WEBVTT

00:00:00.000 --> 00:00:04.188 A generous introduction I I thanks

00:00:04.188 --> 00:00:06.520 for the plug about my family as well.

00:00:06.520 --> 00:00:11.480 I couple years ago I was asked to give

00:00:11.480 --> 00:00:14.432 a a talk to new faculty or something

00:00:14.432 --> 00:00:16.280 about how to be successful in research.

00:00:16.280 --> 00:00:17.715 And I I remember telling my family

00:00:17.715 --> 00:00:18.980 over dinner the night before and

00:00:18.980 --> 00:00:20.387 I was asked to give this talking

00:00:20.433 --> 00:00:21.809 about my son looked at me and said

00:00:21.809 --> 00:00:22.880 why are you asked to give this?

00:00:22.880 --> 00:00:23.705 You're not successful.

00:00:23.705 --> 00:00:26.193 So I I think it'd be good for you

00:00:26.193 --> 00:00:27.957 and him to get together and maybe

1

00:00:27.957 --> 00:00:29.874 he can convince you that your

NOTE Confidence: 0.629987163333333

00:00:29.874 --> 00:00:32.266 introduction was way too over the top.

NOTE Confidence: 0.629987163333333

00:00:32.266 --> 00:00:33.838 But that's all right.

NOTE Confidence: 0.629987163333333

00:00:33.840 --> 00:00:34.872 So can you.

NOTE Confidence: 0.629987163333333

00:00:34.872 --> 00:00:37.120 Let's see, are we doing this right?

NOTE Confidence: 0.629987163333333

00:00:37.120 --> 00:00:38.038 Can you see?

NOTE Confidence: 0.74938273

00:00:40.600 --> 00:00:42.354 Is this the right one? All right.

NOTE Confidence: 0.74938273

00:00:42.354 --> 00:00:44.839 Hopefully people can hear me.

NOTE Confidence: 0.74938273

00:00:44.840 --> 00:00:48.873 So as Jerry mentioned, I after I gave

NOTE Confidence: 0.74938273

00:00:48.873 --> 00:00:52.600 my the title of my talk to Trisha,

NOTE Confidence: 0.74938273

00:00:52.600 --> 00:00:54.128 I I shifted a little bit and said

NOTE Confidence: 0.74938273

00:00:54.128 --> 00:00:55.838 I wanted to focus on really the

NOTE Confidence: 0.74938273

00:00:55.838 --> 00:00:57.113 suicide prevention aspects of it.

NOTE Confidence: 0.74938273

00:00:57.120 --> 00:00:59.880 So the title might be a little bit

NOTE Confidence: 0.74938273

00:00:59.880 --> 00:01:01.000 not as accurate as it could be.

NOTE Confidence: 0.74938273

00:01:01.000 --> 00:01:03.792 I I apologize, but we'll talk a lot

NOTE Confidence: 0.74938273

00:01:03.792 --> 00:01:05.240 about interventional psychiatry.

NOTE Confidence: 0.74938273

00:01:05.240 --> 00:01:06.492 Here are my disclosures.

NOTE Confidence: 0.74938273

00:01:06.492 --> 00:01:09.080 I get funding from a variety of sources.

NOTE Confidence: 0.74938273

00:01:09.080 --> 00:01:11.089 I'll note that Yale has an institutional

NOTE Confidence: 0.74938273

00:01:11.089 --> 00:01:12.758 conflict of interest with S ketamine.

NOTE Confidence: 0.74938273

00:01:12.760 --> 00:01:13.720 I'll be speaking about that.

NOTE Confidence: 0.74938273

00:01:13.720 --> 00:01:18.080 That is FDA approved for for two conditions.

NOTE Confidence: 0.74938273

00:01:18.080 --> 00:01:19.004 What that means,

NOTE Confidence: 0.74938273

00:01:19.004 --> 00:01:20.544 the institutional conflict of interest

NOTE Confidence: 0.74938273

00:01:20.544 --> 00:01:22.268 basically is that Yale owns part of

NOTE Confidence: 0.74938273

00:01:22.268 --> 00:01:24.359 the patent for this and I'm employed

NOTE Confidence: 0.74938273

00:01:24.359 --> 00:01:26.509 by Yale that really above that.

NOTE Confidence: 0.74938273

00:01:26.509 --> 00:01:28.327 All of us have that institutional

NOTE Confidence: 0.74938273

00:01:28.327 --> 00:01:29.279 conflict of interest.

NOTE Confidence: 0.74938273

00:01:29.280 --> 00:01:32.045 But I probably talked about esketamine more

NOTE Confidence: 0.74938273

00:01:32.045 --> 00:01:33.556 than than most people in the department.

NOTE Confidence: 0.74938273

00:01:33.560 --> 00:01:35.064 So here's my outline.

NOTE Confidence: 0.74938273

00:01:35.064 --> 00:01:37.673 I'm going to be talking about making

NOTE Confidence: 0.74938273

00:01:37.673 --> 00:01:39.438 progress in suicide prevention research

NOTE Confidence: 0.74938273

00:01:39.438 --> 00:01:41.719 and there's two ways that our program

NOTE Confidence: 0.74938273

00:01:41.719 --> 00:01:43.602 has tried to approach this and one

NOTE Confidence: 0.74938273

00:01:43.658 --> 00:01:45.590 is through large data analytics and

NOTE Confidence: 0.74938273

00:01:45.590 --> 00:01:47.340 the other should clinical trials.

NOTE Confidence: 0.74938273

00:01:47.340 --> 00:01:50.560 And so just to expand this outline,

NOTE Confidence: 0.74938273

00:01:50.560 --> 00:01:52.360 I'll be talking about mainly

NOTE Confidence: 0.74938273

00:01:52.360 --> 00:01:54.759 4 projects that we have either

NOTE Confidence: 0.74938273

00:01:54.759 --> 00:01:57.184 recently completed or are ongoing

NOTE Confidence: 0.74938273

00:01:57.184 --> 00:02:00.600 and why are we focusing on this.

NOTE Confidence: 0.74938273

00:02:00.600 --> 00:02:02.640 Many may know but but some.

NOTE Confidence: 0.74938273

00:02:02.640 --> 00:02:06.448 This may be somewhat of a of new

NOTE Confidence: 0.74938273

00:02:06.448 --> 00:02:09.200 information but this is a little

NOTE Confidence: 0.74938273

00:02:09.200 --> 00:02:11.524 bit dated but since 2000 really

NOTE Confidence: 0.74938273

00:02:11.524 --> 00:02:14.880 there has been a surge in in suicide

NOTE Confidence: 0.74938273

00:02:14.880 --> 00:02:17.195 deaths in the United States.

NOTE Confidence: 0.74938273

00:02:17.200 --> 00:02:19.512 This this stops in 2016 but if it

NOTE Confidence: 0.74938273

00:02:19.512 --> 00:02:22.307 if it extends you would see that it

NOTE Confidence: 0.74938273

00:02:22.307 --> 00:02:25.175 continues to go up and this is the

NOTE Confidence: 0.74938273

00:02:25.175 --> 00:02:27.165 overall number of deaths at this

NOTE Confidence: 0.74938273

00:02:27.165 --> 00:02:29.160 point it's around it's close to

NOTE Confidence: 0.74938273

00:02:29.160 --> 00:02:31.560 50,000 deaths per year by suicide

NOTE Confidence: 0.74938273

00:02:31.560 --> 00:02:34.088 which is just a terrible terrible

NOTE Confidence: 0.74938273

00:02:34.088 --> 00:02:36.944 thing and the rates are going up

NOTE Confidence: 0.74938273

00:02:36.944 --> 00:02:39.131 as well population adjusted rates.

NOTE Confidence: 0.74938273

00:02:39.131 --> 00:02:43.304 Males die by suicide at A at a greater

NOTE Confidence: 0.74938273

00:02:43.304 --> 00:02:46.012 rate than than females and a lot of

NOTE Confidence: 0.74938273

00:02:46.012 --> 00:02:48.638 you know this some of the major risk factors.

NOTE Confidence: 0.74938273

00:02:48.640 --> 00:02:51.383 This is not an exhaustive list but

NOTE Confidence: 0.74938273

00:02:51.383 --> 00:02:54.110 one of the one of the key risk factors

NOTE Confidence: 0.74938273

00:02:54.191 --> 00:02:55.938 that in the field we often allude

NOTE Confidence: 0.74938273

00:02:55.938 --> 00:02:58.000 to is that prior non fatal attempts.

NOTE Confidence: 0.74938273

00:02:58.000 --> 00:03:00.190 So if someone has attempted suicide

NOTE Confidence: 0.74938273

00:03:00.190 --> 00:03:03.629 before that is one of the key enduring

NOTE Confidence: 0.74938273

00:03:03.629 --> 00:03:06.072 risk factors for for death by suicide

NOTE Confidence: 0.74938273

00:03:06.072 --> 00:03:08.560 in the future for social support,

NOTE Confidence: 0.74938273

00:03:08.560 --> 00:03:11.920 older age, substance use and mental illness.

NOTE Confidence: 0.74938273

00:03:11.920 --> 00:03:14.256 One of the things that we that I

NOTE Confidence: 0.74938273

00:03:14.256 --> 00:03:17.176 think we may be under value or under

NOTE Confidence: 0.74938273

00:03:17.176 --> 00:03:19.760 appreciate and that could help us as

NOTE Confidence: 0.74938273

00:03:19.760 --> 00:03:22.520 we design studies is this risk factor

NOTE Confidence: 0.74938273

00:03:22.520 --> 00:03:24.280 of recent psychiatric hospitalization.

NOTE Confidence: 0.74938273

00:03:24.280 --> 00:03:26.932 And I'll talk a little bit about that,

NOTE Confidence: 0.74938273

00:03:26.932 --> 00:03:29.354 but just to put this into context,

NOTE Confidence: 0.74938273

00:03:29.360 --> 00:03:31.274 you know there's this is again

NOTE Confidence: 0.74938273

00:03:31.274 --> 00:03:32.920 also not an exhaustive list.

NOTE Confidence: 0.74938273

00:03:32.920 --> 00:03:34.290 Efforts at suicide prevention can

NOTE Confidence: 0.74938273

00:03:34.290 --> 00:03:35.660 focus on many different areas

NOTE Confidence: 0.74938273

00:03:35.710 --> 00:03:36.798 identifying risk at risk,

NOTE Confidence: 0.74938273

00:03:36.800 --> 00:03:38.464 individuals treatment means restrictions

NOTE Confidence: 0.74938273

00:03:38.464 --> 00:03:40.960 which is mostly getting rid of

NOTE Confidence: 0.907256574545455

00:03:41.026 --> 00:03:42.816 guns, but not entirely that.

NOTE Confidence: 0.907256574545455

00:03:42.816 --> 00:03:45.575 I'm going to be focusing on this

NOTE Confidence: 0.907256574545455

00:03:45.575 --> 00:03:47.755 second point here in treatment

NOTE Confidence: 0.907256574545455

00:03:47.760 --> 00:03:50.544 development and and implementation.

NOTE Confidence: 0.907256574545455

00:03:50.544 --> 00:03:54.380 So again these are the the major

NOTE Confidence: 0.907256574545455

00:03:54.380 --> 00:03:56.267 methods we're using to try to

NOTE Confidence: 0.907256574545455

00:03:56.267 --> 00:03:57.857 approach this problem and and

NOTE Confidence: 0.907256574545455

00:03:57.857 --> 00:03:59.800 and make progress in this area.

NOTE Confidence: 0.907256574545455

00:03:59.800 --> 00:04:01.752 So the first thing I want to talk

NOTE Confidence: 0.907256574545455

00:04:01.752 --> 00:04:04.640 about is related to ECT and suicide.

NOTE Confidence: 0.907256574545455

00:04:04.640 --> 00:04:06.120 A lot of people know what ECT is.

NOTE Confidence: 0.907256574545455

00:04:06.120 --> 00:04:08.064 Just as a brief overview for

NOTE Confidence: 0.907256574545455

00:04:08.064 --> 00:04:10.440 those who may be less familiar,

NOTE Confidence: 0.907256574545455

00:04:10.440 --> 00:04:12.876 it's a therapy for a fractory illness,

NOTE Confidence: 0.907256574545455

00:04:12.880 --> 00:04:14.083 most commonly depression.

NOTE Confidence: 0.907256574545455

00:04:14.083 --> 00:04:16.489 It involves passing electrical current to

NOTE Confidence: 0.907256574545455

00:04:16.489 --> 00:04:18.717 stimulate a seizure in a controlled setting,

NOTE Confidence: 0.907256574545455

00:04:18.720 --> 00:04:20.175 and the seizure usually lasts

NOTE Confidence: 0.907256574545455

00:04:20.175 --> 00:04:21.920 less than a minute or two.

NOTE Confidence: 0.907256574545455

00:04:21.920 --> 00:04:23.735 And these days anesthesia medicine

NOTE Confidence: 0.907256574545455

00:04:23.735 --> 00:04:25.550 prevents the vast majority of

NOTE Confidence: 0.907256574545455

00:04:25.611 --> 00:04:27.063 convulsion intensity such that

NOTE Confidence: 0.907256574545455

00:04:27.063 --> 00:04:28.878 the risk of orthopaedic injury

NOTE Confidence: 0.907256574545455

00:04:28.878 --> 00:04:32.056 is essentially 0 and a lot has

NOTE Confidence: 0.907256574545455

00:04:32.056 --> 00:04:34.000 changed since 1938 but it still

NOTE Confidence: 0.907256574545455

00:04:34.000 --> 00:04:36.669 does carry a kind of a a troubled

NOTE Confidence: 0.907256574545455

00:04:36.669 --> 00:04:38.594 history and and public perception.

NOTE Confidence: 0.907256574545455

00:04:38.600 --> 00:04:40.920 So why ECT for suicide.

NOTE Confidence: 0.907256574545455

00:04:40.920 --> 00:04:43.648 When I was a resident I remember being

NOTE Confidence: 0.907256574545455

00:04:43.648 --> 00:04:45.944 taught that there are two treatments

NOTE Confidence: 0.907256574545455

00:04:45.944 --> 00:04:48.116 that have consistently been shown at

NOTE Confidence: 0.907256574545455

00:04:48.116 --> 00:04:49.861 least two pharmacologic treatments that

NOTE Confidence: 0.907256574545455

00:04:49.861 --> 00:04:52.010 have consistently been shown to reduce

NOTE Confidence: 0.907256574545455

00:04:52.010 --> 00:04:53.755 suicide that's lithium and clozapine.

NOTE Confidence: 0.907256574545455

00:04:53.760 --> 00:04:56.920 And so I I remember doing some some

NOTE Confidence: 0.907256574545455

00:04:56.920 --> 00:04:59.120 research with this we Michael Block's

NOTE Confidence: 0.907256574545455

00:04:59.120 --> 00:05:02.160 group and and our group and and some

NOTE Confidence: 0.907256574545455

00:05:02.241 --> 00:05:04.780 others published a meta analysis looking

NOTE Confidence: 0.907256574545455

00:05:04.780 --> 00:05:07.100 at aside from antidepressants what's

NOTE Confidence: 0.907256574545455

00:05:07.100 --> 00:05:09.000 the relationship between pharmacologic

NOTE Confidence: 0.907256574545455

00:05:09.000 --> 00:05:11.592 and and somatic approaches on suicide

NOTE Confidence: 0.907256574545455

00:05:11.592 --> 00:05:14.774 and and ECT was kind of on the

NOTE Confidence: 0.907256574545455

00:05:14.774 --> 00:05:16.970 bubble the arbitrary P value point

NOTE Confidence: 0.907256574545455

00:05:16.970 --> 00:05:20.156 O five was not quite achieved but

NOTE Confidence: 0.907256574545455

00:05:20.156 --> 00:05:24.608 you see here the composite the green

NOTE Confidence: 0.907256574545455

00:05:24.608 --> 00:05:26.714 diamond showing potentially signal

NOTE Confidence: 0.907256574545455

00:05:26.714 --> 00:05:29.633 that the EC TS associated with lower

NOTE Confidence: 0.907256574545455

00:05:29.640 --> 00:05:31.878 lower suicide risk in in patients.

NOTE Confidence: 0.907256574545455

00:05:31.880 --> 00:05:33.960 But a lot of these studies are older

NOTE Confidence: 0.907256574545455

00:05:33.960 --> 00:05:37.341 they have some limitations in terms of

NOTE Confidence: 0.907256574545455

00:05:37.341 --> 00:05:42.000 the methodologies they're smaller and so.

NOTE Confidence: 0.907256574545455

00:05:42.000 --> 00:05:44.646 So I I was interested in trying to do

NOTE Confidence: 0.907256574545455

00:05:44.646 --> 00:05:47.193 a a more methodologically sophisticated

NOTE Confidence: 0.907256574545455

00:05:47.193 --> 00:05:50.932 modern study looking at ECT and suicide.

NOTE Confidence: 0.907256574545455

00:05:50.932 --> 00:05:52.956 So this was a,

NOTE Confidence: 0.907256574545455

00:05:52.960 --> 00:05:55.066 this was actually like first federal

NOTE Confidence: 0.907256574545455

00:05:55.066 --> 00:05:59.978 award is an R21 and it it allowed us to

NOTE Confidence: 0.907256574545455

00:05:59.978 --> 00:06:03.159 to acquire data from Medicare claims.

NOTE Confidence: 0.907256574545455

00:06:03.160 --> 00:06:07.360 We we focused on older Medicare patients.

NOTE Confidence: 0.907256574545455

00:06:07.360 --> 00:06:09.488 There's two ways you can get Medicare in

NOTE Confidence: 0.907256574545455

00:06:09.488 --> 00:06:11.958 in the US One is if you're 65 and older,

NOTE Confidence: 0.907256574545455

00:06:11.960 --> 00:06:15.120 the other is if you have a disability

NOTE Confidence: 0.907256574545455

00:06:15.120 --> 00:06:18.928 and any any way a patient touches

NOTE Confidence: 0.907256574545455

00:06:18.928 --> 00:06:20.560 the healthcare system,

NOTE Confidence: 0.907256574545455

00:06:20.560 --> 00:06:22.320 this we would be able to see that

NOTE Confidence: 0.907256574545455

00:06:22.320 --> 00:06:24.158 in this Medicare claims database.

NOTE Confidence: 0.907256574545455

00:06:24.160 --> 00:06:24.913 And we are,

NOTE Confidence: 0.907256574545455

00:06:24.913 --> 00:06:26.670 we're fortunate to be able to link

NOTE Confidence: 0.907256574545455

00:06:26.727 --> 00:06:28.827 this at the patient level to what's

NOTE Confidence: 0.907256574545455

00:06:28.827 --> 00:06:30.439 called the National Death Index,

NOTE Confidence: 0.907256574545455

00:06:30.440 --> 00:06:32.760 which is the most authoritative

NOTE Confidence: 0.907256574545455

00:06:32.760 --> 00:06:35.399 database of death in the United States.

NOTE Confidence: 0.907256574545455

00:06:35.400 --> 00:06:38.382 So we were designing an observational

NOTE Confidence: 0.907256574545455

00:06:38.382 --> 00:06:40.956 study and this is basically the P,

NOTE Confidence: 0.907256574545455

00:06:40.960 --> 00:06:41.315 the,

NOTE Confidence: 0.907256574545455

00:06:41.315 --> 00:06:41.670 the,

NOTE Confidence: 0.907256574545455

00:06:41.670 --> 00:06:43.800 the cohort that we're focusing on

NOTE Confidence: 0.907256574545455

00:06:43.800 --> 00:06:44.706 65 and older,

NOTE Confidence: 0.907256574545455

00:06:44.706 --> 00:06:46.820 we wanted them to have at least

NOTE Confidence: 0.907256574545455

00:06:46.890 --> 00:06:48.338 a history of hospitalization

NOTE Confidence: 0.907256574545455

00:06:48.338 --> 00:06:50.920 in the last year at least once.

NOTE Confidence: 0.907256574545455

00:06:50.920 --> 00:06:53.314 And of course, if they receive ECT,

NOTE Confidence: 0.907256574545455

00:06:53.320 --> 00:06:54.520 they they would be,

NOTE Confidence: 0.907256574545455

00:06:54.520 --> 00:06:56.320 if they're in the ECT group,

NOTE Confidence: 0.908328528

00:06:56.320 --> 00:06:58.560 they they need to receive

NOTE Confidence: 0.908328528

00:06:58.560 --> 00:07:00.800 at least one ECT treatment.

NOTE Confidence: 0.908328528

00:07:00.800 --> 00:07:02.125 Let me talk just briefly

NOTE Confidence: 0.908328528

00:07:02.125 --> 00:07:02.920 about observational studies.

NOTE Confidence: 0.908328528

00:07:02.920 --> 00:07:05.594 So there's this concept of index date,

NOTE Confidence: 0.908328528

00:07:05.600 --> 00:07:07.376 which is the period at AT AT which

NOTE Confidence: 0.908328528

00:07:07.376 --> 00:07:09.040 you start to measure the outcome.

NOTE Confidence: 0.908328528

00:07:09.040 --> 00:07:12.416 And that's a really critical concept to

NOTE Confidence: 0.908328528

00:07:12.416 --> 00:07:16.160 reduce bias in observational studies.

NOTE Confidence: 0.908328528

00:07:16.160 --> 00:07:17.276 And if you're comparing two groups,

NOTE Confidence: 0.908328528

00:07:17.280 --> 00:07:19.683 as you often are an observational analysis,

NOTE Confidence: 0.908328528

00:07:19.683 --> 00:07:21.944 you want the index state to represent

NOTE Confidence: 0.908328528

00:07:21.944 --> 00:07:23.399 a comparable point in time.

NOTE Confidence: 0.908328528

00:07:23.400 --> 00:07:24.725 So something significant is going

NOTE Confidence: 0.908328528

00:07:24.725 --> 00:07:26.920 on in Group one at the index state.

NOTE Confidence: 0.908328528

00:07:26.920 --> 00:07:28.172 You want something comparably

NOTE Confidence: 0.908328528

00:07:28.172 --> 00:07:30.200 significant to be happening in Group 2.

NOTE Confidence: 0.908328528

00:07:30.200 --> 00:07:34.744 So for this reason we chose the psychiatric

NOTE Confidence: 0.908328528

00:07:34.744 --> 00:07:36.520 hospitalization as the as the index state,

NOTE Confidence: 0.908328528

00:07:36.520 --> 00:07:38.780 More specifically the discharge from

NOTE Confidence: 0.908328528

00:07:38.780 --> 00:07:40.136 psychiatric hospitalization because

NOTE Confidence: 0.908328528

00:07:40.136 --> 00:07:42.000 when someone gets hospitalized

NOTE Confidence: 0.908328528

00:07:42.000 --> 00:07:43.408 obviously something things are

NOTE Confidence: 0.908328528

00:07:43.408 --> 00:07:45.520 not going well in their life,

NOTE Confidence: 0.908328528

00:07:45.520 --> 00:07:48.040 they're having a a crisis period

NOTE Confidence: 0.908328528

00:07:48.040 --> 00:07:49.720 and they need intervention.

NOTE Confidence: 0.908328528

00:07:49.720 --> 00:07:52.880 So this made sense as as the Enoch

NOTE Confidence: 0.908328528

00:07:52.880 --> 00:07:56.115 state and what we did here is in

NOTE Confidence: 0.908328528

00:07:56.115 --> 00:07:57.798 the again we have these two groups,

NOTE Confidence: 0.908328528

00:07:57.800 --> 00:08:00.376 the ECT group and the the non

NOTE Confidence: 0.908328528

00:08:00.376 --> 00:08:02.800 ECT group and we exact matched on

NOTE Confidence: 0.908328528

00:08:02.800 --> 00:08:04.806 basically as many variables as we

NOTE Confidence: 0.908328528

00:08:04.806 --> 00:08:06.626 could that had as much relevance

NOTE Confidence: 0.908328528

00:08:06.626 --> 00:08:10.160 as as we judged as possible on on

NOTE Confidence: 0.908328528

00:08:10.160 --> 00:08:12.173 suicide outcomes and we adjusted

NOTE Confidence: 0.908328528

00:08:12.173 --> 00:08:14.039 for for the variables we couldn't.

NOTE Confidence: 0.908328528

00:08:14.040 --> 00:08:18.036 We made adjustments through other methods.

NOTE Confidence: 0.908328528

00:08:18.040 --> 00:08:20.840 So you see here we get we have large groups,

NOTE Confidence: 0.908328528

00:08:20.840 --> 00:08:22.100 10,000 in ECT Group,

NOTE Confidence: 0.908328528

00:08:22.100 --> 00:08:24.440 A little over 30,000 non ECT group.

NOTE Confidence: 0.908328528

00:08:24.440 --> 00:08:25.980 And we're looking again,

NOTE Confidence: 0.908328528

00:08:25.980 --> 00:08:28.310 our main outcomes are suicide and

NOTE Confidence: 0.908328528

00:08:28.310 --> 00:08:30.680 all 'cause mortality and we look

NOTE Confidence: 0.908328528

00:08:30.680 --> 00:08:32.316 throughout up to a 12 month period

NOTE Confidence: 0.897516524

00:08:34.360 --> 00:08:37.480 and our data suggested at least

NOTE Confidence: 0.897516524

00:08:37.480 --> 00:08:39.560 for all 'cause mortality,

NOTE Confidence: 0.897516524

00:08:39.560 --> 00:08:41.120 ECG was associated with a substantial

NOTE Confidence: 0.897516524

00:08:41.120 --> 00:08:42.640 reduction in all 'cause mortality.

NOTE Confidence: 0.897516524

00:08:42.640 --> 00:08:45.120 This is a hazard ratio of about .6,

NOTE Confidence: 0.897516524

00:08:45.120 --> 00:08:47.120 which indicates a reduction in

NOTE Confidence: 0.897516524

00:08:47.120 --> 00:08:50.144 about 40% risk in all 'cause

NOTE Confidence: 0.897516524

00:08:50.144 --> 00:08:52.160 mortality among older individuals.

NOTE Confidence: 0.897516524

00:08:52.160 --> 00:08:56.009 And one of the things that you you

NOTE Confidence: 0.897516524

00:08:56.009 --> 00:08:57.854 are concerned about with observational

NOTE Confidence: 0.897516524

00:08:57.854 --> 00:08:59.976 data is of course confounding

NOTE Confidence: 0.897516524

00:08:59.976 --> 00:09:02.920 because these this is not randomized.

NOTE Confidence: 0.897516524

00:09:02.920 --> 00:09:05.300 So individual doctors make decisions

NOTE Confidence: 0.897516524

00:09:05.300 --> 00:09:08.122 based on information much of which

NOTE Confidence: 0.897516524

00:09:08.122 --> 00:09:10.318 might not be in the database.

NOTE Confidence: 0.897516524

00:09:10.320 --> 00:09:12.384 So one of the ways we're trying to

NOTE Confidence: 0.897516524

00:09:12.384 --> 00:09:14.597 get at this is by looking at those

NOTE Confidence: 0.897516524

00:09:14.597 --> 00:09:17.073 who had what we defined as a sub

NOTE Confidence: 0.897516524

00:09:17.073 --> 00:09:19.006 therapeutic course of ECT and as

NOTE Confidence: 0.897516524

00:09:19.006 --> 00:09:21.127 you see which we define as less

NOTE Confidence: 0.897516524

00:09:21.127 --> 00:09:22.920 than five ECT treatments.

NOTE Confidence: 0.897516524

00:09:22.920 --> 00:09:25.664 And as you see here those who had

NOTE Confidence: 0.897516524

00:09:25.664 --> 00:09:27.152 a sub therapeutic course at least

NOTE Confidence: 0.897516524

00:09:27.152 --> 00:09:29.146 for the first six months or so

NOTE Confidence: 0.897516524

00:09:29.146 --> 00:09:30.274 their mortality outcomes track.

NOTE Confidence: 0.897516524

00:09:30.280 --> 00:09:33.674 Those who didn't get any ECT suggesting

NOTE Confidence: 0.897516524

00:09:33.674 --> 00:09:35.872 that this is not all confounding that

NOTE Confidence: 0.897516524

00:09:35.872 --> 00:09:38.237 I think there is some confounding here

NOTE Confidence: 0.897516524

00:09:38.240 --> 00:09:41.040 but it it doesn't explain explain away

NOTE Confidence: 0.897516524

00:09:41.040 --> 00:09:43.326 that the whole potential treatment effect.

NOTE Confidence: 0.897516524

00:09:43.326 --> 00:09:46.432 So this is a a pretty big effect

NOTE Confidence: 0.897516524

00:09:46.432 --> 00:09:48.947 especially with with mortality which

NOTE Confidence: 0.897516524

00:09:48.947 --> 00:09:50.257 was encouraging ECT.

NOTE Confidence: 0.897516524

00:09:50.257 --> 00:09:50.851 Excuse me?

NOTE Confidence: 0.897516524

00:09:50.851 --> 00:09:52.039 Suicide is an outcome.

NOTE Confidence: 0.897516524

00:09:52.040 --> 00:09:54.440 It's a little more complicated.

NOTE Confidence: 0.897516524

00:09:54.440 --> 00:09:56.968 These these are the the panels on on

NOTE Confidence: 0.897516524

00:09:56.968 --> 00:09:58.963 suicide deaths and and for the first

NOTE Confidence: 0.897516524

00:09:58.963 --> 00:10:01.441 six months or so you may see a little

NOTE Confidence: 0.897516524

00:10:01.441 --> 00:10:04.240 bit of a separation but that seems

NOTE Confidence: 0.897516524

00:10:04.240 --> 00:10:08.160 to go away after after six months.

NOTE Confidence: 0.897516524

00:10:08.160 --> 00:10:10.771 This is a a different way of

NOTE Confidence: 0.897516524

00:10:10.771 --> 00:10:12.679 showing essentially the same data.

NOTE Confidence: 0.897516524

00:10:12.680 --> 00:10:14.536 So the the top half of the panels

NOTE Confidence: 0.897516524

00:10:14.536 --> 00:10:16.644 look at all 'cause mortality and the

NOTE Confidence: 0.897516524

00:10:16.644 --> 00:10:20.120 bottom half look at suicide, death.

NOTE Confidence: 0.897516524

00:10:20.120 --> 00:10:22.262 And you see the the all 'cause

NOTE Confidence: 0.897516524

00:10:22.262 --> 00:10:24.059 mortality for all times points

NOTE Confidence: 0.897516524

00:10:24.059 --> 00:10:25.675 is associated with lower,

NOTE Confidence: 0.897516524

00:10:25.680 --> 00:10:28.640 lower risk of death in the ECT group.

NOTE Confidence: 0.897516524

00:10:28.640 --> 00:10:29.453 And the suicide,

18

NOTE Confidence: 0.897516524

00:10:29.453 --> 00:10:31.719 at least for the first three months or so,

NOTE Confidence: 0.897516524

00:10:31.720 --> 00:10:33.880 there is an association,

NOTE Confidence: 0.897516524

00:10:33.880 --> 00:10:34.960 significant association,

NOTE Confidence: 0.897516524

00:10:34.960 --> 00:10:37.795 but that tends to wane over time.

NOTE Confidence: 0.897516524

00:10:37.800 --> 00:10:40.616 And so you know,

NOTE Confidence: 0.897516524

00:10:40.616 --> 00:10:41.320 interestingly,

NOTE Confidence: 0.897516524

00:10:41.320 --> 00:10:42.832 we were not the first group to do this.

NOTE Confidence: 0.897516524

00:10:42.840 --> 00:10:44.946 There were actually three or four

NOTE Confidence: 0.897516524

00:10:44.946 --> 00:10:46.666 other groups that pick this,

NOTE Confidence: 0.897516524

00:10:46.666 --> 00:10:49.330 pick this issue up at the same time

NOTE Confidence: 0.897516524

00:10:49.407 --> 00:10:51.797 and published in other databases,

NOTE Confidence: 0.897516524

00:10:51.800 --> 00:10:54.328 essentially a very similar

NOTE Confidence: 0.897516524

00:10:54.328 --> 00:10:56.132 analysis such that we're revising

NOTE Confidence: 0.897516524

00:10:56.132 --> 00:10:57.597 and updating our meta analysis.

NOTE Confidence: 0.897516524

00:10:57.600 --> 00:10:59.847 This is this is not not yet

NOTE Confidence: 0.897516524

19

00:10:59.847 --> 00:11:01.154 published we're preparing this

NOTE Confidence: 0.897516524

00:11:01.154 --> 00:11:05.320 still but you see here a number of

NOTE Confidence: 0.897516524

00:11:05.320 --> 00:11:08.163 studies more recently in 2021-2022,

NOTE Confidence: 0.897516524

00:11:08.163 --> 00:11:09.492 2020 of much,

NOTE Confidence: 0.897516524

00:11:09.492 --> 00:11:12.150 much larger sample sizes and they

NOTE Confidence: 0.897516524

00:11:12.233 --> 00:11:15.035 are converging at least with the

NOTE Confidence: 0.897516524

00:11:15.035 --> 00:11:17.292 mortality outcome that that there

NOTE Confidence: 0.897516524

00:11:17.292 --> 00:11:21.464 is a a a fairly large association of

NOTE Confidence: 0.897516524

00:11:21.464 --> 00:11:25.160 reduction in mortality associated with ECT.

NOTE Confidence: 0.897516524

00:11:25.160 --> 00:11:28.079 So I I think that's pretty cool.

NOTE Confidence: 0.897516524

00:11:28.080 --> 00:11:29.810 The suicide again it's it's

NOTE Confidence: 0.897516524

00:11:29.810 --> 00:11:31.194 a more complicated picture.

NOTE Confidence: 0.897516524

00:11:31.200 --> 00:11:32.778 Not all the studies report outcomes

NOTE Confidence: 0.897516524

00:11:32.778 --> 00:11:34.570 at the at the same time points

NOTE Confidence: 0.897516524

00:11:34.570 --> 00:11:36.650 but as much as they do or we could

NOTE Confidence: 0.897516524

00:11:36.650 --> 00:11:38.197 get a little bit of a sense.

NOTE Confidence: 0.897516524

00:11:38.200 --> 00:11:40.464 There seems to be at least in these

NOTE Confidence: 0.897516524

00:11:40.464 --> 00:11:42.154 first few months potentially in

NOTE Confidence: 0.897516524

00:11:42.154 --> 00:11:44.513 association with a reduction in suicide risk,

NOTE Confidence: 0.892150197333333

00:11:44.520 --> 00:11:46.059 suicide, death risk.

NOTE Confidence: 0.892150197333333

00:11:46.059 --> 00:11:49.137 But unfortunately that tends to fade

NOTE Confidence: 0.892150197333333

00:11:49.137 --> 00:11:51.982 the further out you get from from

NOTE Confidence: 0.892150197333333

00:11:51.982 --> 00:11:53.760 the beginning of of the study. So

NOTE Confidence: 0.761384544

00:11:55.880 --> 00:11:57.616 you know the the key take away I

NOTE Confidence: 0.761384544

00:11:57.616 --> 00:11:59.681 would say I would I would have I'm

NOTE Confidence: 0.761384544

00:11:59.681 --> 00:12:01.328 pretty convinced that that ECT can

NOTE Confidence: 0.761384544

00:12:01.328 --> 00:12:02.936 reduce all 'cause mortality and this

NOTE Confidence: 0.761384544

00:12:02.936 --> 00:12:05.700 is seen across several different

NOTE Confidence: 0.761384544

00:12:05.700 --> 00:12:08.720 studies including those higher

NOTE Confidence: 0.761384544

00:12:08.720 --> 00:12:11.657 quality more sophisticated more

NOTE Confidence: 0.761384544

00:12:11.657 --> 00:12:14.285 sophisticated methodologies and and

NOTE Confidence: 0.761384544

00:12:14.285 --> 00:12:16.948 modern studies ECT mainly to reduction

NOTE Confidence: 0.761384544

00:12:16.948 --> 00:12:19.418 in suicide in the first six months

NOTE Confidence: 0.761384544

00:12:19.418 --> 00:12:22.078 but effects seem to diminish over time.

NOTE Confidence: 0.761384544

00:12:22.080 --> 00:12:23.838 The unfortunately the data is not

NOTE Confidence: 0.814239425666667

00:12:25.920 --> 00:12:27.656 not grainy enough to from for me

NOTE Confidence: 0.814239425666667

00:12:27.656 --> 00:12:29.860 at least for us at least at this

NOTE Confidence: 0.814239425666667

00:12:29.860 --> 00:12:31.524 point to determine whether that has

NOTE Confidence: 0.814239425666667

00:12:31.524 --> 00:12:33.351 to do with the fact that a lot of

NOTE Confidence: 0.814239425666667

00:12:33.360 --> 00:12:36.045 people don't get maintenance ECT

NOTE Confidence: 0.814239425666667

00:12:36.045 --> 00:12:39.315 and and relapses after ECT without

NOTE Confidence: 0.814239425666667

00:12:39.315 --> 00:12:42.570 maintenance can be can be high in

NOTE Confidence: 0.814239425666667

00:12:42.570 --> 00:12:44.890 terms of trying to figure out how we

NOTE Confidence: 0.814239425666667

00:12:44.890 --> 00:12:47.476 can make this therapy more available.

NOTE Confidence: 0.814239425666667

00:12:47.480 --> 00:12:49.280 Because ECT is only available in

NOTE Confidence: 0.814239425666667

00:12:49.280 --> 00:12:50.996 about 10% of psychiatric hospitals,

NOTE Confidence: 0.814239425666667

00:12:50.996 --> 00:12:54.558 we we did try to do a a naturally

NOTE Confidence: 0.814239425666667

00:12:54.558 --> 00:12:57.174 national survey and we we were

NOTE Confidence: 0.814239425666667

00:12:57.174 --> 00:12:59.408 fortunate to get about about 1/4

NOTE Confidence: 0.814239425666667

00:12:59.408 --> 00:13:01.680 to 1/3 of all those who do ECT.

NOTE Confidence: 0.814239425666667

00:13:01.680 --> 00:13:03.984 There's about 800 docs in the US who

NOTE Confidence: 0.814239425666667

00:13:03.984 --> 00:13:06.436 do ECT to tell us what they think.

NOTE Confidence: 0.814239425666667

00:13:06.440 --> 00:13:09.062 They're the most prominent barriers to

NOTE Confidence: 0.814239425666667

00:13:09.062 --> 00:13:11.204 either expanding an existing service

NOTE Confidence: 0.814239425666667

00:13:11.204 --> 00:13:13.812 or starting a new service And here you

NOTE Confidence: 0.814239425666667

00:13:13.812 --> 00:13:16.182 see the three most at least reported

NOTE Confidence: 0.814239425666667

00:13:16.182 --> 00:13:18.306 problems and and that's lack of

NOTE Confidence: 0.814239425666667

00:13:18.306 --> 00:13:20.677 physical space stigma and transportation.

NOTE Confidence: 0.814239425666667

00:13:20.680 --> 00:13:22.944 When you ask what is a barrier to

NOTE Confidence: 0.814239425666667

00:13:22.944 --> 00:13:24.824 expanding an existing service you

NOTE Confidence: 0.814239425666667

00:13:24.824 --> 00:13:26.936 get lack of space is #3 and then

NOTE Confidence: 0.814239425666667

00:13:26.936 --> 00:13:29.104 lack of well trained colleagues or

NOTE Confidence: 0.814239425666667

00:13:29.104 --> 00:13:30.986 a champion And if I were to you

NOTE Confidence: 0.814239425666667

00:13:30.986 --> 00:13:33.248 know if I had a lot of power and

NOTE Confidence: 0.814239425666667

00:13:33.248 --> 00:13:34.683 decision making authority what I

NOTE Confidence: 0.814239425666667

00:13:34.744 --> 00:13:36.515 would say are the two things that

NOTE Confidence: 0.814239425666667

00:13:36.515 --> 00:13:39.220 can most be done to make ECT more

NOTE Confidence: 0.814239425666667

00:13:39.220 --> 00:13:41.160 readily available because it's it's

NOTE Confidence: 0.814239425666667

00:13:41.229 --> 00:13:43.881 it's not readily available it's not

NOTE Confidence: 0.814239425666667

00:13:43.881 --> 00:13:46.200 uniformly available it's very patchy.

NOTE Confidence: 0.814239425666667

00:13:46.200 --> 00:13:49.420 One would be to adjust the A/C,

NOTE Confidence: 0.814239425666667

00:13:49.420 --> 00:13:53.120 GME requirement for psychiatric residencies.

NOTE Confidence: 0.814239425666667

00:13:53.120 --> 00:13:56.515 Right now the the requirement is essentially

NOTE Confidence: 0.814239425666667

00:13:56.515 --> 00:13:58.476 to to just have exposure to ECT.

NOTE Confidence: 0.814239425666667

00:13:58.480 --> 00:14:02.080 It can be even be just in a lecture

NOTE Confidence: 0.814239425666667

00:14:02.080 --> 00:14:04.800 and you know if you think well in

NOTE Confidence: 0.814239425666667

00:14:04.800 --> 00:14:07.341 cardiology if all they had to do was

NOTE Confidence: 0.814239425666667

00:14:07.341 --> 00:14:08.972 to learn about cardiac catheterization

NOTE Confidence: 0.814239425666667

00:14:08.972 --> 00:14:11.534 which is one of the most effective

NOTE Confidence: 0.814239425666667

00:14:11.534 --> 00:14:12.812 procedures that probably wouldn't

NOTE Confidence: 0.814239425666667

00:14:12.812 --> 00:14:14.237 make a lot of sense.

NOTE Confidence: 0.814239425666667

00:14:14.240 --> 00:14:16.526 But this is this is how it is in

NOTE Confidence: 0.814239425666667

00:14:16.526 --> 00:14:18.480 psychiatry And if you know this was

NOTE Confidence: 0.814239425666667

00:14:18.480 --> 00:14:20.400 bolstered by the the finding that

NOTE Confidence: 0.814239425666667

00:14:20.400 --> 00:14:22.493 about a third of our ECT respondents

NOTE Confidence: 0.814239425666667

00:14:22.493 --> 00:14:24.918 in in in that survey had graduated

NOTE Confidence: 0.814239425666667

00:14:24.918 --> 00:14:27.564 from just one of 12 residency programs

NOTE Confidence: 0.814239425666667

00:14:27.564 --> 00:14:30.238 who were who had robust ECT services.

NOTE Confidence: 0.814239425666667

00:14:30.240 --> 00:14:32.336 And just to give you a sense there's

NOTE Confidence: 0.814239425666667

00:14:32.336 --> 00:14:34.730 about 350 today there's about 350

NOTE Confidence: 0.814239425666667

00:14:34.730 --> 00:14:36.724 psych residency programs and twelve

NOTE Confidence: 0.814239425666667

00:14:36.724 --> 00:14:38.996 of those led to at least of the

NOTE Confidence: 0.814239425666667

00:14:38.996 --> 00:14:41.119 people who responded to our survey,

NOTE Confidence: 0.814239425666667

00:14:41.120 --> 00:14:43.360 about a third of our survey respondents.

NOTE Confidence: 0.814239425666667

00:14:43.360 --> 00:14:44.697 The others to allow ECT to be

NOTE Confidence: 0.814239425666667

00:14:44.697 --> 00:14:46.160 done in non hospital settings.

NOTE Confidence: 0.814239425666667

00:14:46.160 --> 00:14:47.600 This is a federal government issue.

NOTE Confidence: 0.814239425666667

00:14:47.600 --> 00:14:50.117 This is with CMS that typically

NOTE Confidence: 0.814239425666667

00:14:50.117 --> 00:14:52.499 does not reimburse ECT if it's

NOTE Confidence: 0.814239425666667

00:14:52.499 --> 00:14:55.160 not in a hospital setting.

NOTE Confidence: 0.814239425666667

00:14:55.160 --> 00:14:58.548 And this you know we're competing against

NOTE Confidence: 0.814239425666667

00:14:58.548 --> 00:15:00.433 other procedures like gastroenterology,

NOTE Confidence: 0.814239425666667

00:15:00.433 --> 00:15:02.598 cardiology that sort of thing.

NOTE Confidence: 0.814239425666667

00:15:02.600 --> 00:15:04.320 And unfortunately because of

NOTE Confidence: 0.814239425666667

00:15:04.320 --> 00:15:06.040 the way reimbursement works,

NOTE Confidence: 0.814239425666667

00:15:06.040 --> 00:15:08.326 we're often you know the 1st to kind of

NOTE Confidence: 0.814239425666667

00:15:08.326 --> 00:15:10.738 be pushed out or or not have the space

NOTE Confidence: 0.814239425666667

00:15:10.738 --> 00:15:12.959 that we need to to do these things.

NOTE Confidence: 0.814239425666667

00:15:12.960 --> 00:15:15.264 And if you could make it so that ECT

NOTE Confidence: 0.814239425666667

00:15:15.264 --> 00:15:17.720 be could be done in in ambulatory

NOTE Confidence: 0.814239425666667

00:15:17.720 --> 00:15:19.140 surgical centers and so

NOTE Confidence: 0.819804530952381

00:15:19.206 --> 00:15:22.096 forth, this would make it a little

NOTE Confidence: 0.819804530952381

00:15:22.096 --> 00:15:25.550 more a little easier to to have the

NOTE Confidence: 0.819804530952381

00:15:25.550 --> 00:15:28.100 space that that this service needs

NOTE Confidence: 0.819804530952381

00:15:28.187 --> 00:15:31.519 to to to to be able to to to operate.

NOTE Confidence: 0.819804530952381

00:15:31.520 --> 00:15:33.056 So that's that's all I'm going

NOTE Confidence: 0.819804530952381

00:15:33.056 --> 00:15:34.080 to say about ECT.

NOTE Confidence: 0.819804530952381

00:15:34.080 --> 00:15:35.795 You know hopefully these these

NOTE Confidence: 0.819804530952381

00:15:35.795 --> 00:15:38.230 findings can be of interest in and

NOTE Confidence: 0.819804530952381

00:15:38.230 --> 00:15:39.875 help this become more available.

NOTE Confidence: 0.819804530952381

00:15:39.880 --> 00:15:41.424 I want to shift a little bit and

NOTE Confidence: 0.819804530952381

00:15:41.424 --> 00:15:42.543 talk about intensive outpatient

NOTE Confidence: 0.819804530952381

00:15:42.543 --> 00:15:43.919 programs and and suicide.

NOTE Confidence: 0.819804530952381

00:15:43.920 --> 00:15:47.106 This is a A the project that we are

NOTE Confidence: 0.819804530952381

00:15:47.106 --> 00:15:50.215 just getting underway now and this

NOTE Confidence: 0.819804530952381

00:15:50.215 --> 00:15:53.425 this idea in part was compelled

NOTE Confidence: 0.819804530952381

00:15:53.425 --> 00:15:56.324 by this finding and this was put

NOTE Confidence: 0.819804530952381

00:15:56.324 --> 00:15:59.948 well by some rabble rousing second

NOTE Confidence: 0.819804530952381

00:15:59.948 --> 00:16:02.939 year residents from this is almost

NOTE Confidence: 0.819804530952381

00:16:02.939 --> 00:16:05.312 30 years ago but they they were

NOTE Confidence: 0.819804530952381

00:16:05.312 --> 00:16:07.280 rotating in the child service.

NOTE Confidence: 0.819804530952381

00:16:07.280 --> 00:16:09.345 This was during a time when the

NOTE Confidence: 0.819804530952381

00:16:09.345 --> 00:16:11.502 average length of stay in the

NOTE Confidence: 0.819804530952381

00:16:11.502 --> 00:16:13.118 hospitals was reducing drastically.

NOTE Confidence: 0.819804530952381

00:16:13.120 --> 00:16:14.312 And a lot of the staff at this

NOTE Confidence: 0.819804530952381

00:16:14.312 --> 00:16:14.880 time were upset.

NOTE Confidence: 0.819804530952381

00:16:14.880 --> 00:16:16.320 And the residents asked, well,

NOTE Confidence: 0.819804530952381

00:16:16.320 --> 00:16:18.136 you know, what is the evidence that a

NOTE Confidence: 0.819804530952381

00:16:18.136 --> 00:16:19.837 longer length of stay is more beneficial?

NOTE Confidence: 0.819804530952381

00:16:19.840 --> 00:16:21.450 And they were told, well, it's actually,

NOTE Confidence: 0.819804530952381

00:16:21.450 --> 00:16:23.040 there's not a lot of evidence,

NOTE Confidence: 0.819804530952381

00:16:23.040 --> 00:16:24.880 but we think it's helpful.

NOTE Confidence: 0.819804530952381

00:16:24.880 --> 00:16:27.401 And you know this,

NOTE Confidence: 0.819804530952381

00:16:27.401 --> 00:16:29.243 this was actually Jerry was among

NOTE Confidence: 0.819804530952381

00:16:29.243 --> 00:16:31.260 these these residents who who voiced

NOTE Confidence: 0.819804530952381

00:16:31.260 --> 00:16:33.480 this problem and concern of you know,

NOTE Confidence: 0.819804530952381

00:16:33.480 --> 00:16:35.530 kind of lack of evidence of a lot of the

NOTE Confidence: 0.819804530952381

00:16:35.586 --> 00:16:37.634 things we do in psychiatry and you know,

NOTE Confidence: 0.819804530952381

00:16:37.640 --> 00:16:38.966 intensive outpatient programs.

NOTE Confidence: 0.819804530952381

00:16:38.966 --> 00:16:41.618 It really started to proliferate around

NOTE Confidence: 0.819804530952381

00:16:41.618 --> 00:16:44.109 this time in the mid 90s when managed

NOTE Confidence: 0.819804530952381

00:16:44.109 --> 00:16:46.189 care started to become more common

NOTE Confidence: 0.819804530952381

00:16:46.189 --> 00:16:48.134 and the length of hospitalization

NOTE Confidence: 0.819804530952381

00:16:48.134 --> 00:16:49.303 dropped quite significantly.

NOTE Confidence: 0.819804530952381

00:16:49.303 --> 00:16:50.452 And it's these,

NOTE Confidence: 0.819804530952381

00:16:50.452 --> 00:16:52.750 these were instituted as a way

NOTE Confidence: 0.819804530952381

00:16:52.813 --> 00:16:54.691 to manage high risk patients who

NOTE Confidence: 0.819804530952381

00:16:54.691 --> 00:16:57.463 no longer met the kind of the new

NOTE Confidence: 0.819804530952381

00:16:57.463 --> 00:16:59.273 criteria for hospitalization and IO.

NOTE Confidence: 0.819804530952381

00:16:59.280 --> 00:17:02.502 PS were of course much less

NOTE Confidence: 0.819804530952381

00:17:02.502 --> 00:17:04.113 expensive than hospitalization.

NOTE Confidence: 0.819804530952381

00:17:04.120 --> 00:17:05.432 But again this wasn't,

NOTE Confidence: 0.819804530952381

00:17:05.432 --> 00:17:07.400 this wasn't something where people said,

NOTE Confidence: 0.819804530952381

00:17:07.400 --> 00:17:08.880 OK, we've designed this treatment,

NOTE Confidence: 0.819804530952381

00:17:08.880 --> 00:17:10.357 it works really well. We've tested it.

NOTE Confidence: 0.819804530952381

00:17:10.360 --> 00:17:11.708 So let's implement it.

NOTE Confidence: 0.819804530952381

00:17:11.708 --> 00:17:14.232 It was more you know the financial

NOTE Confidence: 0.819804530952381

00:17:14.232 --> 00:17:16.960 expedience of of the way healthcare works.

NOTE Confidence: 0.819804530952381

00:17:16.960 --> 00:17:19.977 What is IOP IT it generally consists

NOTE Confidence: 0.819804530952381

00:17:19.977 --> 00:17:22.478 of somewhere between 12 and 20 hours

NOTE Confidence: 0.819804530952381

00:17:22.480 --> 00:17:25.276 per week of of patient interaction,

NOTE Confidence: 0.819804530952381

00:17:25.280 --> 00:17:27.709 most in the form of group therapy

NOTE Confidence: 0.819804530952381

00:17:27.709 --> 00:17:29.688 generally time limited to maybe two

NOTE Confidence: 0.819804530952381

00:17:29.688 --> 00:17:31.716 to three months and it is often

NOTE Confidence: 0.819804530952381

00:17:31.716 --> 00:17:33.450 used for high risk patients leaving

NOTE Confidence: 0.819804530952381

00:17:33.512 --> 00:17:35.768 the hospital or as an alternative

NOTE Confidence: 0.819804530952381

00:17:35.768 --> 00:17:36.520 to hospitalization.

NOTE Confidence: 0.819804530952381

00:17:36.520 --> 00:17:38.662 One thing I should note about it

NOTE Confidence: 0.819804530952381

00:17:38.662 --> 00:17:40.450 however is that it's not uniformly

NOTE Confidence: 0.819804530952381

00:17:40.450 --> 00:17:40.740 distributed.

NOTE Confidence: 0.819804530952381

00:17:40.740 --> 00:17:43.320 I don't think it's quite as bad as ECT.

NOTE Confidence: 0.819804530952381

00:17:43.320 --> 00:17:45.960 We're only 10% of psych hospitals

NOTE Confidence: 0.819804530952381

00:17:45.960 --> 00:17:46.840 provide ECT.

NOTE Confidence: 0.819804530952381

00:17:46.840 --> 00:17:50.152 But I would say roughly half of the country,

NOTE Confidence: 0.819804530952381

00:17:50.160 --> 00:17:51.690 you know in some states these

NOTE Confidence: 0.819804530952381

00:17:51.690 --> 00:17:53.040 these things really don't exist.

NOTE Confidence: 0.819804530952381

00:17:53.040 --> 00:17:57.248 Whereas in in New Haven as a rough estimate,

NOTE Confidence: 0.819804530952381

00:17:57.248 --> 00:18:00.440 I would say 30 to 50% of patients that

NOTE Confidence: 0.819804530952381

00:18:00.440 --> 00:18:03.560 leave YPH leave the inpatient units

NOTE Confidence: 0.819804530952381

00:18:03.560 --> 00:18:05.730 on Y pH intensive outpatient programs

NOTE Confidence: 0.819804530952381

00:18:05.730 --> 00:18:08.840 are a key part of their discharge plan.

NOTE Confidence: 0.819804530952381

00:18:08.840 --> 00:18:11.480 So again there's this uneven distribution

NOTE Confidence: 0.819804530952381

00:18:11.480 --> 00:18:14.261 of these these programs and these

NOTE Confidence: 0.819804530952381

00:18:14.261 --> 00:18:16.157 services throughout the country.

NOTE Confidence: 0.788822896

00:18:16.160 --> 00:18:20.824 So I we our program, we wanted to study

NOTE Confidence: 0.788822896

00:18:20.824 --> 00:18:23.545 in a sophisticated way what is the

NOTE Confidence: 0.788822896

00:18:23.545 --> 00:18:25.759 evidence for them in terms of suicide

NOTE Confidence: 0.788822896

00:18:25.760 --> 00:18:28.744 risk reduction and we we want to focus

NOTE Confidence: 0.788822896

00:18:28.744 --> 00:18:32.319 on the period following hospitalization.

NOTE Confidence: 0.788822896

00:18:32.320 --> 00:18:34.693 One of the reasons is because as

NOTE Confidence: 0.788822896

00:18:34.693 --> 00:18:36.560 I mentioned earlier in the talk,

NOTE Confidence: 0.788822896

00:18:36.560 --> 00:18:39.218 the period following discharge is one

NOTE Confidence: 0.788822896

00:18:39.218 --> 00:18:41.960 of immensely high risk for suicide.

NOTE Confidence: 0.788822896

00:18:41.960 --> 00:18:44.240 It's most acute in the first three months.

NOTE Confidence: 0.788822896

00:18:44.240 --> 00:18:47.796 It does come down somewhat after that,

NOTE Confidence: 0.788822896

00:18:47.800 --> 00:18:52.117 but you know it's it's just an extraordinary

NOTE Confidence: 0.788822896

00:18:52.117 --> 00:18:54.679 high risk just to give you some numbers.

NOTE Confidence: 0.788822896

00:18:54.680 --> 00:18:57.179 So the usually suicide rates are measured

NOTE Confidence: 0.788822896

00:18:57.179 --> 00:19:00.102 in per 100,000 person years and the base

NOTE Confidence: 0.788822896

00:19:00.102 --> 00:19:02.720 rate for general population is around this.

NOTE Confidence: 0.788822896

00:19:02.720 --> 00:19:03.612 This paper indicates 11.4.

NOTE Confidence: 0.788822896

00:19:03.612 --> 00:19:05.231 It's a little bit higher these days

NOTE Confidence: 0.788822896

00:19:05.231 --> 00:19:06.876 unfortunately because the rate has gone up,

NOTE Confidence: 0.788822896

00:19:06.880 --> 00:19:09.536 but it's it's around 12 to 13 if

NOTE Confidence: 0.788822896

00:19:09.536 --> 00:19:11.553 you look at it someone who comes

NOTE Confidence: 0.788822896

00:19:11.553 --> 00:19:12.877 into the hospital suicidal,

NOTE Confidence: 0.788822896

00:19:12.880 --> 00:19:15.729 their rate of suicide risk in the

NOTE Confidence: 0.788822896

00:19:15.729 --> 00:19:17.360 falling hospitalization is 2000.

NOTE Confidence: 0.788822896

00:19:17.360 --> 00:19:20.538 So 2000 compared to you know 12

NOTE Confidence: 0.788822896

00:19:20.538 --> 00:19:23.940 or 12 or 13 events per 100,000 is

NOTE Confidence: 0.788822896

00:19:23.940 --> 00:19:27.560 it's just a huge increase in risk.

NOTE Confidence: 0.788822896

00:19:27.560 --> 00:19:30.335 So in a similar way to the way

NOTE Confidence: 0.788822896

00:19:30.335 --> 00:19:32.358 we conducted the the ECT survey,

NOTE Confidence: 0.788822896

00:19:32.360 --> 00:19:35.790 excuse me project looking at

NOTE Confidence: 0.788822896

00:19:35.790 --> 00:19:38.080 at risk reduction of suicide,

NOTE Confidence: 0.788822896

00:19:38.080 --> 00:19:40.480 we are looking at intensive outpatient

NOTE Confidence: 0.788822896

00:19:40.547 --> 00:19:43.317 programs or partial hospitalization programs.

NOTE Confidence: 0.788822896

00:19:43.320 --> 00:19:44.370 There's a difference,

NOTE Confidence: 0.788822896

00:19:44.370 --> 00:19:46.648 but it's it's it's subtle compared

NOTE Confidence: 0.788822896

00:19:46.648 --> 00:19:49.288 to non intensive outpatient care

NOTE Confidence: 0.788822896

00:19:49.288 --> 00:19:50.872 following psychiatric hospitalization

NOTE Confidence: 0.788822896

00:19:50.880 --> 00:19:54.920 and we are going to do this in,

NOTE Confidence: 0.788822896

00:19:54.920 --> 00:19:56.920 in the Medicaid population.

NOTE Confidence: 0.788822896

00:19:56.920 --> 00:19:59.445 And again we're just getting

NOTE Confidence: 0.788822896

00:19:59.445 --> 00:20:00.960 this project underway,

NOTE Confidence: 0.788822896

00:20:00.960 --> 00:20:03.795 but hopefully in the next two years or so

NOTE Confidence: 0.788822896

00:20:03.795 --> 00:20:06.399 we'll have some interesting results and

NOTE Confidence: 0.788822896

00:20:06.400 --> 00:20:07.758 you know the strength of this project,

NOTE Confidence: 0.788822896

00:20:07.760 --> 00:20:10.637 what we'll have very large sample sizes

NOTE Confidence: 0.788822896

00:20:10.640 --> 00:20:12.920 estimated about 100,000 per group.

NOTE Confidence: 0.788822896

00:20:12.920 --> 00:20:15.960 Another strength is that this in my opinion,

NOTE Confidence: 0.788822896

00:20:15.960 --> 00:20:17.710 this could be leveraged and

NOTE Confidence: 0.788822896

00:20:17.710 --> 00:20:18.760 implemented relatively easily.

NOTE Confidence: 0.788822896

00:20:18.760 --> 00:20:21.920 If we find that IO PS actually reduce

NOTE Confidence: 0.788822896

00:20:21.920 --> 00:20:25.840 suicide in post hospital discharge period,

NOTE Confidence: 0.788822896

00:20:25.840 --> 00:20:27.772 these exist in about half the country

NOTE Confidence: 0.788822896

00:20:27.772 --> 00:20:29.763 and could we therefore make them exist

NOTE Confidence: 0.788822896

00:20:29.763 --> 00:20:31.920 in the other half of the country?

NOTE Confidence: 0.788822896

00:20:31.920 --> 00:20:33.138 And you know,

NOTE Confidence: 0.788822896

00:20:33.138 --> 00:20:35.574 re make real progress in reducing

NOTE Confidence: 0.788822896

00:20:35.574 --> 00:20:38.064 the suicide rate as is one of

NOTE Confidence: 0.788822896

00:20:38.064 --> 00:20:40.119 the key goals of the NIH.

NOTE Confidence: 0.788822896

00:20:40.120 --> 00:20:42.493 Another strength is that it's focused on

NOTE Confidence: 0.788822896

00:20:42.493 --> 00:20:45.240 in a context of extraordinary high risk

NOTE Confidence: 0.788822896

00:20:45.240 --> 00:20:48.089 as as always the you know observational

NOTE Confidence: 0.788822896

00:20:48.089 --> 00:20:50.959 studies they they do have this weakness.

NOTE Confidence: 0.788822896

00:20:50.960 --> 00:20:52.916 There's confounding we have to really

NOTE Confidence: 0.788822896

00:20:52.920 --> 00:20:54.690 think about critically and then be

NOTE Confidence: 0.788822896

00:20:54.690 --> 00:20:56.814 based on the way claims data works

NOTE Confidence: 0.788822896

00:20:56.814 --> 00:20:58.879 which is the data we'll be using.

NOTE Confidence: 0.788822896

00:20:58.880 --> 00:21:01.838 The details of programs are limited.

NOTE Confidence: 0.788822896

00:21:01.840 --> 00:21:02.575 We will be,

NOTE Confidence: 0.788822896

00:21:02.575 --> 00:21:04.623 we do have a a perspective survey that

NOTE Confidence: 0.788822896

00:21:04.623 --> 00:21:06.839 will conduct as part of this project that

NOTE Confidence: 0.788822896

00:21:06.839 --> 00:21:10.320 will help us mitigate this weakness.

NOTE Confidence: 0.788822896

00:21:10.320 --> 00:21:13.512 So this is a a federally funded project

NOTE Confidence: 0.788822896

00:21:13.512 --> 00:21:15.931 that we're excited to get get off the

NOTE Confidence: 0.788822896

00:21:15.931 --> 00:21:17.954 ground that we're getting off the ground.

NOTE Confidence: 0.788822896

00:21:17.960 --> 00:21:19.440 Gregory is a Co Pi.

NOTE Confidence: 0.788822896

00:21:19.440 --> 00:21:22.915 He's a really extraordinary biostatistician

NOTE Confidence: 0.788822896

00:21:22.915 --> 00:21:25.960 who I've worked with over many years,

NOTE Confidence: 0.788822896

00:21:25.960 --> 00:21:27.128 primarily based at UConn.

NOTE Confidence: 0.788822896

00:21:27.128 --> 00:21:28.880 He has an adjunct appointment here.

NOTE Confidence: 0.788822896

00:21:28.880 --> 00:21:30.230 He's worked with many people

NOTE Confidence: 0.788822896

00:21:30.230 --> 00:21:31.040 in our department.

NOTE Confidence: 0.540221882

00:21:31.040 --> 00:21:33.250 Katie Cleaning Smith who's a a Co

NOTE Confidence: 0.540221882

00:21:33.250 --> 00:21:35.690 eye on this project and is the head

NOTE Confidence: 0.540221882

00:21:35.767 --> 00:21:38.678 of yells out P Services is also a

NOTE Confidence: 0.540221882

00:21:38.680 --> 00:21:41.053 key collaborate in this study and

NOTE Confidence: 0.540221882

00:21:41.053 --> 00:21:43.384 we we have a group of stakeholders

NOTE Confidence: 0.540221882

00:21:43.384 --> 00:21:45.328 who from various organizations who

NOTE Confidence: 0.540221882

00:21:45.328 --> 00:21:48.204 will hopefully be able to help us

NOTE Confidence: 0.540221882

00:21:48.204 --> 00:21:49.830 implement any actionable results

NOTE Confidence: 0.540221882

00:21:49.830 --> 00:21:51.880 that that this study finds.

NOTE Confidence: 0.540221882

00:21:51.880 --> 00:21:55.375 So that concludes my the portion

NOTE Confidence: 0.540221882

00:21:55.375 --> 00:21:57.663 I'm going to talk about large data

NOTE Confidence: 0.540221882

00:21:57.663 --> 00:22:00.102 analytics and and trying to move the

NOTE Confidence: 0.540221882

00:22:00.102 --> 00:22:02.157 needle and suicide prevention research.

NOTE Confidence: 0.540221882

00:22:02.160 --> 00:22:03.960 I am going to shift now a little bit

NOTE Confidence: 0.540221882

00:22:03.960 --> 00:22:06.377 and talk about some of the work that our

NOTE Confidence: 0.540221882

00:22:06.377 --> 00:22:08.433 our program is doing in in clinical trials.

NOTE Confidence: 0.540221882

00:22:08.440 --> 00:22:12.800 And I'm going to start with just some of

NOTE Confidence: 0.540221882

00:22:12.800 --> 00:22:15.880 the the background of this and limitations

NOTE Confidence: 0.540221882

00:22:15.880 --> 00:22:18.715 in in this space that have existed.

NOTE Confidence: 0.540221882

00:22:18.720 --> 00:22:20.360 And the fact is that most clinical trials,

NOTE Confidence: 0.540221882

00:22:20.360 --> 00:22:22.365 mental illness I've systematically excluded

NOTE Confidence: 0.540221882

00:22:22.365 --> 00:22:24.880 those at substantial risk of suicide.

NOTE Confidence: 0.540221882

00:22:24.880 --> 00:22:26.165 There's various reasons for that

NOTE Confidence: 0.540221882

00:22:26.165 --> 00:22:28.180 that I won't get into now but this

NOTE Confidence: 0.540221882

00:22:28.180 --> 00:22:30.340 of course is a big weakness in it

NOTE Confidence: 0.540221882

00:22:30.404 --> 00:22:32.612 and there's a huge limit of of data

NOTE Confidence: 0.540221882

00:22:32.612 --> 00:22:34.745 and how are treatments that we're

NOTE Confidence: 0.540221882

00:22:34.745 --> 00:22:37.040 using on a day-to-day basis affect

NOTE Confidence: 0.540221882

00:22:37.040 --> 00:22:39.040 people at risk of suicide.

NOTE Confidence: 0.540221882

00:22:39.040 --> 00:22:41.212 Fortunately at there is there are

NOTE Confidence: 0.540221882

00:22:41.212 --> 00:22:43.863 efforts that this may be there are

NOTE Confidence: 0.540221882

00:22:43.863 --> 00:22:45.753 indications this may be changing.

NOTE Confidence: 0.540221882

00:22:45.760 --> 00:22:48.756 There's a number of modern studies that

NOTE Confidence: 0.540221882

00:22:48.756 --> 00:22:51.620 are either ongoing or recently completed

NOTE Confidence: 0.540221882

00:22:51.620 --> 00:22:55.432 where trials are are specifically

NOTE Confidence: 0.540221882

00:22:55.432 --> 00:22:58.600 focusing on on those at risk of suicide.

NOTE Confidence: 0.540221882

00:22:58.600 --> 00:23:00.777 One of those studies that we're a

NOTE Confidence: 0.540221882

00:23:00.777 --> 00:23:03.037 part of right now is sponsored by

NOTE Confidence: 0.540221882

00:23:03.040 --> 00:23:06.040 we Therapeutics as a company that

NOTE Confidence: 0.540221882

00:23:06.040 --> 00:23:08.480 has a strong tie to the department.

NOTE Confidence: 0.540221882

00:23:08.480 --> 00:23:09.539 So Steve Bunny,

NOTE Confidence: 0.540221882

00:23:09.539 --> 00:23:11.328 Seth Fierstein and and Patricia

NOTE Confidence: 0.540221882

00:23:11.328 --> 00:23:14.240 Simon are are part of we and we

NOTE Confidence: 0.540221882

00:23:14.323 --> 00:23:17.163 are one one side of a multi site

NOTE Confidence: 0.540221882

00:23:17.163 --> 00:23:20.255 study that that they are running to

NOTE Confidence: 0.540221882

00:23:20.255 --> 00:23:23.256 evaluate a digital therapeutic in in

NOTE Confidence: 0.540221882

00:23:23.256 --> 00:23:25.996 reducing risk of suicide behavior.

NOTE Confidence: 0.540221882

00:23:26.000 --> 00:23:29.600 So this is a a traditional

NOTE Confidence: 0.540221882

00:23:29.600 --> 00:23:31.142 design AA1TO1 ratio,

NOTE Confidence: 0.540221882

00:23:31.142 --> 00:23:33.497 two group randomized trial where

NOTE Confidence: 0.540221882

00:23:33.497 --> 00:23:37.560 patients are randomized to an active

NOTE Confidence: 0.540221882

00:23:37.560 --> 00:23:40.850 group that has the the experimental app

NOTE Confidence: 0.540221882

00:23:40.850 --> 00:23:42.964 plus psychoeducation plus treatment as

NOTE Confidence: 0.540221882

00:23:42.964 --> 00:23:45.019 usual versus just the psychoeducation

NOTE Confidence: 0.540221882

00:23:45.019 --> 00:23:46.797 app plus treatment as usual.

NOTE Confidence: 0.540221882

00:23:46.800 --> 00:23:50.150 And the the primary outcome measure

NOTE Confidence: 0.540221882

00:23:50.150 --> 00:23:52.282 here is group difference in suicide

NOTE Confidence: 0.540221882

00:23:52.282 --> 00:23:54.694 behaviors as measured by the Columbia

NOTE Confidence: 0.540221882

00:23:54.694 --> 00:23:56.564 scale following discharge from a

NOTE Confidence: 0.540221882

00:23:56.564 --> 00:23:58.678 psychiatric facility for up to two years.

NOTE Confidence: 0.540221882

00:23:58.680 --> 00:24:01.704 The app is based on David Rudd's work

NOTE Confidence: 0.540221882

00:24:01.704 --> 00:24:04.888 using CBT to reduce suicide risk and

NOTE Confidence: 0.540221882

00:24:04.888 --> 00:24:07.796 veterans and it's a you know very,

NOTE Confidence: 0.540221882

00:24:07.800 --> 00:24:09.870 very respectable sample size of

NOTE Confidence: 0.540221882

00:24:09.870 --> 00:24:11.940 almost 400 participants that is

NOTE Confidence: 0.540221882

00:24:12.008 --> 00:24:13.518 the goal to to recruit.

NOTE Confidence: 0.540221882

00:24:13.520 --> 00:24:15.250 It's one thing that's interesting

NOTE Confidence: 0.540221882

00:24:15.250 --> 00:24:16.634 is this is transdiagnostic

NOTE Confidence: 0.77429201

00:24:18.840 --> 00:24:20.712 really the the the key inclusion

NOTE Confidence: 0.77429201

00:24:20.712 --> 00:24:22.403 criteria is that that you're

NOTE Confidence: 0.77429201

00:24:22.403 --> 00:24:24.283 admitted to a psychiatric facility

NOTE Confidence: 0.77429201

00:24:24.283 --> 00:24:27.280 because of suicidal ideation.

NOTE Confidence: 0.77429201

00:24:27.280 --> 00:24:28.630 We're going to exclude people who

NOTE Confidence: 0.77429201

00:24:28.630 --> 00:24:30.206 aren't going to be able to meaningfully

NOTE Confidence: 0.77429201

00:24:30.206 --> 00:24:31.945 participate in a in a in an app

NOTE Confidence: 0.77429201

00:24:31.945 --> 00:24:33.355 program or or something like that.

NOTE Confidence: 0.77429201

00:24:33.360 --> 00:24:35.040 But otherwise it's it's a very broad

NOTE Confidence: 0.77429201

00:24:35.040 --> 00:24:37.040 trial and it and it's transdiagnostic.

NOTE Confidence: 0.77429201

00:24:37.040 --> 00:24:39.998 So this is a specific trial that

NOTE Confidence: 0.77429201

00:24:39.998 --> 00:24:42.224 we're we're one of of several sites

NOTE Confidence: 0.77429201

00:24:42.224 --> 00:24:43.946 that are participating in this

NOTE Confidence: 0.77429201

00:24:43.946 --> 00:24:46.639 and I'm just going to use this to

NOTE Confidence: 0.77429201

00:24:46.639 --> 00:24:48.786 to do a slight tangent on why I'm

NOTE Confidence: 0.77429201

00:24:48.786 --> 00:24:49.958 excited about digital therapeutics.

NOTE Confidence: 0.77429201

00:24:49.960 --> 00:24:52.471 I know that the speaker next week probably

NOTE Confidence: 0.77429201

00:24:52.471 --> 00:24:55.279 has a lot more to say about this.

NOTE Confidence: 0.77429201

00:24:55.280 --> 00:24:57.340 Digital Therapeutics I think have

NOTE Confidence: 0.77429201

00:24:57.340 --> 00:24:59.944 a the potential to really rebalance

NOTE Confidence: 0.77429201

00:24:59.944 --> 00:25:02.300 the funding portfolio for for

NOTE Confidence: 0.77429201

00:25:02.300 --> 00:25:03.380 clinical trials and I'll share a

NOTE Confidence: 0.77429201

00:25:03.380 --> 00:25:04.199 little bit what I mean.

NOTE Confidence: 0.77429201

00:25:04.200 --> 00:25:05.196 So Para Therapeutics,

NOTE Confidence: 0.77429201

00:25:05.196 --> 00:25:07.520 I don't have any ties with this

NOTE Confidence: 0.77429201

00:25:07.588 --> 00:25:09.604 company by the way they they were

NOTE Confidence: 0.77429201

00:25:09.604 --> 00:25:12.026 the first to really be able to push

NOTE Confidence: 0.77429201

00:25:12.026 --> 00:25:15.878 through the FDA a an app that it was

NOTE Confidence: 0.77429201

00:25:15.880 --> 00:25:18.184 designed to help people with substance

NOTE Confidence: 0.77429201

00:25:18.184 --> 00:25:20.893 use disorder engage in in CBT type

NOTE Confidence: 0.77429201

00:25:20.893 --> 00:25:23.113 principles and adopt CBT type principles.

NOTE Confidence: 0.77429201

00:25:23.120 --> 00:25:23.353 So,

NOTE Confidence: 0.77429201

00:25:23.353 --> 00:25:24.518 so why am I excited,

NOTE Confidence: 0.77429201

00:25:24.520 --> 00:25:25.054 why do,

NOTE Confidence: 0.77429201

00:25:25.054 --> 00:25:27.190 why do I think this makes this has

NOTE Confidence: 0.77429201

00:25:27.261 --> 00:25:29.098 a lot of potential to solve some

NOTE Confidence: 0.77429201

00:25:29.098 --> 00:25:30.841 of the problems our field has and

NOTE Confidence: 0.77429201

00:25:30.841 --> 00:25:32.691 one of the reasons is because you

NOTE Confidence: 0.77429201

00:25:32.691 --> 00:25:34.197 know the vast majority of research

NOTE Confidence: 0.77429201

00:25:34.197 --> 00:25:35.400 funding comes from industry.

NOTE Confidence: 0.77429201

00:25:35.400 --> 00:25:38.430 This is the just a picture of the

NOTE Confidence: 0.77429201

00:25:38.430 --> 00:25:39.510 the imbalance between industry

NOTE Confidence: 0.77429201

00:25:39.510 --> 00:25:41.175 funding versus NIH funding and the

NOTE Confidence: 0.77429201

00:25:41.175 --> 00:25:42.525 vast majority of industry funding

NOTE Confidence: 0.77429201

00:25:42.570 --> 00:25:43.558 is in clinical trials.

NOTE Confidence: 0.77429201

00:25:43.560 --> 00:25:46.245 But up to this point the industry has

NOTE Confidence: 0.77429201

00:25:46.245 --> 00:25:48.590 had no really reason or incentive to

NOTE Confidence: 0.77429201

00:25:48.654 --> 00:25:51.119 get involved in psychotherapy research.

NOTE Confidence: 0.77429201

00:25:51.120 --> 00:25:52.920 And you know digital therapeutics

NOTE Confidence: 0.77429201

00:25:52.920 --> 00:25:54.360 are not necessarily psychotherapy,

NOTE Confidence: 0.77429201

00:25:54.360 --> 00:25:56.492 but they're psychotherapy like.

NOTE Confidence: 0.77429201

00:25:56.492 --> 00:25:59.960 And so this has the potential to

NOTE Confidence: 0.77429201

00:25:59.960 --> 00:26:03.462 draw in interest from industry and

NOTE Confidence: 0.77429201

00:26:03.462 --> 00:26:07.914 and funding from industry to really

NOTE Confidence: 0.77429201

00:26:07.920 --> 00:26:11.950 fund large clinical trials and of

NOTE Confidence: 0.77429201

00:26:11.950 --> 00:26:13.990 of psychotherapy like approaches

NOTE Confidence: 0.77429201

00:26:13.990 --> 00:26:15.520 through digital therapeutics.

NOTE Confidence: 0.77429201

00:26:15.520 --> 00:26:18.680 Another big problem is that

NOTE Confidence: 0.77429201

00:26:18.680 --> 00:26:20.516 these things can help us improve

NOTE Confidence: 0.77429201

00:26:20.516 --> 00:26:21.434 implementation of therapies.

NOTE Confidence: 0.77429201

00:26:21.440 --> 00:26:22.240 We've known for a long,

NOTE Confidence: 0.77429201

00:26:22.240 --> 00:26:23.662 long time that cognitive behavioral therapy

NOTE Confidence: 0.77429201

00:26:23.662 --> 00:26:25.997 is a is a very evidence based treatment,

NOTE Confidence: 0.77429201

00:26:26.000 --> 00:26:27.359 but it's really hard to get in the community.

NOTE Confidence: 0.77429201

00:26:27.360 --> 00:26:29.262 It's really hard to find a good

NOTE Confidence: 0.77429201

00:26:29.262 --> 00:26:30.917 therapist who who sticks to

NOTE Confidence: 0.77429201

00:26:30.917 --> 00:26:32.880 the model and and you know,

NOTE Confidence: 0.77429201

00:26:32.880 --> 00:26:33.590 assigns homework,

NOTE Confidence: 0.77429201

00:26:33.590 --> 00:26:35.720 sets an agenda and so forth.

NOTE Confidence: 0.77429201

00:26:35.720 --> 00:26:37.580 And and digital therapies can help

NOTE Confidence: 0.77429201

00:26:37.580 --> 00:26:39.160 solve that problem as well.

NOTE Confidence: 0.77429201

00:26:39.160 --> 00:26:41.820 So I'm excited about the way that

NOTE Confidence: 0.77429201

00:26:41.820 --> 00:26:43.990 this could help transform psychiatry

NOTE Confidence: 0.77429201

00:26:43.990 --> 00:26:47.595 to drawing a lot more funding from

NOTE Confidence: 0.77429201

00:26:47.595 --> 00:26:49.926 industry to develop psych therapy

NOTE Confidence: 0.77429201

00:26:49.926 --> 00:26:53.080 like approaches as well as to help

NOTE Confidence: 0.77429201

00:26:53.080 --> 00:26:55.400 implement those that are shown

NOTE Confidence: 0.77429201

00:26:55.400 --> 00:26:56.792 to be effective.

NOTE Confidence: 0.77429201

00:26:56.800 --> 00:26:58.340 So that's all I'm going to say

NOTE Confidence: 0.77429201

00:26:58.340 --> 00:26:59.000 about digital therapeutics.

NOTE Confidence: 0.77429201

00:26:59.000 --> 00:27:02.780 Let me shift a little bit to

NOTE Confidence: 0.77429201

00:27:02.780 --> 00:27:05.882 esketamine which many of you may know

NOTE Confidence: 0.77429201

00:27:05.882 --> 00:27:08.519 was approved almost five years ago.

NOTE Confidence: 0.77429201

00:27:08.520 --> 00:27:10.440 It's crazy how time flies,

NOTE Confidence: 0.77429201

00:27:10.440 --> 00:27:13.728 but it was approved initially for

NOTE Confidence: 0.77429201

00:27:13.728 --> 00:27:15.920 TRD treatment resistant depression

NOTE Confidence: 0.77429201

00:27:15.920 --> 00:27:18.920 following some FDA registered studies,

NOTE Confidence: 0.902743661

00:27:18.920 --> 00:27:22.232 some key trials for patients with

NOTE Confidence: 0.902743661

00:27:22.232 --> 00:27:24.440 depression and suicidal ideation.

NOTE Confidence: 0.902743661

00:27:24.440 --> 00:27:27.170 It also had a supplemental

NOTE Confidence: 0.902743661

00:27:27.170 --> 00:27:29.220 indication that it's approved for

NOTE Confidence: 0.902743661

00:27:29.220 --> 00:27:30.720 depression with suicidal indication.

NOTE Confidence: 0.902743661

00:27:30.720 --> 00:27:33.636 This was the phase two study.

NOTE Confidence: 0.902743661

00:27:33.640 --> 00:27:35.770 The the Yale Depression Research

NOTE Confidence: 0.902743661

00:27:35.770 --> 00:27:37.474 Program participated in this.

NOTE Confidence: 0.902743661

00:27:37.480 --> 00:27:38.888 The primary outcome here

NOTE Confidence: 0.902743661

00:27:38.888 --> 00:27:41.000 was a 24 hours post dose.

NOTE Confidence: 0.902743661

00:27:41.000 --> 00:27:43.142 So it wasn't you know necessarily at

NOTE Confidence: 0.902743661

00:27:43.142 --> 00:27:45.493 every time point there was a there was

NOTE Confidence: 0.902743661

00:27:45.493 --> 00:27:47.732 a difference but but it was enough

NOTE Confidence: 0.902743661

00:27:47.732 --> 00:27:50.600 to to lead to phase three studies.

NOTE Confidence: 0.902743661

00:27:50.600 --> 00:27:53.270 These were called the ASPIRE studies

NOTE Confidence: 0.902743661

00:27:53.270 --> 00:27:56.870 of about 220 or 30 patients each

NOTE Confidence: 0.902743661

00:27:56.870 --> 00:27:59.226 randomized to every patient got

NOTE Confidence: 0.902743661

00:27:59.226 --> 00:28:01.336 good standard of care including

NOTE Confidence: 0.902743661

00:28:01.336 --> 00:28:02.950 hospitalization and then half of them

NOTE Confidence: 0.902743661

00:28:02.950 --> 00:28:04.798 got it as ketamine plus standard of

NOTE Confidence: 0.902743661

00:28:04.798 --> 00:28:06.604 care and haven't got placebo plus

NOTE Confidence: 0.902743661

00:28:06.604 --> 00:28:08.792 standard of care plus a new antidepressant.

NOTE Confidence: 0.902743661

00:28:08.792 --> 00:28:10.760 Every patient got a new antidepressant.

NOTE Confidence: 0.902743661

00:28:10.760 --> 00:28:14.584 So this was enough data for the FDA

NOTE Confidence: 0.902743661

00:28:14.584 --> 00:28:17.356 to say OK, we are going to prove this,

NOTE Confidence: 0.902743661

00:28:17.360 --> 00:28:20.876 this treatment for depression with suicidal.

NOTE Confidence: 0.902743661

00:28:20.880 --> 00:28:22.842 I do want to just note here some of

NOTE Confidence: 0.902743661

00:28:22.842 --> 00:28:24.576 the adverse effects of esketamine

NOTE Confidence: 0.902743661

00:28:24.576 --> 00:28:26.760 either straight from the FDA label.

NOTE Confidence: 0.902743661

00:28:26.760 --> 00:28:28.440 The vast majority of these,

NOTE Confidence: 0.902743661

00:28:28.440 --> 00:28:30.480 maybe with the exception of headache,

NOTE Confidence: 0.902743661

00:28:30.480 --> 00:28:32.408 are limited to the one or one hour

NOTE Confidence: 0.902743661

00:28:32.408 --> 00:28:34.735 or so where patients are in the

NOTE Confidence: 0.902743661

00:28:34.735 --> 00:28:37.240 experiencing the acute effects of escetamine.

NOTE Confidence: 0.902743661

00:28:37.240 --> 00:28:39.045 Headaches often happen later that

NOTE Confidence: 0.902743661

00:28:39.045 --> 00:28:41.976 day or maybe the next day kind of.

NOTE Confidence: 0.902743661

00:28:41.976 --> 00:28:42.832 At most.

NOTE Confidence: 0.902743661

00:28:42.832 --> 00:28:44.972 Escetamine does have a boxed

NOTE Confidence: 0.902743661

00:28:44.972 --> 00:28:46.174 warning of sedation,

NOTE Confidence: 0.902743661

00:28:46.174 --> 00:28:46.561 dissociation,

NOTE Confidence: 0.902743661

00:28:46.561 --> 00:28:48.883 abuse and misuse and suicidal thoughts

NOTE Confidence: 0.902743661

00:28:48.883 --> 00:28:49.840 and behavior.

NOTE Confidence: 0.902743661

00:28:49.840 --> 00:28:52.200 I will note that the the risk for

NOTE Confidence: 0.902743661

00:28:52.200 --> 00:28:54.389 suicidal thoughts and behavior that is

NOTE Confidence: 0.902743661

00:28:54.389 --> 00:28:56.314 simply a carryover from antidepressant.

NOTE Confidence: 0.902743661

00:28:56.320 --> 00:28:59.072 The antidepressant box warning

NOTE Confidence: 0.902743661

00:28:59.072 --> 00:29:01.552 for were suicidal thoughts and

NOTE Confidence: 0.902743661

00:29:01.552 --> 00:29:03.476 behavior because that's going to

NOTE Confidence: 0.902743661

00:29:03.476 --> 00:29:06.234 be was designed to be started with

NOTE Confidence: 0.902743661

00:29:06.234 --> 00:29:08.559 initiation of a new antidepressant.

NOTE Confidence: 0.902743661

00:29:08.560 --> 00:29:11.280 So as I mentioned this led to the

00:29:11.280 --> 00:29:14.130 FDA approval of this medicine for

00:29:14.130 --> 00:29:16.030 depression or suicidal ideation

00:29:16.107 --> 00:29:17.696 what some folks call MDSI.

00:29:17.696 --> 00:29:19.640 One of the weaknesses we thought

00:29:19.700 --> 00:29:21.860 existed in this protocol was that

00:29:21.860 --> 00:29:23.672 treatment stops after four weeks

00:29:23.672 --> 00:29:26.168 that was has the how the studies were

00:29:26.168 --> 00:29:29.680 designed and based on the data we

00:29:29.680 --> 00:29:31.200 know that after you're hospitalized

00:29:31.254 --> 00:29:32.719 is really high risk period.

00:29:32.720 --> 00:29:34.610 One of the key concerns in the

00:29:34.610 --> 00:29:36.062 ketamine world at least initially

00:29:36.062 --> 00:29:38.106 and and still some to some degree

00:29:38.106 --> 00:29:40.154 is that you know if it if something

00:29:40.154 --> 00:29:41.550 is a rapid acting antidepressant,

00:29:41.550 --> 00:29:43.895 if you stop it can people rapidly

NOTE Confidence: 0.902743661

00:29:43.895 --> 00:29:45.958 relapse and that is definitely the case.

NOTE Confidence: 0.902743661

00:29:45.960 --> 00:29:48.680 And so are we setting people up for

NOTE Confidence: 0.902743661

00:29:48.680 --> 00:29:51.916 you know a really hard relapse and and

NOTE Confidence: 0.902743661

00:29:51.916 --> 00:29:55.560 potential you know high risk of of suicide.

NOTE Confidence: 0.902743661

00:29:55.560 --> 00:29:57.828 So based on our work where

NOTE Confidence: 0.902743661

00:29:57.828 --> 00:30:00.120 we've tried to combine ketamine,

NOTE Confidence: 0.902743661

00:30:00.120 --> 00:30:00.637 racimia,

NOTE Confidence: 0.902743661

00:30:00.637 --> 00:30:03.222 ketamine in prior studies with

NOTE Confidence: 0.902743661

00:30:03.222 --> 00:30:04.773 cognitive behavioral therapy

NOTE Confidence: 0.902743661

00:30:04.773 --> 00:30:07.178 suggesting that there may be some way

NOTE Confidence: 0.902743661

00:30:07.178 --> 00:30:09.446 to kind of combine these treatments

NOTE Confidence: 0.902743661

00:30:09.446 --> 00:30:12.118 in a in a synergistic way.

NOTE Confidence: 0.902743661

00:30:12.120 --> 00:30:17.848 We have designed a study to to combine

NOTE Confidence: 0.902743661

00:30:17.848 --> 00:30:23.700 S ketamine with CBT and in people people

NOTE Confidence: 0.902743661

00:30:23.700 --> 00:30:25.480 with depression and suicidalization.

NOTE Confidence: 0.902743661

00:30:25.480 --> 00:30:27.370 Originally this was intended to recruit

NOTE Confidence: 0.902743661

00:30:27.370 --> 00:30:29.080 only from the inpatient setting.

NOTE Confidence: 0.902743661

00:30:29.080 --> 00:30:31.444 We've since expanded it to enroll

NOTE Confidence: 0.902743661

00:30:31.444 --> 00:30:33.600 people from the outpatient setting

NOTE Confidence: 0.902743661

00:30:33.600 --> 00:30:35.800 who also have significant SI

NOTE Confidence: 0.769782840588235

00:30:35.800 --> 00:30:38.520 and we are we are running the study

NOTE Confidence: 0.769782840588235

00:30:38.520 --> 00:30:41.236 it's it's this is funded by a an RFA

NOTE Confidence: 0.769782840588235

00:30:41.240 --> 00:30:43.039 a large RFA that's funding a number

NOTE Confidence: 0.769782840588235

00:30:43.039 --> 00:30:44.740 of studies around the country but

NOTE Confidence: 0.769782840588235

00:30:44.740 --> 00:30:47.553 this this funds this study Yale is a

NOTE Confidence: 0.769782840588235

00:30:47.553 --> 00:30:50.891 primary of three sites and patients are

NOTE Confidence: 0.769782840588235

00:30:50.891 --> 00:30:53.733 all patients get esketamine patients

NOTE Confidence: 0.769782840588235

00:30:53.733 --> 00:30:55.598 with depression and suicidal ideation

NOTE Confidence: 0.769782840588235

00:30:55.598 --> 00:30:58.576 half of them will receive CBT that

NOTE Confidence: 0.769782840588235

00:30:58.576 --> 00:31:01.624 starts about two weeks after they

NOTE Confidence: 0.769782840588235

00:31:01.624 --> 00:31:04.630 they begin esketamine and and patients

NOTE Confidence: 0.769782840588235

00:31:04.630 --> 00:31:06.555 are followed for up to six months.

NOTE Confidence: 0.769782840588235

00:31:06.560 --> 00:31:08.996 So our target enrollment is is 100.

NOTE Confidence: 0.769782840588235

00:31:09.000 --> 00:31:10.813 We should be wrapping up the study

NOTE Confidence: 0.769782840588235

00:31:10.813 --> 00:31:12.398 at the end of this year.

NOTE Confidence: 0.769782840588235

00:31:12.400 --> 00:31:15.400 We are about 2/3 the way through with

NOTE Confidence: 0.769782840588235

00:31:15.400 --> 00:31:17.761 with recruitment and again Yale is the

NOTE Confidence: 0.769782840588235

00:31:17.761 --> 00:31:20.120 primary site of of a a three site group.

NOTE Confidence: 0.769782840588235

00:31:20.120 --> 00:31:24.518 Emery and Alabama are also participating.

NOTE Confidence: 0.769782840588235

00:31:24.520 --> 00:31:27.848 So that is the what we're calling the

NOTE Confidence: 0.769782840588235

00:31:27.848 --> 00:31:32.080 CBT endure study to try and again make

NOTE Confidence: 0.769782840588235

00:31:32.080 --> 00:31:34.600 progress in in in suicide prevention.

NOTE Confidence: 0.769782840588235

00:31:34.600 --> 00:31:39.065 So I want to come back again to

NOTE Confidence: 0.769782840588235

00:31:39.065 --> 00:31:40.640 what what at least I have learned.

NOTE Confidence: 0.769782840588235

00:31:40.640 --> 00:31:43.480 I think we've learned in in the depression

NOTE Confidence: 0.769782840588235

00:31:43.480 --> 00:31:45.902 research program about how to conduct

NOTE Confidence: 0.769782840588235

00:31:45.902 --> 00:31:47.554 suicide prevention clinical trials

NOTE Confidence: 0.769782840588235

00:31:47.560 --> 00:31:49.863 and again with the context that most

NOTE Confidence: 0.769782840588235

00:31:49.863 --> 00:31:51.718 trials have excluded those at risk.

NOTE Confidence: 0.769782840588235

00:31:51.720 --> 00:31:54.486 There again have been I think

NOTE Confidence: 0.769782840588235

00:31:54.486 --> 00:31:57.320 indications that this this is changing

NOTE Confidence: 0.769782840588235

00:31:57.320 --> 00:31:59.360 the ASPIRE studies that led to

NOTE Confidence: 0.769782840588235

00:31:59.360 --> 00:32:01.320 Jansen's FDA approval of Escanamine

NOTE Confidence: 0.769782840588235

00:32:01.320 --> 00:32:03.280 for depression with suicidal iation.

NOTE Confidence: 0.769782840588235

00:32:03.280 --> 00:32:06.151 Those are some you know well funded studies.

NOTE Confidence: 0.769782840588235

00:32:06.151 --> 00:32:08.993 The ENDURE study is is part of a

NOTE Confidence: 0.769782840588235

00:32:08.993 --> 00:32:11.177 number of RF as from the NIH that

NOTE Confidence: 0.769782840588235

00:32:11.177 --> 00:32:13.312 are explicitly calling for trials

NOTE Confidence: 0.769782840588235

00:32:13.312 --> 00:32:16.840 to to focus on suicide prevention.

NOTE Confidence: 0.769782840588235

00:32:16.840 --> 00:32:19.592 There's a lithium trial that was based in

NOTE Confidence: 0.769782840588235

00:32:19.592 --> 00:32:21.412 the VA unfortunately that was negative.

NOTE Confidence: 0.769782840588235

00:32:21.412 --> 00:32:23.880 But again we need to do these studies.

NOTE Confidence: 0.769782840588235

00:32:23.880 --> 00:32:26.860 The WE trial I mentioned the SPOT trial

NOTE Confidence: 0.769782840588235

00:32:26.860 --> 00:32:29.240 from Greg Simon that was based in Kaiser.

NOTE Confidence: 0.769782840588235

00:32:29.240 --> 00:32:32.768 The Kaiser Healthcare system was one

NOTE Confidence: 0.769782840588235

00:32:32.768 --> 00:32:34.288 that focused on suicide prevention

NOTE Confidence: 0.769782840588235

00:32:34.288 --> 00:32:35.200 and clinical trials.

NOTE Confidence: 0.769782840588235

00:32:35.200 --> 00:32:38.598 So just a couple of the key takeaways

NOTE Confidence: 0.769782840588235

00:32:38.598 --> 00:32:40.554 for those of you who do clinical

NOTE Confidence: 0.769782840588235

00:32:40.554 --> 00:32:42.659 trials or in in other ways and you

NOTE Confidence: 0.769782840588235

00:32:42.659 --> 00:32:44.731 know one of the key issues is how

NOTE Confidence: 0.769782840588235

00:32:44.731 --> 00:32:47.510 to identify patients and and this

NOTE Confidence: 0.769782840588235

00:32:47.510 --> 00:32:50.615 is actually a a key problem for any

NOTE Confidence: 0.769782840588235

00:32:50.615 --> 00:32:52.040 clinical trial and mental illness.

NOTE Confidence: 0.769782840588235

00:32:52.040 --> 00:32:55.136 It it's it's so interesting whenever I

NOTE Confidence: 0.769782840588235

00:32:55.136 --> 00:32:56.960 talk about what I do with friends and

NOTE Confidence: 0.769782840588235

00:32:57.014 --> 00:32:58.950 family who are not in medicine and I

NOTE Confidence: 0.769782840588235

00:32:58.950 --> 00:33:00.459 mentioned that we do clinical trials

NOTE Confidence: 0.769782840588235

00:33:00.459 --> 00:33:02.834 for mental illness and one of the key

NOTE Confidence: 0.769782840588235

00:33:02.834 --> 00:33:05.119 problems is, is finding patients.

NOTE Confidence: 0.769782840588235

00:33:05.120 --> 00:33:06.104 You know that that doesn't seem

NOTE Confidence: 0.769782840588235

00:33:06.104 --> 00:33:06.596 to make sense.

NOTE Confidence: 0.769782840588235

00:33:06.600 --> 00:33:08.904 There are there's an abundance of

NOTE Confidence: 0.769782840588235

00:33:08.904 --> 00:33:10.853 people who are desperately seeking

NOTE Confidence: 0.769782840588235

00:33:10.853 --> 00:33:12.923 care but our systems haven't figured

NOTE Confidence: 0.769782840588235

00:33:12.923 --> 00:33:15.438 out a way to in a in a good way,

NOTE Confidence: 0.769782840588235

00:33:15.440 --> 00:33:17.648 an efficient way align trial recruitment

NOTE Confidence: 0.769782840588235

00:33:17.648 --> 00:33:20.678 with those who are are trying to seek help.

NOTE Confidence: 0.769782840588235

00:33:20.680 --> 00:33:25.000 But in in this case if we can recruit

NOTE Confidence: 0.769782840588235

00:33:25.000 --> 00:33:26.800 from Ed settings or hospitals,

NOTE Confidence: 0.769782840588235

00:33:26.800 --> 00:33:29.320 then that helps us I think with an

NOTE Confidence: 0.769782840588235

00:33:29.320 --> 00:33:31.223 enriched sample and it helps us

NOTE Confidence: 0.769782840588235

00:33:31.223 --> 00:33:33.035 because there's a steady flow of

NOTE Confidence: 0.769782840588235

00:33:33.103 --> 00:33:35.119 patients through these settings.

NOTE Confidence: 0.769782840588235

00:33:35.120 --> 00:33:36.842 And this relates to what I think

NOTE Confidence: 0.769782840588235

00:33:36.842 --> 00:33:37.580 is just critical

NOTE Confidence: 0.871583221333334

00:33:37.632 --> 00:33:39.704 if we're going to make progress in

NOTE Confidence: 0.871583221333334

00:33:39.704 --> 00:33:40.937 treatment development in mental

NOTE Confidence: 0.871583221333334

00:33:40.937 --> 00:33:42.974 illness generally is that we need to

NOTE Confidence: 0.871583221333334

00:33:42.974 --> 00:33:44.640 bring together clinical and research

NOTE Confidence: 0.871583221333334

00:33:44.640 --> 00:33:46.080 missions and academic centers.

NOTE Confidence: 0.871583221333334

00:33:46.080 --> 00:33:48.060 This is not an easy thing. There's a

NOTE Confidence: 0.871583221333334

00:33:48.060 --> 00:33:49.560 lot of structural impediment to this.

NOTE Confidence: 0.871583221333334

00:33:49.560 --> 00:33:50.988 But it I'm convinced that if

NOTE Confidence: 0.871583221333334

00:33:50.988 --> 00:33:52.440 we're going to make progress,

NOTE Confidence: 0.871583221333334

00:33:52.440 --> 00:33:53.272 this needs to happen.

NOTE Confidence: 0.871583221333334

00:33:53.272 --> 00:33:54.757 If we're going to run good

NOTE Confidence: 0.871583221333334

00:33:54.757 --> 00:33:56.068 quality clinical trials,

NOTE Confidence: 0.871583221333334

00:33:56.068 --> 00:33:58.690 this needs to happen not just

NOTE Confidence: 0.871583221333334

00:33:58.766 --> 00:34:00.602 for suicide prevention trials

NOTE Confidence: 0.871583221333334

00:34:00.602 --> 00:34:03.356 but for all all clinical trials.

NOTE Confidence: 0.871583221333334

00:34:03.360 --> 00:34:05.845 Another tricky thing about clinical

NOTE Confidence: 0.871583221333334

00:34:05.845 --> 00:34:07.924 trials with in suicide prevention is

NOTE Confidence: 0.871583221333334

00:34:07.924 --> 00:34:09.279 you can't tightly control treatment.

NOTE Confidence: 0.871583221333334

00:34:09.280 --> 00:34:10.640 So we think about RCT,

NOTE Confidence: 0.871583221333334

00:34:10.640 --> 00:34:12.180 it's randomized controlled trial.

NOTE Confidence: 0.871583221333334

00:34:12.180 --> 00:34:14.105 You control the treatments except

NOTE Confidence: 0.871583221333334

00:34:14.105 --> 00:34:16.170 for one that is randomized and

NOTE Confidence: 0.871583221333334

00:34:16.170 --> 00:34:17.795 thereby you can elicit causality.

NOTE Confidence: 0.871583221333334

00:34:17.800 --> 00:34:19.606 But in it's not ethical to do

NOTE Confidence: 0.871583221333334

00:34:19.606 --> 00:34:20.920 that with suicidal patients.

NOTE Confidence: 0.871583221333334

00:34:20.920 --> 00:34:22.876 And so the analysis generally needs

NOTE Confidence: 0.871583221333334

00:34:22.876 --> 00:34:25.532 to be a time to event and an event

NOTE Confidence: 0.871583221333334

00:34:25.532 --> 00:34:26.996 could be well the patient crumped

NOTE Confidence: 0.871583221333334

00:34:26.996 --> 00:34:28.560 and they need a new treatment,

NOTE Confidence: 0.871583221333334

00:34:28.560 --> 00:34:31.068 they need ECT or whatever could

NOTE Confidence: 0.871583221333334

00:34:31.068 --> 00:34:32.140 be hospitalization could be

NOTE Confidence: 0.871583221333334

00:34:32.140 --> 00:34:33.480 a composite of these things.

NOTE Confidence: 0.871583221333334

00:34:33.480 --> 00:34:35.678 The definition of the event is critical,

NOTE Confidence: 0.871583221333334

00:34:35.680 --> 00:34:37.345 but these things generally need

NOTE Confidence: 0.871583221333334

00:34:37.345 --> 00:34:39.600 to be time to event studies.

NOTE Confidence: 0.871583221333334

00:34:39.600 --> 00:34:41.812 And one thing I like about some

NOTE Confidence: 0.871583221333334

00:34:41.812 --> 00:34:43.144 of these studies, you know,

NOTE Confidence: 0.871583221333334

00:34:43.144 --> 00:34:43.912 they're focusing on outcomes

NOTE Confidence: 0.871583221333334

00:34:43.912 --> 00:34:45.000 that are meaningful to patients.

NOTE Confidence: 0.871583221333334

00:34:45.000 --> 00:34:46.900 So suicide behaviors, hospitalization,

NOTE Confidence: 0.871583221333334

00:34:46.900 --> 00:34:49.275 not just a rating scale,

NOTE Confidence: 0.871583221333334

00:34:49.280 --> 00:34:51.220 which are important but more

NOTE Confidence: 0.871583221333334

00:34:51.220 --> 00:34:53.160 meaningful to patients are do

00:34:53.231 --> 00:34:55.236 they have to get hospitalized?

00:34:55.240 --> 00:34:57.074 Do they act as their family member,

00:34:57.080 --> 00:35:00.158 actually attempt suicide?

00:35:00.160 --> 00:35:02.120 This is the direction we need to go.

00:35:02.120 --> 00:35:03.280 That's a high bar,

00:35:03.280 --> 00:35:05.020 but I think that's this is

00:35:05.084 --> 00:35:06.758 a direction we need to go.

00:35:06.760 --> 00:35:08.425 Another critical thing is a

00:35:08.425 --> 00:35:09.757 somewhat of a nuance,

00:35:09.760 --> 00:35:11.704 but standard of care needs to

00:35:11.704 --> 00:35:13.000 be the comparator arm.

00:35:13.000 --> 00:35:15.920 It can't just be placebo for ethical reasons.

00:35:15.920 --> 00:35:17.550 And there's a critical difference

00:35:17.550 --> 00:35:19.180 between standard of care and

00:35:19.237 --> 00:35:21.077 community versus research settings.

00:35:21.080 --> 00:35:22.040 And finally,

NOTE Confidence: 0.870468946

00:35:24.160 --> 00:35:25.440 in terms of regulatory issues,

NOTE Confidence: 0.870468946

00:35:25.440 --> 00:35:27.057 there needs to be a change in

NOTE Confidence: 0.870468946

00:35:27.057 --> 00:35:28.760 culture where we can't stop a study.

NOTE Confidence: 0.870468946

00:35:28.760 --> 00:35:31.640 If one, one event happens,

NOTE Confidence: 0.870468946

00:35:31.640 --> 00:35:32.798 these things are going to happen.

NOTE Confidence: 0.870468946

00:35:32.800 --> 00:35:33.847 It's it's terrible,

NOTE Confidence: 0.870468946

00:35:33.847 --> 00:35:35.941 but we can't stop oncology studies

NOTE Confidence: 0.870468946

00:35:35.941 --> 00:35:37.717 when someone dies of cancer.

NOTE Confidence: 0.870468946

00:35:37.720 --> 00:35:39.635 Likewise, if we're recruiting specifically

NOTE Confidence: 0.870468946

00:35:39.635 --> 00:35:42.239 patients who are at risk of suicide,

NOTE Confidence: 0.870468946

00:35:42.240 --> 00:35:44.496 we need to somehow change the

NOTE Confidence: 0.870468946

00:35:44.496 --> 00:35:46.665 culture that we can't stop a

NOTE Confidence: 0.870468946

00:35:46.665 --> 00:35:47.960 study just because of one event.

NOTE Confidence: 0.870468946

00:35:47.960 --> 00:35:50.473 Now if there's gross negligence or or

NOTE Confidence: 0.870468946

00:35:50.473 --> 00:35:52.712 things are not being done properly,

NOTE Confidence: 0.870468946

00:35:52.712 --> 00:35:54.280 obviously that's an issue.

NOTE Confidence: 0.870468946

00:35:54.280 --> 00:35:55.905 But these things unfortunately are

NOTE Confidence: 0.870468946

00:35:55.905 --> 00:35:58.343 going to happen and and if we're going

NOTE Confidence: 0.870468946

00:35:58.343 --> 00:36:00.484 to make progress we need to be able

NOTE Confidence: 0.870468946

00:36:00.484 --> 00:36:02.079 to to meaningfully conduct studies

NOTE Confidence: 0.870468946

00:36:02.079 --> 00:36:05.400 in these types of of populations.

NOTE Confidence: 0.870468946

00:36:05.400 --> 00:36:08.469 So, so that's what I'm going to say

NOTE Confidence: 0.870468946

00:36:08.469 --> 00:36:10.200 about our our work in suicide prevention.

NOTE Confidence: 0.870468946

00:36:10.200 --> 00:36:12.784 I will mention just one other study and

NOTE Confidence: 0.870468946

00:36:12.784 --> 00:36:15.330 and notably the many of these studies

NOTE Confidence: 0.870468946

00:36:15.330 --> 00:36:17.360 are conducted within the context of

NOTE Confidence: 0.870468946

00:36:17.360 --> 00:36:19.376 of interventional psychiatry service

NOTE Confidence: 0.870468946

00:36:19.376 --> 00:36:22.400 which is a collaboration between the

NOTE Confidence: 0.870468946

00:36:22.473 --> 00:36:24.957 university and the and the hospital.

NOTE Confidence: 0.870468946

00:36:24.960 --> 00:36:27.770 In in our interventional service there

NOTE Confidence: 0.870468946

00:36:27.770 --> 00:36:29.750 are three three key treatments that

NOTE Confidence: 0.870468946

00:36:29.750 --> 00:36:32.624 are offered to patients ECT Ketamine

NOTE Confidence: 0.870468946

00:36:32.624 --> 00:36:35.740 S ketamine TMS especially in the last

NOTE Confidence: 0.870468946

00:36:35.740 --> 00:36:37.390 five years with the FDA approval

NOTE Confidence: 0.870468946

00:36:37.440 --> 00:36:39.040 our ketamine S ketamine service,

NOTE Confidence: 0.870468946

00:36:39.040 --> 00:36:40.920 the volume has grown tremendously

NOTE Confidence: 0.870468946

00:36:40.920 --> 00:36:43.953 and you know there are a lot of

NOTE Confidence: 0.870468946

00:36:43.953 --> 00:36:46.216 interesting issues you know one of

NOTE Confidence: 0.870468946

00:36:46.216 --> 00:36:48.220 which you know with with the recent

NOTE Confidence: 0.870468946

00:36:48.220 --> 00:36:50.280 death and and really autopsy reported.

NOTE Confidence: 0.870468946

00:36:50.280 --> 00:36:52.134 Matthew Perry you know just really

NOTE Confidence: 0.870468946

00:36:52.134 --> 00:36:54.185 brings to the forefront one of these

NOTE Confidence: 0.870468946

00:36:54.185 --> 00:36:55.942 questions that that we get all the

NOTE Confidence: 0.870468946

00:36:55.996 --> 00:36:58.300 time in the in the ketamine world with

NOTE Confidence: 0.870468946

00:36:58.300 --> 00:37:00.260 whether there's a meaningful difference

NOTE Confidence: 0.870468946

00:37:00.260 --> 00:37:02.560 between ketamine and S ketamine.

00:37:02.560 --> 00:37:04.984 You know I I was shocked to read

00:37:04.984 --> 00:37:08.106 from the New York Times that the the the

00:37:08.106 --> 00:37:10.589 coroner the medical examiner judge

00:37:10.589 --> 00:37:12.734 that ketamine played a contributing

00:37:12.734 --> 00:37:14.920 role to Matthew Perry's death.

00:37:14.920 --> 00:37:16.768 This brings to the the forefront of

00:37:16.768 --> 00:37:18.766 some of the challenges that we've

00:37:18.766 --> 00:37:20.751 been wrestling with again of this

00:37:20.751 --> 00:37:22.136 is there a meaningful difference

00:37:22.136 --> 00:37:23.994 between S ketamine and ketamine from

00:37:23.994 --> 00:37:25.554 a clinical perspective there's a

00:37:25.554 --> 00:37:27.452 lot of differences from a kind of

00:37:27.452 --> 00:37:28.436 a healthcare system perspective.

00:37:28.440 --> 00:37:31.040 S ketamine has FDA approval.

00:37:31.040 --> 00:37:33.440 IV ketamine does not have the FDA approval.

00:37:33.440 --> 00:37:35.078 S ketamine is subject to a very,

NOTE Confidence: 0.870468946

00:37:35.080 --> 00:37:36.760 very strict drug safety program.

NOTE Confidence: 0.870468946

00:37:36.760 --> 00:37:39.680 The REMS ketamine is kind of the wild,

NOTE Confidence: 0.870468946

00:37:39.680 --> 00:37:42.886 Wild West and there's a lot of

NOTE Confidence: 0.870468946

00:37:42.886 --> 00:37:45.692 things going on that that probably

NOTE Confidence: 0.870468946

00:37:45.692 --> 00:37:47.556 shouldn't be going on.

NOTE Confidence: 0.870468946

00:37:47.560 --> 00:37:48.032 Last year,

NOTE Confidence: 0.870468946

00:37:48.032 --> 00:37:49.920 this is the first I heard of it

NOTE Confidence: 0.870468946

00:37:49.983 --> 00:37:51.902 where the federal government stepped

NOTE Confidence: 0.870468946

00:37:51.902 --> 00:37:55.925 in and shut down a clinic of a,

NOTE Confidence: 0.870468946

00:37:55.925 --> 00:37:57.640 of a of a Doctor Who was,

NOTE Confidence: 0.870468946

00:37:57.640 --> 00:37:58.410 you know,

NOTE Confidence: 0.870468946

00:37:58.410 --> 00:38:00.720 sending ketamine for at home consumption,

NOTE Confidence: 0.870468946

00:38:00.720 --> 00:38:01.950 at home use.

NOTE Confidence: 0.870468946

00:38:01.950 --> 00:38:04.410 He had obtained licenses in most

NOTE Confidence: 0.870468946

00:38:04.410 --> 00:38:07.037 states across the US and you know,

NOTE Confidence: 0.870468946

00:38:07.040 --> 00:38:08.780 was treating something like thousands

NOTE Confidence: 0.870468946

00:38:08.780 --> 00:38:11.068 of patients and the DEA came in

NOTE Confidence: 0.870468946

00:38:11.068 --> 00:38:12.755 and and and and shut him down.

NOTE Confidence: 0.870468946

00:38:12.760 --> 00:38:15.588 So there's a lot of healthcare differences

NOTE Confidence: 0.870468946

00:38:15.588 --> 00:38:17.358 between S ketamine and ketamine,

NOTE Confidence: 0.870468946

00:38:17.360 --> 00:38:19.117 the way it's regulated and so forth.

NOTE Confidence: 0.920482672

00:38:19.120 --> 00:38:21.080 And there's confusion among patients,

NOTE Confidence: 0.920482672

00:38:21.080 --> 00:38:22.010 third party payers,

NOTE Confidence: 0.920482672

00:38:22.010 --> 00:38:23.560 providers in the general public.

NOTE Confidence: 0.920482672

00:38:23.560 --> 00:38:25.986 This is a quote from Glenn Brooks,

NOTE Confidence: 0.920482672

00:38:25.986 --> 00:38:28.177 who is probably one of the first

NOTE Confidence: 0.920482672

00:38:28.177 --> 00:38:31.355 to start a ketamine clinic in in

NOTE Confidence: 0.920482672

00:38:31.355 --> 00:38:33.560 Manhattan who says, you know, Ivy,

NOTE Confidence: 0.920482672

00:38:33.560 --> 00:38:34.760 ketamine is the gold standard.

NOTE Confidence: 0.920482672

00:38:34.760 --> 00:38:36.356 So we don't offer S ketamine.

NOTE Confidence: 0.920482672

00:38:36.360 --> 00:38:38.120 And there's a there's there's

NOTE Confidence: 0.920482672

00:38:38.120 --> 00:38:39.880 more opinions in the world,

NOTE Confidence: 0.920482672

00:38:39.880 --> 00:38:42.320 in the ketamine world about this than data.

NOTE Confidence: 0.920482672

00:38:42.320 --> 00:38:44.575 Fortunately we we recently received

NOTE Confidence: 0.920482672

00:38:44.575 --> 00:38:47.259 funding to try to settle this

NOTE Confidence: 0.920482672

00:38:47.259 --> 00:38:49.730 question and run a head to head

NOTE Confidence: 0.920482672

00:38:49.730 --> 00:38:51.957 study with you know respectable

NOTE Confidence: 0.920482672

00:38:51.957 --> 00:38:53.835 sample size where patients are

NOTE Confidence: 0.920482672

00:38:53.835 --> 00:38:55.360 randomized ketamine or S ketamine.

NOTE Confidence: 0.920482672

00:38:55.360 --> 00:38:57.148 We're likely going to call this

NOTE Confidence: 0.920482672

00:38:57.148 --> 00:38:58.667 the equivalence trial because it's

NOTE Confidence: 0.920482672

00:38:58.667 --> 00:39:00.550 acronym as it's one of the patient

NOTE Confidence: 0.920482672

00:39:00.550 --> 00:39:01.950 center outcomes research and we're

NOTE Confidence: 0.920482672

00:39:01.950 --> 00:39:04.068 excited to get get started with this.

NOTE Confidence: 0.920482672

00:39:04.068 --> 00:39:06.720 We hope to start enrollment in September.

NOTE Confidence: 0.920482672

00:39:06.720 --> 00:39:08.392 So I know this is kind of a

NOTE Confidence: 0.920482672

00:39:08.392 --> 00:39:09.958 whirlwind of of some of the stuff.

NOTE Confidence: 0.920482672

00:39:09.960 --> 00:39:11.796 Hopefully there was a an underlying

NOTE Confidence: 0.920482672

00:39:11.796 --> 00:39:13.240 theme through most of it.

NOTE Confidence: 0.920482672

00:39:13.240 --> 00:39:15.481 I just want to thank so many of the

NOTE Confidence: 0.920482672

00:39:15.481 --> 00:39:17.756 people who make this research possible

NOTE Confidence: 0.920482672

00:39:17.756 --> 00:39:20.097 in the depression research program as

NOTE Confidence: 0.920482672

00:39:20.097 --> 00:39:21.982 well as the interventional psychiatric

NOTE Confidence: 0.920482672

00:39:21.982 --> 00:39:24.040 service at Yale New Haven Health,

NOTE Confidence: 0.920482672

00:39:24.040 --> 00:39:26.994 some of my Biostats and EPI collaborators

NOTE Confidence: 0.920482672

00:39:27.000 --> 00:39:30.065 or other institutions and and

NOTE Confidence: 0.920482672

00:39:30.065 --> 00:39:32.390 increasingly you know in the in these

NOTE Confidence: 0.920482672

00:39:32.390 --> 00:39:34.116 these studies focused on suicide

NOTE Confidence: 0.920482672

00:39:34.116 --> 00:39:36.140 prevention the the emergency services,

NOTE Confidence: 0.920482672

00:39:36.140 --> 00:39:37.640 the psych emergency services.

NOTE Confidence: 0.920482672

00:39:37.640 --> 00:39:40.200 We're in there all the time and appreciate

NOTE Confidence: 0.920482672

00:39:40.200 --> 00:39:42.346 you helping us to facilitate the conduct

NOTE Confidence: 0.920482672

00:39:42.346 --> 00:39:44.638 of of of these important studies.

NOTE Confidence: 0.920482672

00:39:44.640 --> 00:39:48.640 So again thank you to the for your interest.

NOTE Confidence: 0.920482672

00:39:48.640 --> 00:39:51.013 Thanks so many of our collaborators in

NOTE Confidence: 0.920482672

00:39:51.013 --> 00:39:53.787 the in the depression research program

NOTE Confidence: 0.920482672

00:39:53.787 --> 00:39:56.597 and and interventional psychiatry and

NOTE Confidence: 0.920482672

00:39:56.600 --> 00:39:58.800 that is all I have for prepared remarks.

NOTE Confidence: 0.920482672

00:39:58.800 --> 00:40:01.355 So I think I'll stop sharing and.

NOTE Confidence: 0.920482672

00:40:01.360 --> 00:40:03.020 I think it's time for Q&amp;A.

NOTE Confidence: 0.920482672

00:40:03.020 --> 00:40:05.000 Is that right?