is asking what types of treatment do you suggest for patients with substance use disorders? You will see five answer options there pop up on occur your screen it. Looks like about ten, 15% of you have voted already, awesome. Thank you so much. And just as a reminder, those of you who have sent in questions, thank you so much for those questions. We will have a live Q&A towards the end of the webinar. For those of you who have not, feel free to send million in questions in the questions box, if you go of your GoToWebinar control panel and we will ask those questions of Dr. Davis in the order they are received. It looks like about 60% of have you voted. I'll give but five more seconds here. Perfect. Thank you so much, everyone. We're going to close this poll and share the results, and I'll turn this back over to your presenter.

>> Thank you, Samson and I apologize for getting your name incorrect. There's no excuse for that on my part.

All right. It looks like IOP is the most common type of treatment experience that the attendees, patients experienced and after that 30-to 90-day residential treatment programs and a good number with alcoholic's anonymous.

So that was very helpful information. And it will be interesting, as for you folks, to contrast your treatment experience, outcome treatment experience with what I'm going to share with you later about counter conditioning base treatment programs.

All right. I went a little too far here. We are on the correct slide thank you for bearing with me. All right. So there are certain characteristics to refer a patient to our hospital and to treat them. First of all, the person must be an adult age 18 or older. There's really no limit on the age of a patient that we will admit it is rare for us to admit somebody over the age of 80 but there have been a few patient that we have admitted over the age of 80 throughout the years. The patients need to be psychiatrically stable.

Now, of course, we will admit patients who have chronic psychiatric disorders, the most common of those being major depressive disorder. Sometimes folks with thought disorders. And certainly folks with anxiety based disorders. Anxiety based and depressive disorders would be the two most common categories of chronically or recurrently psychiatrically ill patients. But these patients must be psychiatrically stable. Preferably in outpatient treatment with a therapist and/or taking a medication that is keeping them in remission. So that is an important characteristic of patients that we look for.

Patients must also be medically stable. We, of course, provide medical detoxification and we can provide medical detoxification at the 4.0 level using ASAM criteria. So that is next to the very highest level of detoxification. In general if the patient requires more than just more than intravenous hydration, we may have to refer them to a ICU. But up to that point we are able to safely and adequately handle those patients. But for patients post detox they also need to be medically stable. And our physicians would evaluate the perspective patient to ensure that that's the case. As you can imagine, with chemical counter conditioning treatment and because of the [naurz](#) I can't and the

vomiting, our patients need to be in good health to be able to tolerate that, so we'll talk about that more later also.

Patients also need to qualify for a primary substance use disorder, at least one of five substances, and those include beverage alcohol, opiate opioids, cannabis, myth amphetamine, and cocaine. At our particular hospital, we call folks who use four or more substances poly substance use disorder persons and we in general are not able to offer them comprehensive chemical and/or treatments for four or more substances. We will talk about this a little bit more in a moment but essentially we can only incorporate two substances in a particular counter conditioning modality. Otherwise, are a process occurs called dilution and the person will not develop an adequate and/or strong' version to the substance that's being used in the counter conditioning treatment. So we can use two in each modality but we prefer to use two in one modality and a third substance in the other modality but when we get to four or more we really can't do it and we have data to show that this curse and that it is not as efficacious for four or more substances.

Also, we do not admit and treat patients who are primarily intervene us substance use disorder persons. And the obvious reason for this is since in the counter conditioning treatment we try to reproduce as best we can the experience that the person has in their real life, substance used administration, we cannot allow patients to place a needle inside vein to bypass the skin barrier. This is illegal in the state of Washington to allow someone to do this in an inpatient setting. Or actually any healthcare setting at this point. So that's the obviously reason we can't treat these folks.

The other is that in general in the industry folks that are intravenous drug users have very complex and complicated use histories and at least the evidence appears to suggest that they do much better in very long-term residential treatments treatment programs which we are not able to offer.

Okay. Since many of you or most of you are actually out there in the field, seeing and taking care of patients, I wanted to just talk for a second about what you could do to help prepare a patient to come to a decision about a counter conditioning based treatment program so that they're not surprised.

And let me say first of all, the vast majority, well over 90% of perspective patients that come through our front door are very well-informed and very knowledgeable about what we have to offer. Our website is visited very frequently by these folks and they can send in questions, they can ask questions that may come up with our admissions staff. In the past we also used to allow perspective patients to actually come to the hospital in order to tour the hospital and ask questions to be interviewed prior to admission mission. We can't do that anymore. But we do as much as we can over the phone and over the e-mails.

So back to patient preparation. The patients who seem to do best at our hospital are those patients who view their substance use disorder as a medical condition that they don't view it as a moral choice or a choice of will or other sorts of situations like that. So those folks who look, substance use disorder mostly being a disease or a medical condition are better prepared to benefit from the treatment program. It is also very important patients have insight in to the fact that there are certain situations, emotional states, real life situations, that these situations are queues or triggers then having a slip or a relapse. That realization and having some insight is also

very helpful to patients succeeding in the treatment program. I don't need to mention the readiness for change issue as you folks are all very well of this. But sometimes assessing that and doing outpatient motivational interviewing and meeting with family can be very helpful to prepare the patient for what they're going to experience in the hospital. The vast majority of our patients, as I said, come to the hospital well-informed and they're already motivated for treatment and we don't necessarily have to spend a good amount of time or energy related to motivational interviewing.

So that is something that you folks can do if you are going to be referring patients to our hospital so they're not surprised and so they're ready to start that treatment right away and so the benefit from this very short and intense treatment program. So I have pretty much already summarized what's on the next slide but let me say it again. How is this different than others? It involves counter conditioning, the rehabilitation interviews, the two reinforcements and again I want to stress those are not charged separately. They are a part of the original cost of the treatment program but on the other hand if the patient misses them they get no reimbursement and/or they don't get any credit if they should come back to the hospital and retreat again.

The brevity of the inpatient treatment program is unusual as most of you know and covert sensitization is a new aspect of the treatment program in the last decade and can be very, very helpful in those very small number of situations in which patients have difficulty developing an aversion. So these are the major distinguishing features compared to most other treatment programs.

Okay. Now we're going to get to the nitty-gritty of technology and treatments of what we do at the hospital.

So I want to talk about counter conditioning. Counter conditioning is a form of learning which has traditionally been called Pavlovian or classical conditioning to distinguish it from Skala Rickann learning or conditioning. I'm sure all you know the Pavlovian story about the dog and salvation so don't really need to repeat that metaphor. But essentially the counter conditioning that we do is very similar to that in terms of the technology and how it works.

Very simply, we pair the experience of the smell, the taste, the sight and related acrutiman or paraphernalia with nausea and we'll talk in a moment about how that's actually done. It is important to realize that counter conditioning is not punishment and indeed, although it can be extremely unpleasant, it is a limited period of unpleasantness and it should be no experience. We are very careful to let the patients know if they are actually experiencing pain, they need to let us know because the pain will distract them and will not contribute to the development of an aversion. And counter conditioning is also not like the use of antiabuse or dicelafaram which I'm sure you are all aware of because that is fear based, the psychological basis of that is if I'm taking this drug and I should drink, I could get very, very sick and/or I could be seriously injured and/or die. So that is a fear based psychology that is not a learning based psychology.

Okay. So we're going to talk a little bit more about counter conditioning treatment. And the basis for it.

So this is typically referred in the academic literature and science literature as taste self aversion which is a little bit odd since it really is smell taste aversion. 90% of a person's taste is basically smell. And you will note in a moment when I describe the actual

conduct of the treatment how important that is. So basically this form of counter conditioning treatment is to learn or develop a revulsion to the smell or taste much a substance. Simultaneous to the onset of nausea. So I think it as good step back for a second at this point and talk about how the counter conditioning treatment, at least the chemical counter conditioning treatment is actually delivered. Over the years, we've used a number of different stub substances in order to create nausea that we can control.

We currently use HIPAKACK orally which is a medication that used to be available over-the-counter and for any of you that are parents, I'm sure you're very aware of this medication to have in the house if necessary. So what we do is prior to the actual treatment which is conducted privately with a treatment nurse in a room, the patient is administered orally a small dose of IPICAP. We generally know they're in the treatment room, it has been swallowed, the patient is sitting with a basin in front of them and a mirror in front of them. It is set up to look like a bar. There's various alcoholic drinks bottles sitting around. And based upon prior drinking history, there are a number of glasses of alcohol. Alcohols. That are sitting close to the patient. This is important to get the timing so simultaneously with the smell, or very, very shortly thereafter, seconds, microseconds, if you will, the patients begins to experience nausea. On this first drink, they are then requested to put some of the alcohol in their mouth swish it around and spit it out. This increases the sense of smell, of course, of the alcohol and as well as now the taste. Which this time, the patient is getting nauseated and may already be vomiting even though they haven't swallowed anything.

That would be a very good sign. And then the treatment nurse proceeds to instruct and help the patient to actually consume alcoholic can beverages for a period depending on which treatment it is that may last only a few minutes or up to about 20 minutes. And the patients will usually regurgitate or vomit up the alcohol at various times during this period of treatment so that they don't absorb the alcohol and become intoxicated.

The patients are very clearly instructed that if they get a little bit of a buzz on they are to let the nurse know immediately because it is impossible to learn or develop an aversion if one is intoxicated. And we go to great lengths to avoid this. Even to the point of inducing mechanically vomiting if the patient is not doing it spontaneously, although that is rarely necessary.

So after this treatment in the treatment room, the patient is taken back to their hospital room where they are generally alone and they are exposed to alcohol by sight and by smell. No further consumption and they will be nauseated off and on for a period of two and a half or three hours. May or may not vomit. They don't have any alcohol in their stomach at this point. But they have these waves of resurgent and ongoing nausea. They're also given other instructions about things to read and what to think about and those sorts of issues. So each of these treatments lasts about three hours total. Then the patient recovers very quickly. If they don't, we have medications to help them recover and we instruct them how to request that and when to request it. But most patients spontaneously recover during that period of time or shortly thereafter. And the only thing that really changes over the number of treatments for is that we will move from preferred beverages to many different choices of beverages but always coming back to the preferred beverages. The number of alcohol drinks that the patient is

exposed to over the five treatments increases. But never beyond what the patient is able to tolerate. So that is generally how the treatments go.

For other substances the treatment is delivered in the same way but you can it would be different if the route of use is smoking. Or snorting or oral for other substances also. And if there are two substances that are going to be used in a treatment we have to make decisions about the primary substance, the secondary substance, and they are combined in the treatment. This gets pretty complicated but it is basically based upon the patient's history of use and an episode of using and as well the application of the technology in order to develop the aversions in this case, if you will.

And we have dedicated treatment spaces for smokers. It is like being in a phone booth which is properly ventilated so that the treatment nurse is protected and then so that the ventilation occurs also. This is particularly important if we're smoking the opioids in order to protect the patient and the treatment nurse. So as I said in general, we give patients five of these treatments, one every other day, no matter what the substance is. The vast majority of the patients by the time they have treatment No. 3 are well on the way to developing an aversion. Treatment No. 4 extends it and treatment No. 5 is just basically consolidates the aversion. That is 90% of our patients.

Okay. Let's go back to smell and taste aversion or taste smell aversion. As you folks probably know, the, we could use lots of different types of physical experiences to develop an aversion. But we have chosen to use smell taste aversion because our brains have developed in a way evolutionary that smell is the strongest and most indelible memory that gets implanted in our brains, that we make memories of. It is very, very normal human experience for most people to develop a natural aversion at some point in their time related to a substance, a food, a beverage, flora is, something, and I imagine if each one of you were to think back during the life, you would think yeah, I wouldn't drink that again, I wouldn't eat that again, I would avoid that again. And that particular memory can be very strong and very long lasting so these treatments are based on the evolutionary biology. The simple story is that as we evolved over the Linna in order to survive we would have to avoid substances that were toxic, that would make us I have sick or disabled and kill us. If we were very sick, our neighbor would see that weakness and take advantage of us and maybe even kill us. So it wasn't good for survival to become sick and disabled, certainly not to die. So the brain recognized a way of a way to avoid the types of substances in order to survive. It is basically as simple as that. Nausea based conversion, as I stated, is the basic of a medic or what we call chemical aversion at this point. Okay. We're going to next go to the next slide and I'm going to talk about the immediate goals of counter conditioning and then the long-term goals.

The immediate goal, of course, is to develop an aversion to the smell, taste, sight, and thought of use in situations in which one would usually have a desire, a craving, or an urge to use the substance. So that is the immediate goal. In regard to treatment program, the experience has been only one patients walk out of the hospital saying they don't have an aversion. So as most, that's one out of 100 patients. In retrospect when they come back for reinforcement treatments, which are 30 days and 90 days, they actually report that they do have an aversion they just didn't realize what they did or what was until they got out in the real world. And oftentimes they will simply say

these small number of patients will say, I just have a neutral response to situations in which I used to have a craving or an urge or thoughts about drinking and a neutral response is on the continuum of an aversion. One of the things we have to educate patients about is that there is no right aversion. Every individual will develop their own aversion which will be helpful to them.

I've just mentioned one type of aversion on a continuum and that's simply a neutral response. There are other patients who will have a full exuberant response of nausea and even up to vomiting sometimes and have to remove themselves from the situation in which the stimulus is there because it is making them so sick. That is strong and indelible response to the treatment that is transmitted into the real world or exploited into the real world. And some patients just say, I don't care one way or the other in these situations about using and I just move through it and it's okay. Usually somewhere on that continuum but most of the patients have some kind of physicality to the response to these situations and certainly on occasion some anxiety. So the immediate goal is to develop an aversion which may lie somewhere along this continuum and also to reduce or eliminate the hedonically memory, very fancy word, hedonically of course meaning and simultaneously develop a distaste and/or avoidance to the substance.

As most of you will probably know the word aversion comes from the Latin root aver which means to turn away from. So we hope to also be successful at teaching patients how to avere or turn away from those situations in which they would usually experience a desire, craving, or an urge to drink and a large part of that is related to life skills training, cognitive behavioral training and other aspects of helping patients learn how to manage situations which are dangerous, if you will.

So we're going to move on now to the long-term goals of counter conditioning.

>> CART Provider [Staci]: Captioner reconnecting audio.

So the mechanism for learning tends to extinguish or expire as time goes on. Especially those are nonsmell taste related. Memories that may related to other types of memory formations, whether it is pain or some other kind of emotion may expire much more quickly and we tell our patients that it is unlikely that their aversion will be lifelong but it is possible but the point is to give them this period of time so that they're free of cravings and urges to proceed with recovery items.

Let's move on to the second treatment that differentiates us from everybody else and that's basically rehabilitation interviews. These are essentially sedative hypnotic interviews. Over the years we've used a good number of different medication s for these treatments. We currently use a drug called Propofol or Diprivan which is a very short acting general anesthetic or sedative. These treatments are administered by nurse anesthetists in a private room that includes all of the necessary safety equipment if something should go wrong which it generally does not. And in that room also is a scribe and a interviewer who conducts the scripted interviews and the hypnotic portion of the experience while the anesthetist maintain the state of minimal sedation. These treatments usually last about oh, 28 to 30 minutes. When the patient Sunday the influence of the medication then there is usually about a 45-minute to an hour recovery period which is also accomplished under the supervision of RNs and the anesthetists.

So the purpose of rehabilitation interviews is several. First of all, it is another mechanism for uncovering the triggers or the cues that patients have to become aware of in order to be successful in their rehabilitation and recovery when they leave the hospital.

In addition, this situation is basically like being hypnotized. So we are able to deliver a series of positive suggestions which are scripted, that is general, and also some that are individualized. We have the patient with the counselor prior to the treatment develop a list of positive discussions that, if appropriate, can be included into these rehabilitation interviews. Patients really appreciate being able to contribute to that part of the treatment and find it very helpful.

Another really important part is the rehabilitation interviews is an objective measurement of how the aversion is developing our monitoring of that. We had many different mechanisms for doing this so this is just one of them. And what we do is we can create imagery or scenarios of situations in which the patient has traditionally been tempted or cued or have cravings or desire to drink or use a drug and see how they respond verbally under the influence of a drug related to those kinds of situations.

Finally rehabilitation interviews provide a day of respite for patients. Our treatment program is extremely intense the and the chemical counter conditioning treatments are very demanding. So it provides a day of looking forward to having some rest, relaxation, a little bit of a sleep, and something that is a pleasant change from the chemical counter conditioning treatments.

So moving on with these interviews, again, we let patients contribute to the interviews and then we have a number of questions that we ask patients, the answers of which can be used with the patient with their counselor on the inpatient or aftercare setting to explore issues that be this deal with in a different way.

Since these patients are under the influence of a mild sedative, one can say that they tend to be a little more truthful or forthcoming or actually may respond in a way that's a little bit surprising to them, ie, from the subconscious mind, if you will.

As I told you, these are strand transcribed. We don't audiotape them, we transcribe them. They are given a copy to go over with their counselor. They also have a copy of the proceedings and what they say and what has been done to take with them when they leave the hospital. And those can be used if they wish, with their outpatient counselor for further exploration and for use in their recovery activities.

As I mentioned before, we usually give patients four rehabilitation interviews during their initial ten days with alternate with the counter conditioning treatments and then one on each reinforcement.

There's going to be a number of slides here basically just to ascribe an aversion. This is the definition that we post all around the hospital and that we try to get patients to understand. And I'm just going to read this to you. An aversion is the absence of a desire to use the substance and circumstances that a person has ordinarily desired and craving to use that substance. On the next couple of slides you will see some expanded definitions of an aversion, I'm not going to review these with you, you tend to be more academic and scientific to explain what be a aversion is and sometimes it can be helpful with some patients to go more in to detail about what an aversion is. But generally after several treatments they understand pretty clearly what an aversion is.

Okay. I want to talk for a moment about safety. We treat patients whose average age of a patient is about 40 years of age. And when patients use substances excessively for many years, they are liable to develop many medical problems because of malnutrition, trauma, ignoring their self care, and also, quite simply, from the toxicity of the substance that they are using. So a good number of our patients are unable to tolerate chemical counter conditioning treatment because it is a very demanding treatment and requires that the patient be able to tolerate it safely. So we're very, very careful about selecting patients for that treatment, very careful, and have a long list of conditions which we respect that are both absolute as well as relative counter indications to these treatments.

I do want to say, related to, that we have never had a death from a counter conditioning treatment nor have we had one from a rehabilitation interview. And we have never had anyone seriously injured from either one of these treatments also. And again, we're very, very careful approximate our selectivity for these particular treatments. So let's talk now for a moment about what you can expect for patients that you may refer to treatment for the programs I just told you about.

First of all, many of the patients who come to the hospital have never received any other treatment for their substance use disorder and then there are American patients who have come, who have treated elsewhere and who have relapsed.

Our outcome data shows that there is no significant difference between those two groups of patients in terms of the effectiveness of the treatment program at the hospital.

So we measure abstinence at the two reinforcement treatments, of course, at 30 and 990 days, and then 12 months after the second reinforcement treatment, that is 15 months after the initial discharge, we conduct a survey to determine the patient's behavior at that time and during the period prior to that time. If we can get a collateral report we do the patient for that and we'll try to get that information also.

We have done this survey inhouse for decades. Back in the 1980s we hired an out of house survey company to conduct this follow-up for us in order to objectify more the data for publication purposes and these particular companies were incented, of course, to get ahold of the patient and to get a response and they were very good at getting ahold of patients, a little bit better than the hospital is internally, but generally about 80% of the patients were able to get ahold of and/or a collateral to get a self report.

Interestingly, we did this for a number of years and the data that the companies were able to get, other than a slightly improved response rate was no different than the data we had been gathering for decades in-house. So we suspended using out of house and continued on an annual basis to get in-house data from patients who have been discharged. And this seasonal for patients who comply the initial ten days.

If a patient leaves against medical device or is transferred because they can't complete the treatment for a medical or other reason, we don't follow-up with them. So we have decades of data here. And this is generally what you can expect for a patient who is a primary alcohol use disorder, primary cannabis use disorder or a primary stimulant use disorder which includes methamphetamine and stimulants who complete the ten days and return for the two reinforcements, you can expect about two-thirds of them to be abstinent during that entire period of time at 15 months post discharge. For our opiate, opioid patients, you can expect about half of those patients to be abstinent at 15 months post initial discharge.

If the person comes to the hospital and is treated for more than one substance use disorder, you can expect those folks to be abstinent at about 50% of the time. And this is for the entire period, if you will, and again these data are supported by out of house data and decades of in-house data. Samson, it is your turn.

>> Awesome. Thanks you so much, Dr. Davis it. This is just such incredible information, pages and pages of notes filling up on my side. Everyone you'll see this polling question pop up on your screen, our last one for this webinar. This poll question just simply asks based on this presentation, are you more likely to consider counter conditioning treatment as an option for your patients? You'll see five answer options here and by the way, we've got some excellent questions in the queue. We will start those who sent them in earlier, and go down the list. Please feel free to send them in the questions box. If we run out of time and don't get to your question, don't worry, we'll send it to Dr. Davis and try to work with him over the next couple of weeks or so to see if we can get the questions written out in a Q&A document on our website at a later date. About five more seconds to answer this polling question and then we'll turn it back over.

>> Perfect. Thanks so much, everyone. All right. We are closing this poll, sharing the results, and I'll turn it back over to Dr. Davis.

>> Thank you very much, Samson. Look at these responses. It looks like I may have been a little successful in providing a little more information to you folks who are in the position to treat patients or refer patients. So thank you very much for your positive response to this presentation. Samson, are we moving on to questions now?

>> Yeah definitely. I wanted to make sure you were ready. Okay. So we will go on to questions. So our first question comes from Barbara, Barbara asks how many clients are in this treatment facility at any given time?

>> Excellent question, Barbara from Georgia. I'm sure it is not rang there, so I'm a little jealous. But the hospital is currently licensed for I believe 60 beds, within several beds one way or the other. And as I mentioned previously, we are able to dead eight minimum of ten of those beds and I believe up to 15 beds for acute medical detox.

>> Thank you. The next question is do they have access of transcripts.

>> Yes. What we do is give a actual hard copy of the actual instrument we do, the tools we use and we give that to the patient at discharge and they can do what they want with it and if they wish to share it with their outpatient counselor that's perfectly fine. We don't consider that to be proprietary in terms of the questions or the tool that we use.

>> Perfect. Thank you. And the next question comes from Rita, hold on one second here, sorry. I had it and I lost it. There it is. Sorry. Rita asks is counter conditioning only done in a hospital setting or can it be done in outpatient treatment and is only one drug used for counter conditioning. I know there was two questions, is it done in a hospital setting or can it be done in outpatient treatment and is only one drug used for counter conditioning from Rita.

>> Thank you, Rita. Very good questions. In North America at this time, to the best of my knowledge, chemical counter conditioning treatment is owning offered on a inpatient basis and I distinguish that from a residential basis because most residential settings are not medical. They generally the folks who work there are generally not RNs, the majority of the staff or physicians. So and it would be actually unsafe in our opinion to offer chemical counter conditioning treatments on the basis other than inpatient. Our

inpatient services are at 3.7 if you're familiar about with ASAM levels criteria of care which is the highest level of care other than complicated medical detox. And I think the second part of that was about the medication used, Samson. Was that it?

>> Yes. The second part of the question was one second, sorry, I'm grabbing it up here again. Is only one drug used for counter conditioning.

>> So over the many years, many different medications have been tried to produce the most predictable, reliable and intense nausea. I will give you a couple of examples. Lithium has been used in the past. Able morphine has been used in the past. And also an extract from the IPICAC plant called impasefaline has been used. Currently only medication we use is liquid oral IPICAC which is derived from the planned, although there's a long history of using other medications. And I actually want to go back to reanswer or additionally answer the first part of your question, Rita, that was the second form of counter conditioning treatment that we used is called Foratac or electrical counter conditioning treatment, basically used as a modified tense unit which you may be familiar with the treatment of chronic pain. We used to use that to treat people on a outpatient basis for tobacco use disorder. So that treatment can be given on a outpatient basis if it is aversion treatment. But since we use it as an alternative to chemical counter conditioning treatment and don't have outpatient clinic he can we also deliver that treatment on a inpatient basis.

>> Great questions. Great answers. We have a lot more. I'm going to try to get as many in as I can. So I guess along the same lines, Ana from California asked are injections part of the overall treatment plan?

>> Fab why you us will question, I'm happy to report and the answer is yes in the following situations. So the vast, vast, vast majority of our let me talk about first who are opiate, opioid, come to the hospital for can he toxification and counter conditioning treatment. We are able to give those patients a shot of Dibutrol the day before they are discharged and to arrange for them to have a follow-up appointment with an approved and a experienced place, as you know, this requires certain training in searches of how to give the shot education of the patient in things of that nature. So we recommend that all of our opiate patients get that which is now intra muscular at the day before discharge and then to follow-up. And we used to in the past give them a prescription but we are now able to get them to have Vivitrol. There are a second group of patients who come to the hospital who are opiate opioid dependent and they just want to simply detoxify and go home. Or go to some other outpatient or residential treatment besides what we have to offer at the hospital.

For those patients we can also administer a shot prior to their discharge from medical detox and we strongly recommend it and we can also set them up for follow-up. As that point at that point, once they leave the hospital, they are no longer our patients because they're not coming back for the reenforcements, they've just been detox phi. And the third group comes in to get what is called transition management to get off of their opioid or open otherwise of choice and to go on to be discharged on that medication. Those patients, of course, we don't recommend Vivitro for because their on the Saboaxon replacement. Going to alcohol patients, as you know, FDA has now pro of this as the first medication of choice to assist people ins have reduced urges and desires and cravings and also if they should lapse or slip it seems to decrease the amount of consumption if the person relapsed, so we, in general, don't offer that for our

first team treating patients, as I noted, but if the patient requested it, we probably would do it and certainly if it is a relapse patient, we would have a strong conversation about that. Excellent question. Thank you for giving me the time to explain that. From the other substances, cannabis and the stimulants of course not that has not been shown to be of any help so we don't recommend that or give that.

>> Perfect. Thanks for that. So the next question is can patients stay in touch with friends and family during treatment?

>> Excellent question. Yes, we do not sequester patients from their real life. We allow them to bring their smartphone cell phones. There is the telephone in every room for local calls. And in addition, in the past, we used to allow visiting hours. We, of course, can knowledge no longer do that now. And we've been very successful in protecting our staff and patients from COVID and I'm just so happy about that, we're doing a really good job of that. But yes other than when the patients are in a treatment, per se, like counter conditioning treatment or rehabilitation interview, counseling session or educational session, they may use their smartphones and cell phones to their heart's content and also we have Wi-Fi so they're able to use their laptops if they wish.

>> Perfect. Thank you so much. And the next question is from Evan. Everyone asks what are reasons for this not being more popular clinically indicated treatment model?

>> How much time have you got, Evan? Well, I gave you the major reason which is the people who chrome prior authorization, utilization, management decision making, develop these guidelines, implement these guidelines have made decisions that treatment is as effective in a less restrictive outpatient stud setting that does not include counter conditioning treatment. That is the major reason. In the distant past certain agencies have considered it to be investigative or experimental. In general, most agencies do not consider it to be experimental although there are some who will still invoke the adjective investigative. I can tell you that it is in general not the position of most health insurers because we treat patients mostly who are insured by commercial insurers. All of the big five that you will know about. And I guess the other reason is just that it is not that widespread or well-known about. And finally, as you folks know, self-help is the dominant treatment model in the United States. That's my short answer to your question, Evan, but very good question.

>> And great answer, Dr. Davis. Thanks for breaking that down. So kind of along the same lines, some are asking would this program work well with a 30-day program?

>> I don't know how to approach that but let me just give some thoughts about that. You mean, I assume the person is asking as a part of a 30-day program or in addition to a 30-day program?

>> We'll have to guess.

>> Well, let's guess both. One of the attractions of the program that we have is its brevity.

>> Oh, in addition to, my apologies for interrupting, in addition to.

>> In addition to. Can't hurt. It can only help. I mean, if you put the power of time, length of stay, with the efficacy and power for an aversion, I would think that that would only synergize and help the situation but remember, my comments about length of stay and outcome. So I'm going a little bit against what I quoted in terms of data before but let's put it this way, it won't hurt. Awesome.

And ironically we have another Ana, so Ana from Wyoming I think we had a question from Ann a in a in California, welcome to both of you, Ana in Wyoming asks, our resources are very limited, how many counter conditioning treatment centers or programs are there? Or are they more available than I know of? And also can other states rope will I indicate this type of program?

>> So I think I answered that question before in Wyoming but I'll be happy to answer it again. You are talking to the medical director of the only known facility in North America that provides chemical counter conditioning treatment counter conditioning treatment. It is as simple as that. I believe there may be a facility in Thailand, there used to be one, I don't know if it is still operating, that uses chemical counter conditioning treatment and there used to be a facility in eastern Europe that also did it. Otherwise I am unaware of any other facilities that offer this treatment. Excellent. Oh, go ahead.

>> I'm sorry, Samson. And the person asked a question about steals. I am unaware of any state laws or regulation that is would dis allow conditioning treatment because I know when the 30 or 40 facilities were in operation, they were all west of the Mississippi but it was pretty much in all of though I states so I don't think there's any state reasons why it wouldn't be done in another state.

>> Thank you, Dr. Davis. The next comes from Dave, most of my SUD clients are responding to trauma. How are you addressing trauma in your program?

>> I assume this person is talking with psychological trauma. So certainly we have the usual required screening tools to screen for domestic violence, sexual assault, other types of traumatic experiences that a person would have had sometime in the distant past. In addition to other sources of PTSD, for example. So we do all of this prior to screenings and if we identify someone that this seems to be important in terms of their health, their abstinence, if you will, and their success and recovery, then it will be incorporated in to the counseling program while they're in the hospital and will also be identified as an issue for continue addressing on a outpatient basis. I think that's basically the simplest answer in the rehabilitation interviews when the person is under the influence of medications, sometimes these issues also get brought up. It is not necessarily the purpose of the rehabilitation interview but sometimes it is also a source of information and then we can share that with the patients for them to talk to the counselor about also. Sometimes these things are uncovered or repressed or suppressed, if you will, but we purposely don't look for suppressed or repressed memories but it does happen on occasion.

>> Perfect. Thanks, Dr. Davis. And next we have some good ones. So Aaron is asking what are some of the protected factors or strengths that you look for when seeing if a client is appropriate for this type of treatment?

>> Thank you, Aaron, that's a very good question and let's see if I can elaborate on that. I am sure I won't say anything that's particularly surprising. You remember the slide that has the required characteristics and then the slide that has some favorable characteristics also but in general, the kinds of characteristics or parameters or favorable progress naps particular factors that apply to any substance use disorder patients apply to patients coming to counter condition treatment program and those are not having a severe psychiatric disorder, that's number one, even if it is under good control and in remission. Two, a favorable factor is having a stable employment job and/or income. Three, having a stable primary intimate relationship that is long-term.

Or partner, if you will. In general being in good health. And the next important thing would be not having any pressing crisis in one's life, for example, a DUI or something like that. So those are five very common prognostic factors which only help our patients to do just as well to help your patients do well.

>> Perfect. Thank you so much. And the next question is from Sharon. Sharon asked, what are, you mentioned some of the big forms of patients, you mentioned the big five, but what are the forms of payment accepted for the aversion program, do people fly in from out of state and then what is the average cost?

>> Okay. Three questions in one. Thank you.

>> It sounds like she has a referral in mind. That's what I'm taking.

>> Excellent question. Let's see if I can remember all of the components. First of all, about two-thirds are patients come from the Pacific Northwest region, west coast, and I include British Columbia and Alaska in that area. So that accounts for about two-thirds of our patients. We have patients that fly in from all over the world. And I'm not joking you. They arrive at SETAC international airport which is a 10-minute Uber or Lyft to our hospital. We are ten minutes from the airport by Uber or Lyft. It takes a little longer if you want to take public transportation but there's taxis also. So we're very close to the airport. We are more than happy to receive patients out of the region. And we can actually admit patients 24 hours a day. Our doctors are available 24 hours a day. It just needs to be arranged in advance but we can admit someone at 2:00 a.m. if they're flying in from France or something like that.

In regards to payment for treatment, as I said, most of the major insurance companies in the United States will cover some part based upon the patient's benefits of our treatment programs. The cost structure is such that medical detoxification is a little more expensive per diem rehabilitation but I believe the last numbers I heard from the CEO of the hospital was that medical detoxification is about \$1,800 a day and I believe that the rehabilitation portion is about \$1,500 per day. And that includes the two reinforcements at no further charge if the patient returns and if they abstinent and have been so at that time. We, of course, will accept cash. And since we treat a good number of Canadian patients, they come with cash. I do want to say we don't accept Medicaid and we do not accept Medicare. We are nonparticipating with both of those insurance schemes and since we have a signed agreement with the federal government as a nonpartisan in the Medicare, as long as we inform the Medicare patient that we do not accept and will not bill Medicare, they may come into the hospital but they're going to have to be private pay. But we can accept Medicare patients under those conditions but not Medicaid. I hope I answered your question.

>> Great. Great. Great. We're going to speak sneak in two more here. Erika from South Carolina asks, do you have testimony as or testimonies from patients that we can show other patients who have gone through this patient? I know you mentioned alumni earlier.

>> Didn't. Go to the website which is should be on the screen in front of you, [www.kchickshadel.com](http://www.kchickshadel.com) and you will find many, many, many testimonials, and it is possible that if you call the admissions department at the hospital, the number of which I don't see it is there, but it is 1-800-CRAVING is the admissions department, 1-800-CRAVING they could possibly arrange with an interview with a testimonial of a previous patient. In addition, there's a little book that's called drink up and it is written

by one of our successful patients it. Is a little paperback and explains in detail the patient's experience of being at the hospital, and I believe that on request, we can even send one of those out free to someone.

>> Perfect. Thank you, Dr. Davis. One more question and just about what you asked on your screen on the slide here is that the contact information, resources or if you had questions about the program, so feel please feel free to e-mail Mark, he left his contact information there for that purpose. So Dr. Davis, last question, do you elaborate more on the types of education your patients receive in that section on the slide where you mention education?

>> Yes, well, of course, thank you very much for that question. Of course we try to do a good job of educating patients about various substances, everything from their toxicity to their effect on patients's physical health and psychological well-being so very complete information and education from a medical standpoint by the substance itself. We try also to help people understand how it is they arrive at living in a different way and making different decisions related to a substance, per se, and substances in general. And so some of that is done usually in a group educational sessions. The doctors, of course, do meet with patients and see them on a daily basis for rounds. So there is always that opportunity. And of course we have written literature in our library. We have a fairly extensive library in which patients may go to and get information to learn about substance use disorders.

>> Awesome. Dr. Davis, thank you so much for this incredible presentation and wonderful detail and expertise, and leadership in the field. Everyone, you know, thank goodness for technology, Mark Woodward just texted me and offered that if you do send an e-mail to [Mark.Woodward@uhsinc.com](mailto:Mark.Woodward@uhsinc.com), he will e-mail you back the book that Dr. Davis was mentioning earlier and some additional information about patient stories. So, again, feel free to e-mail [Mark.Woodward@uhsinc.com](mailto:Mark.Woodward@uhsinc.com), the e-mail address you see on the screen, and he will be able to e-mail you that book and additional resources. Thank you so much, Mark. Dr. Davis, thank you. Everyone, just a quick reminder, every NAADAC webinar has its own webpage that houses everything you need to know about that particular webinar. So immediately following the live event, you will find the on-line CE quiz link on the exact same website you used to register for this webinar. That means everything you need will be permanently hosted at [www.NAADAC.org/aversion/treatment/webinar](http://www.NAADAC.org/aversion/treatment/webinar). And here is the schedule for our upcoming webinars. Please feel free to tune in if you can as there's some really interesting topics with great presenters just like today. For example, you could actually join us tomorrow, Friday, November 6th, 2020, at 12 noon eastern time to learn from Dr. David Fawcett who will be presenting on stimulants, sex and the search for connection. We're really fortunate to welcome these incredible presenters the last quarter of the year as part of our 2020 post conference virtual trainings.

If you haven't already, make sure to bookmark this webpage, [www.NAADAC.org/culture-hundred huh mitt-resources](http://www.NAADAC.org/culture-hundred-huh-mitt-resources). This is our cultural humility resources page. You can stay up to date on critical topics and expand your cultural competency as a professional helper by visiting this resources page, you'll immediately have access to our new eight-part culture humility webinar series which is free to view, all our highest viewed webinar in 2020 actually which is substance use disorder and the

African-American community and virtual town hall event currently bringing ranking at over 3,000 total archived on demand views and climbing. Many more resources and we will just add more in 2021.

As an additional resource, NAADAC the association for addiction professionals has provided a COVID-19 resources page. It includes six excellent free webinars that cover top concerns in the addiction profession and presented by leading experts in the field.

If you haven't gotten this book yet, make sure to go to the NAADAC bookstore and grab a book of the new clinical supervision workbook by Dr. Thomas, protege of the late Dr. Powell, visit the bookstore to purchase this new collection. You can also take the on-line training series created provided by Dr. Durham and other colleagues and specialists in the field.

Our second specialty training series is on addiction in military and veteran culture. This series will prepare you to earn a certificate of achievement on this specialty on-line training series and specialty group. As a NAADAC member, a quick review of action a member with us. As you know, you'll immediately have access to a well over 125 free CEs as a the part of your membership. For nonmembers, there is a small processing fee CE requests.

NAADAC receive quarterly advances in the Magazine which has over 75,000 additional subscribers and is eligible to CE and instantly becoming a part of our national initiative for advocacy wonderful opportunities to be a part of connections and communities and committees that are advocating for the workforce and clients we serve.

Visit [www.NAADAC.org/join](http://www.NAADAC.org/join) to join us now.

All right, everyone. Short survey will pop up at the end. Please take some time to give us some feedback, share any notes you have for us or for our presenters. You can tell us how we can improve and just continue to sharpen your learning experience with us. Thank you, again, everyone, for participating in this webinar, Dr. Davis and for the valuable for the research and support in the field, we're really honored to have you here and I encourage you all to take some time to browse our website, learn how NAADAC helps others.

You can stay connected with us on LinkedIn, Facebook and Twitter. Be well.