WEBVTT

NOTE duration:"00:38:00" NOTE recognizability:0.885

NOTE language:en-us

NOTE Confidence: 0.89189582

00:00:00.000 --> 00:00:02.896 Uh, I'm just going to make a few

NOTE Confidence: 0.89189582

 $00{:}00{:}02.896 \dashrightarrow 00{:}00{:}05.452$ brief comments and then turn it

NOTE Confidence: 0.89189582

 $00{:}00{:}05.452 \dashrightarrow 00{:}00{:}07.637$ over to our conference organizers.

NOTE Confidence: 0.89189582

 $00:00:07.640 \longrightarrow 00:00:10.580$ But first of all, I just wanted

NOTE Confidence: 0.89189582

 $00:00:10.580 \longrightarrow 00:00:13.249$ to say thanks to a few folks

NOTE Confidence: 0.89189582

 $00{:}00{:}13.250 \dashrightarrow 00{:}00{:}18.248$ thanks to our uh to Ruth Arnold,

NOTE Confidence: 0.89189582

 $00:00:18.250 \longrightarrow 00:00:20.760$ who has really done a lot of work in the

NOTE Confidence: 0.89189582

 $00:00:20.824 \longrightarrow 00:00:23.645$ last several weeks to pull everyone together,

NOTE Confidence: 0.89189582

 $00:00:23.650 \longrightarrow 00:00:25.470$ both locally and across the

NOTE Confidence: 0.89189582

 $00:00:25.470 \longrightarrow 00:00:27.290$ country to to come here.

NOTE Confidence: 0.89189582

 $00:00:27.290 \longrightarrow 00:00:30.280$ This is our regional, coordinating.

NOTE Confidence: 0.89189582

 $00:00:30.280 \longrightarrow 00:00:33.192$ Center for stroke Nets the Southern New

NOTE Confidence: 0.89189582

00:00:33.192 --> 00:00:35.138 England Partnership and Stroke Research,

00:00:35.140 --> 00:00:36.733 Innovation and Treatment

NOTE Confidence: 0.89189582

 $00:00:36.733 \longrightarrow 00:00:38.857$ Conference we affectionately refer

NOTE Confidence: 0.89189582

 $00:00:38.857 \longrightarrow 00:00:41.299$ to ourselves as the spirit,

NOTE Confidence: 0.89189582

 $00:00:41.300 \longrightarrow 00:00:42.695$ our regional coordinating

NOTE Confidence: 0.89189582

00:00:42.695 --> 00:00:44.555 Center for Stroke NET,

NOTE Confidence: 0.89189582

00:00:44.560 --> 00:00:48.272 and on behalf of the other Co principal

NOTE Confidence: 0.89189582

 $00:00:48.272 \longrightarrow 00:00:50.798$ investigators that Brown and Hartford,

NOTE Confidence: 0.89189582

00:00:50.800 --> 00:00:54.559 and at Northwell Karen Fury Mark Albertson,

NOTE Confidence: 0.89189582

00:00:54.560 --> 00:00:55.250 Richard Chemist.

NOTE Confidence: 0.89189582

 $00:00:55.250 \longrightarrow 00:00:58.450$ We're really glad that you can join us today.

NOTE Confidence: 0.89189582

 $00{:}00{:}58.450 \dashrightarrow 00{:}01{:}00.340$ I, I think over the course of the day.

NOTE Confidence: 0.89189582

00:01:00.340 --> 00:01:02.740 We're very lucky because we're going

NOTE Confidence: 0.89189582

 $00:01:02.740 \longrightarrow 00:01:05.964$ to hear really from so many of the

NOTE Confidence: 0.89189582

 $00:01:05.964 \longrightarrow 00:01:07.894$ national leaders across the spectrum

NOTE Confidence: 0.89189582

 $00:01:07.894 \longrightarrow 00:01:10.289$ of stroke net clinical trials.

NOTE Confidence: 0.89189582

 $00:01:10.290 \longrightarrow 00:01:16.550$ I'll just say that the perhaps the most.

 $00:01:16.550 \longrightarrow 00:01:19.238$ Part of stroke net.

NOTE Confidence: 0.89189582

 $00{:}01{:}19.240 \dashrightarrow 00{:}01{:}22.310$ That's my favorite part really.

NOTE Confidence: 0.89189582

 $00:01:22.310 \longrightarrow 00:01:24.650$ Are these conferences and is the

NOTE Confidence: 0.89189582

 $00:01:24.650 \longrightarrow 00:01:27.432$ ability for our centers to be able

NOTE Confidence: 0.89189582

 $00:01:27.432 \longrightarrow 00:01:29.347$ to come together both nationally,

NOTE Confidence: 0.89189582

 $00{:}01{:}29.350 \dashrightarrow 00{:}01{:}31.770$ but especially within our

NOTE Confidence: 0.89189582

 $00:01:31.770 \longrightarrow 00:01:32.980$ regional consortium.

NOTE Confidence: 0.89189582

 $00{:}01{:}32.980 \to 00{:}01{:}35.404$ So it's just great to have everyone here.

NOTE Confidence: 0.89189582

00:01:35.410 --> 00:01:36.866 It's really exciting agenda.

NOTE Confidence: 0.89189582

00:01:36.866 --> 00:01:40.006 I just want to take the moment to

NOTE Confidence: 0.89189582

 $00{:}01{:}40.006 \dashrightarrow 00{:}01{:}43.195$ introduce Shadi Yaghi so Shadi is

NOTE Confidence: 0.89189582

 $00{:}01{:}43.195 \dashrightarrow 00{:}01{:}46.680$ the stroke division chief at Brown.

NOTE Confidence: 0.89189582

 $00{:}01{:}46.680 \dashrightarrow 00{:}01{:}49.860$ And is incredibly involved in both,

NOTE Confidence: 0.89189582

 $00:01:49.860 \longrightarrow 00:01:52.920$ contributing to spirit and to stroke.

NOTE Confidence: 0.89189582

 $00:01:52.920 \longrightarrow 00:01:55.256$ Net clinical trial recruitment,

 $00:01:55.256 \longrightarrow 00:02:00.050$ but has a number of different interests in

NOTE Confidence: 0.89189582

 $00{:}02{:}00.050 \dashrightarrow 00{:}02{:}04.180$ investigation and also to reach a Sharma.

NOTE Confidence: 0.89189582

 $00{:}02{:}04.180 \dashrightarrow 00{:}02{:}07.197$ Richa Sharma is here at Yale and

NOTE Confidence: 0.89189582

00:02:07.197 --> 00:02:09.850 actually I believe was a former

NOTE Confidence: 0.89189582

 $00:02:09.850 \longrightarrow 00:02:12.164$ stroke net fellow but now also

NOTE Confidence: 0.89189582

 $00:02:12.164 \longrightarrow 00:02:14.600$ playing a number of roles and the

NOTE Confidence: 0.89189582

00:02:14.685 --> 00:02:16.959 stroke program at Yale and is.

NOTE Confidence: 0.89189582

 $00:02:16.960 \longrightarrow 00:02:19.730$ Also involved in pushing forward stroke

NOTE Confidence: 0.89189582

 $00{:}02{:}19.730 \dashrightarrow 00{:}02{:}21.980$ net trial concepts and has other

NOTE Confidence: 0.89189582

 $00:02:22.045 \longrightarrow 00:02:24.757$ interests in stroke investigation as well.

NOTE Confidence: 0.89189582

00:02:24.760 --> 00:02:25.732 So shoddy and reach,

NOTE Confidence: 0.89189582

 $00:02:25.732 \longrightarrow 00:02:27.502$ I'll turn it over to you but

NOTE Confidence: 0.89189582

 $00:02:27.502 \longrightarrow 00:02:28.498$ but thanks so much.

NOTE Confidence: 0.88172607

 $00{:}02{:}29.210 --> 00{:}02{:}30.660$ Thank you so much, Kevin.

NOTE Confidence: 0.88172607

 $00:02:30.660 \longrightarrow 00:02:32.760$ I'm so excited about the

NOTE Confidence: 0.88172607

 $00:02:32.760 \longrightarrow 00:02:34.440$ conference today and about

 $00:02:34.440 \longrightarrow 00:02:36.560$ moderating it and welcome everyone.

NOTE Confidence: 0.66804415

00:02:47.010 --> 00:02:50.305 Thank you as well for having us today.

NOTE Confidence: 0.791893538571429

 $00:02:50.310 \longrightarrow 00:02:53.124$ We are delighted to have you all.

NOTE Confidence: 0.791893538571429

00:02:53.130 --> 00:02:56.427 Join us today for the Spirit Conference

NOTE Confidence: 0.791893538571429

 $00:02:56.430 \longrightarrow 00:02:59.384$ at thank you Shadi Yaghi for moderating,

NOTE Confidence: 0.791893538571429

 $00:02:59.390 \longrightarrow 00:03:01.830$ along with me and today.

NOTE Confidence: 0.791893538571429

 $00:03:01.830 \longrightarrow 00:03:04.504$ We will have a series of interesting

NOTE Confidence: 0.791893538571429

 $00:03:04.504 \longrightarrow 00:03:07.351$ talks and we will start off the

NOTE Confidence: 0.791893538571429

 $00:03:07.351 \longrightarrow 00:03:09.860$ morning with talks from representative

NOTE Confidence: 0.791893538571429

 $00{:}03{:}09.860 \dashrightarrow 00{:}03{:}13.010$ peas from the I acquired fleet

NOTE Confidence: 0.791893538571429

00:03:13.102 --> 00:03:15.597 Smart and Arcadia CSI trials.

NOTE Confidence: 0.791893538571429

 $00{:}03{:}15.600 \dashrightarrow 00{:}03{:}18.320$ And then that will be followed by Doctor

NOTE Confidence: 0.791893538571429

 $00{:}03{:}18.320 \dashrightarrow 00{:}03{:}20.550$ Richard Benson talking about diversity,

NOTE Confidence: 0.791893538571429

 $00{:}03{:}20.550 \dashrightarrow 00{:}03{:}22.330$ equity and recruitment will have

NOTE Confidence: 0.791893538571429

 $00:03:22.330 \longrightarrow 00:03:25.179$ a little bit of a break at noon.

00:03:25.180 --> 00:03:27.480 Doctor Joe Broderick will be

NOTE Confidence: 0.791893538571429

 $00{:}03{:}27.480 \dashrightarrow 00{:}03{:}29.280$ talking about clinical stroke,

NOTE Confidence: 0.791893538571429

 $00:03:29.280 \longrightarrow 00:03:32.360$ trial networks and particularly in the end.

NOTE Confidence: 0.791893538571429

 $00:03:32.360 \longrightarrow 00:03:35.300$ And yes, stroke net infrastructure

NOTE Confidence: 0.791893538571429

 $00:03:35.300 \longrightarrow 00:03:37.995$ will have lunch at 1:00 to 1:30.

NOTE Confidence: 0.791893538571429

 $00:03:38.000 \longrightarrow 00:03:40.238$ Doctor Benson has kindly agreed to

NOTE Confidence: 0.791893538571429

00:03:40.238 --> 00:03:43.256 talk with our young junior faculty

NOTE Confidence: 0.791893538571429

 $00:03:43.256 \longrightarrow 00:03:45.784$ and Stroke Research fellows.

NOTE Confidence: 0.791893538571429

00:03:45.790 --> 00:03:48.618 Or in training and then the afternoon

NOTE Confidence: 0.791893538571429

00:03:48.618 --> 00:03:51.056 session will be led by Doctor

NOTE Confidence: 0.791893538571429

 $00{:}03{:}51.056 \dashrightarrow 00{:}03{:}53.885$ Jahnke where we will hear from

NOTE Confidence: 0.791893538571429

 $00:03:53.885 \longrightarrow 00:03:57.290$ the P eyes from Aspire Arcadia.

NOTE Confidence: 0.791893538571429

 $00:03:57.290 \longrightarrow 00:03:59.775$ And most and then that will be

NOTE Confidence: 0.791893538571429

 $00:03:59.775 \longrightarrow 00:04:01.389$ followed by research presentations

NOTE Confidence: 0.791893538571429

00:04:01.389 --> 00:04:03.301 from representatives from all

NOTE Confidence: 0.791893538571429

 $00:04:03.301 \longrightarrow 00:04:07.310$ four of our spirit sites.

 $00:04:07.310 \longrightarrow 00:04:08.974$ So without further ado,

NOTE Confidence: 0.791893538571429

 $00:04:08.974 \longrightarrow 00:04:12.208$ we'd like to maybe go ahead and get

NOTE Confidence: 0.791893538571429

 $00{:}04{:}12.208 \dashrightarrow 00{:}04{:}14.248$ started with our first session,

NOTE Confidence: 0.791893538571429

00:04:14.250 --> 00:04:17.306 which in which we'll hear from the P

NOTE Confidence: 0.791893538571429

00:04:17.306 --> 00:04:20.490 eyes from the three trials I acquired,

NOTE Confidence: 0.791893538571429

 $00:04:20.490 \longrightarrow 00:04:23.256$ smart in the Arcadia CSI study.

NOTE Confidence: 0.503081628333333

00:04:26.170 --> 00:04:29.440 At Doctor Ramey or Doctor Lowe,

NOTE Confidence: 0.503081628333333

 $00:04:29.440 \longrightarrow 00:04:32.205$ would you like to share your screen?

NOTE Confidence: 0.857018987142857

 $00:04:33.540 \longrightarrow 00:04:36.795$ Yes, so once you let me share,

NOTE Confidence: 0.857018987142857

 $00:04:36.800 \longrightarrow 00:04:39.761$ I will be happy to pull our

NOTE Confidence: 0.857018987142857

 $00{:}04{:}39.761 \dashrightarrow 00{:}04{:}44.470$ presentation up. Here we are and.

NOTE Confidence: 0.857018987142857

 $00{:}04{:}44.470 \dashrightarrow 00{:}04{:}48.772$ Let me start this slideshow from

NOTE Confidence: 0.857018987142857

 $00{:}04{:}48.772 \dashrightarrow 00{:}04{:}51.705$ here and let me have Sharon

NOTE Confidence: 0.857018987142857

 $00{:}04{:}51.705 \dashrightarrow 00{:}04{:}53.477$ start with the presentation.

NOTE Confidence: 0.818134973333333

00:04:55.160 --> 00:04:57.068 Introduce you both if that's OK.

 $00:04:59.270 \longrightarrow 00:05:01.727$ Thank you Doctor Ramey and Doctor Low

NOTE Confidence: 0.7547118384

 $00{:}05{:}01.727 \dashrightarrow 00{:}05{:}05{.}048$ for joining us today to speak about the

NOTE Confidence: 0.7547118384

 $00{:}05{:}05.048 \dashrightarrow 00{:}05{:}07.243$ I acquired trial studying rehabilitation

NOTE Confidence: 0.7547118384

 $00{:}05{:}07.316 \dashrightarrow 00{:}05{:}10.016$ strategies for paralegal arterial stroke

NOTE Confidence: 0.7547118384

 $00:05:10.020 \longrightarrow 00:05:12.360$ Doctor Shannon Ramey is professor of

NOTE Confidence: 0.7547118384

 $00:05:12.360 \longrightarrow 00:05:14.440$ psychology and professor of psychiatry

NOTE Confidence: 0.7547118384

 $00{:}05{:}14.440 \dashrightarrow 00{:}05{:}17.158$ and Behavioral Medicine at Virginia Tech.

NOTE Confidence: 0.7547118384

 $00:05:17.160 \longrightarrow 00:05:19.656$ Dr Warren Lewis of Pediatric neurologist

NOTE Confidence: 0.7547118384

 $00:05:19.656 \longrightarrow 00:05:21.814$ at Nationwide children and Clinical

NOTE Confidence: 0.7547118384

00:05:21.814 --> 00:05:23.929 professor of Pediatrics and Neurology

NOTE Confidence: 0.7547118384

 $00:05:23.929 \longrightarrow 00:05:26.429$ at Ohio State College of Medicine.

NOTE Confidence: 0.7547118384

 $00:05:26.430 \longrightarrow 00:05:27.550$ So, without further ado.

NOTE Confidence: 0.91218853375

 $00:05:30.720 \longrightarrow 00:05:32.019$ Well, thank you.

NOTE Confidence: 0.91218853375

 $00:05:32.019 \longrightarrow 00:05:35.050$ We're so pleased to be here and

NOTE Confidence: 0.91218853375

 $00:05:35.142 \longrightarrow 00:05:38.028$ today what we hope to accomplish

NOTE Confidence: 0.91218853375

 $00{:}05{:}38.030 \dashrightarrow 00{:}05{:}41.480$ is letting you know the overview,

 $00:05:41.480 \longrightarrow 00:05:43.450$ the design of our study.

NOTE Confidence: 0.91218853375

 $00:05:43.450 \longrightarrow 00:05:46.838$ But we ahead of time received some

NOTE Confidence: 0.91218853375

00:05:46.838 --> 00:05:48.700 wonderful questions from you.

NOTE Confidence: 0.91218853375

 $00:05:48.700 \longrightarrow 00:05:50.695$ One is how did we really pick

NOTE Confidence: 0.91218853375

 $00{:}05{:}50.695 \dashrightarrow 00{:}05{:}52.399$ those dosages for the children?

NOTE Confidence: 0.91218853375

 $00:05:52.400 \longrightarrow 00:05:54.476$ I mean, three hours, six hours,

NOTE Confidence: 0.91218853375

 $00:05:54.480 \longrightarrow 00:05:55.912$ what's what's that rationale?

NOTE Confidence: 0.91218853375

 $00:05:55.912 \longrightarrow 00:05:57.702$ So we'll spend a minute

NOTE Confidence: 0.91218853375

 $00:05:57.702 \longrightarrow 00:05:59.380$ and share that with you,

NOTE Confidence: 0.91218853375

 $00:05:59.380 \longrightarrow 00:06:02.012$ and then we want to let you

NOTE Confidence: 0.91218853375

00:06:02.012 --> 00:06:03.140 know what's innovative,

NOTE Confidence: 0.91218853375

 $00:06:03.140 \longrightarrow 00:06:04.584$ not because we're trying

NOTE Confidence: 0.91218853375

 $00:06:04.584 \longrightarrow 00:06:06.028$ to get funded anymore,

NOTE Confidence: 0.91218853375

 $00{:}06{:}06.030 \dashrightarrow 00{:}06{:}07.980$ but because we hope that those

NOTE Confidence: 0.91218853375

 $00:06:07.980 \longrightarrow 00:06:09.815$ of you who study different

00:06:09.815 --> 00:06:12.130 dimensions of stroke across the

NOTE Confidence: 0.91218853375

 $00{:}06{:}12.130 \dashrightarrow 00{:}06{:}14.465$ life spectrum might think about

NOTE Confidence: 0.91218853375

00:06:14.465 --> 00:06:16.505 some of our innovative features

NOTE Confidence: 0.91218853375

 $00:06:16.505 \longrightarrow 00:06:18.878$ and whether there are things that.

NOTE Confidence: 0.91218853375

00:06:18.878 --> 00:06:22.419 You can adapt to the kind of research you do,

NOTE Confidence: 0.91218853375

 $00:06:22.420 \longrightarrow 00:06:25.900$ especially if you work in rehab and recovery,

NOTE Confidence: 0.91218853375

 $00:06:25.900 \longrightarrow 00:06:28.339$ and then we got it funding for a new,

NOTE Confidence: 0.91218853375

00:06:28.340 --> 00:06:30.338 longer term follow-up will tell you

NOTE Confidence: 0.91218853375

 $00:06:30.338 \longrightarrow 00:06:33.130$ about and then we'll talk about some

NOTE Confidence: 0.91218853375

 $00:06:33.130 \longrightarrow 00:06:34.998$ other opportunities for collaborations,

NOTE Confidence: 0.91218853375

 $00{:}06{:}35.000 \dashrightarrow 00{:}06{:}37.225$ because I always think things

NOTE Confidence: 0.91218853375

 $00:06:37.225 \longrightarrow 00:06:39.450$ like a regional conference really

NOTE Confidence: 0.91218853375

 $00:06:39.521 \longrightarrow 00:06:41.635$ are about what can we do next.

NOTE Confidence: 0.91218853375

00:06:41.640 --> 00:06:45.288 Even better, even bigger, more impactful.

NOTE Confidence: 0.91218853375

00:06:45.290 --> 00:06:49.182 So background on our history PA IS.

NOTE Confidence: 0.91218853375

00:06:49.182 --> 00:06:51.587 Covers both the neonatal period,

 $00:06:51.590 \longrightarrow 00:06:54.320$ the first 28 days of life and

NOTE Confidence: 0.91218853375

 $00:06:54.320 \longrightarrow 00:06:55.490$ also the prenatal.

NOTE Confidence: 0.91218853375

 $00:06:55.490 \longrightarrow 00:06:57.990$ We presume strokes are there

NOTE Confidence: 0.91218853375

 $00:06:57.990 \longrightarrow 00:07:00.490$ based on clinical MRI data.

NOTE Confidence: 0.91218853375

 $00:07:00.490 \longrightarrow 00:07:04.598$ We estimate it's about one in 1100 or 1200.

NOTE Confidence: 0.91218853375

 $00:07:04.598 \longrightarrow 00:07:05.430$ Live verse,

NOTE Confidence: 0.91218853375

00:07:05.430 --> 00:07:09.273 so really much more common than people

NOTE Confidence: 0.91218853375

 $00:07:09.273 \longrightarrow 00:07:11.610$ recognize and hemiparesis occurs.

NOTE Confidence: 0.91218853375

 $00{:}07{:}11.610 \dashrightarrow 00{:}07{:}14.116$ Maybe in about 40% of the children.

NOTE Confidence: 0.91218853375

 $00:07:14.120 \longrightarrow 00:07:17.270$ It's the most common lifelong,

NOTE Confidence: 0.91218853375

00:07:17.270 --> 00:07:18.530 under a motor impairment,

NOTE Confidence: 0.91218853375

 $00:07:18.530 \longrightarrow 00:07:21.170$ and many of the children have impairments.

NOTE Confidence: 0.91218853375

 $00{:}07{:}21.170 \dashrightarrow 00{:}07{:}22.906$ And other developmental domains.

NOTE Confidence: 0.91218853375

00:07:22.906 --> 00:07:25.510 The biggest thing is that when

NOTE Confidence: 0.91218853375

 $00:07:25.579 \longrightarrow 00:07:26.749$ we launched this,

 $00:07:26.750 \longrightarrow 00:07:30.398$ there was and still is not a true

NOTE Confidence: 0.91218853375

 $00{:}07{:}30.398 \dashrightarrow 00{:}07{:}34.486$ consensus on how best to treat the children,

NOTE Confidence: 0.91218853375

 $00:07:34.490 \longrightarrow 00:07:36.920$ so they usually are referred for

NOTE Confidence: 0.91218853375

 $00:07:36.920 \longrightarrow 00:07:39.907$ therapy and then the therapy is a

NOTE Confidence: 0.91218853375

 $00:07:39.907 \longrightarrow 00:07:42.475$ combination of whatever the parents and

NOTE Confidence: 0.91218853375

00:07:42.475 --> 00:07:45.970 and the receiving referral specialists say.

NOTE Confidence: 0.91218853375

00:07:45.970 --> 00:07:48.556 Usually the children get OT and

NOTE Confidence: 0.91218853375

 $00:07:48.556 \longrightarrow 00:07:50.940$ PT often couple hours a week.

NOTE Confidence: 0.91218853375

 $00{:}07{:}50.940 \dashrightarrow 00{:}07{:}53.817$ That's increased a little over the years.

NOTE Confidence: 0.91218853375

 $00:07:53.820 \longrightarrow 00:07:55.878$ And it's really not evidence based.

NOTE Confidence: 0.91218853375

 $00:07:55.880 \longrightarrow 00:07:58.922$ It's not highly specified and there's

NOTE Confidence: 0.91218853375

 $00:07:58.922 \longrightarrow 00:08:02.297$ been no infant toddler trial of

NOTE Confidence: 0.91218853375

00:08:02.297 --> 00:08:05.437 either constraint induced movement therapy.

NOTE Confidence: 0.91218853375

 $00:08:05.440 \longrightarrow 00:08:08.260$ The version adapted for children which

NOTE Confidence: 0.91218853375

 $00:08:08.260 \longrightarrow 00:08:13.810$ has been tested from age 3 up and small.

NOTE Confidence: 0.91218853375

00:08:13.810 --> 00:08:15.590 Phase One phase two trials,

 $00:08:15.590 \longrightarrow 00:08:17.638$ but no adequately powered

NOTE Confidence: 0.91218853375

00:08:17.638 --> 00:08:19.174 infant toddler trial,

NOTE Confidence: 0.91218853375

 $00:08:19.180 \longrightarrow 00:08:23.010$ focused solely on children who have the

NOTE Confidence: 0.91218853375

 $00:08:23.010 \longrightarrow 00:08:27.460$ etiology of PA IS now when we designed it.

NOTE Confidence: 0.91218853375

00:08:27.460 --> 00:08:30.020 Next slide.

NOTE Confidence: 0.91218853375

 $00:08:30.020 \longrightarrow 00:08:32.684$ We did this because some of our team

NOTE Confidence: 0.91218853375

 $00:08:32.684 \longrightarrow 00:08:35.765$ were among the people who did the very

NOTE Confidence: 0.91218853375

 $00:08:35.765 \longrightarrow 00:08:38.389$ first adaptation from adult to Pediatrics.

NOTE Confidence: 0.91218853375

 $00:08:38.390 \longrightarrow 00:08:40.166$ I was part of that team.

NOTE Confidence: 0.91218853375

00:08:40.170 --> 00:08:41.206 Great honor,

NOTE Confidence: 0.91218853375

 $00:08:41.206 \longrightarrow 00:08:42.242$ great challenge.

NOTE Confidence: 0.91218853375

 $00:08:42.242 \longrightarrow 00:08:45.350$ We've already done three other multi

NOTE Confidence: 0.91218853375

 $00{:}08{:}45.434 \dashrightarrow 00{:}08{:}47.944$ site worked for older children

NOTE Confidence: 0.91218853375

 $00{:}08{:}47.944 \dashrightarrow 00{:}08{:}50.454$ and testing various components of

NOTE Confidence: 0.91218853375

 $00:08:50.541 \longrightarrow 00:08:53.369$ constraint induced movement therapy.

 $00:08:53.370 \longrightarrow 00:08:56.220$ And why did we pick dosage?

NOTE Confidence: 0.91218853375

 $00{:}08{:}56.220 \dashrightarrow 00{:}09{:}00.408$ It is the single most controversial

NOTE Confidence: 0.91218853375

 $00:09:00.408 \longrightarrow 00:09:05.222$ thing many parents but especially

NOTE Confidence: 0.91218853375

 $00:09:05.222 \longrightarrow 00:09:07.218$ clinicians MD's think.

NOTE Confidence: 0.91218853375

 $00:09:07.218 \longrightarrow 00:09:10.606$ Our original dose 6 hours a day.

NOTE Confidence: 0.91218853375

 $00:09:10.610 \longrightarrow 00:09:12.640$ Originally we did it for 21

NOTE Confidence: 0.91218853375

 $00:09:12.640 \longrightarrow 00:09:15.580$ days like that is way too much.

NOTE Confidence: 0.91218853375

 $00:09:15.580 \longrightarrow 00:09:18.020$ What child can have six hours of therapy?

NOTE Confidence: 0.888240480666667

00:09:18.020 --> 00:09:19.874 Well if you're thinking of therapy

NOTE Confidence: 0.888240480666667

 $00:09:19.874 \longrightarrow 00:09:22.435$ like a child sitting in a chair at a

NOTE Confidence: 0.888240480666667

 $00{:}09{:}22.435 \dashrightarrow 00{:}09{:}24.021$ table and someone handing the child

NOTE Confidence: 0.888240480666667

 $00:09:24.021 \longrightarrow 00:09:26.133$ of lock and making them pick up the

NOTE Confidence: 0.888240480666667

00:09:26.133 --> 00:09:28.038 block and doing that for six hours,

NOTE Confidence: 0.888240480666667

 $00:09:28.040 \longrightarrow 00:09:29.468$ it would be atrocious.

NOTE Confidence: 0.888240480666667

 $00:09:29.468 \longrightarrow 00:09:33.697$ But what we do is in the home it's play like.

NOTE Confidence: 0.888240480666667

 $00:09:33.700 \longrightarrow 00:09:36.780$ It includes self-help skills kids.

 $00:09:36.780 \longrightarrow 00:09:39.284$ Have you ever met a baby or toddler?

NOTE Confidence: 0.888240480666667

 $00:09:39.290 \longrightarrow 00:09:41.684$ When he or she is awake, who doesn't

NOTE Confidence: 0.888240480666667

 $00:09:41.684 \longrightarrow 00:09:44.300$ love to be played with and have fun?

NOTE Confidence: 0.888240480666667

00:09:44.300 --> 00:09:47.360 Especially if it's fun with objects

NOTE Confidence: 0.888240480666667

 $00:09:47.360 \longrightarrow 00:09:50.288$ and people they like to hang out with.

NOTE Confidence: 0.888240480666667

 $00:09:50.290 \longrightarrow 00:09:52.719$ So children are active all day long

NOTE Confidence: 0.888240480666667

 $00:09:52.719 \longrightarrow 00:09:54.502$ and basically the therapy becomes

NOTE Confidence: 0.888240480666667

 $00:09:54.502 \longrightarrow 00:09:56.847$ integrated and we do it in the

NOTE Confidence: 0.888240480666667

00:09:56.850 --> 00:09:59.994 children's homes and then this,

NOTE Confidence: 0.888240480666667

 $00:09:59.994 \longrightarrow 00:10:00.870$ why dosage?

NOTE Confidence: 0.888240480666667

 $00:10:00.870 \longrightarrow 00:10:03.990$ We wanted to really cover today and in

NOTE Confidence: 0.888240480666667

 $00:10:03.990 \longrightarrow 00:10:06.127$ psychology going back to really the

NOTE Confidence: 0.888240480666667

 $00{:}10{:}06.130 \dashrightarrow 00{:}10{:}08.426$ 1930s and 40s there was this idea.

NOTE Confidence: 0.888240480666667

 $00:10:08.430 \longrightarrow 00:10:09.996$ If you want a new habit.

NOTE Confidence: 0.888240480666667

 $00:10:10.000 \longrightarrow 00:10:11.968$ For the rest of your life.

 $00:10:11.970 \longrightarrow 00:10:14.970$ Do it for 21 days in a row.

NOTE Confidence: 0.888240480666667

00:10:14.970 --> 00:10:16.926 I will confess the evidence behind.

NOTE Confidence: 0.888240480666667

00:10:16.930 --> 00:10:18.940 It's like mediocre at best,

NOTE Confidence: 0.888240480666667

 $00:10:18.940 \longrightarrow 00:10:21.480$ but it was widely accepted.

NOTE Confidence: 0.888240480666667

 $00:10:21.480 \longrightarrow 00:10:24.056$ Do it for 21 days and if you

NOTE Confidence: 0.888240480666667

00:10:24.056 --> 00:10:25.010 haven't tried it,

NOTE Confidence: 0.888240480666667

 $00:10:25.010 \longrightarrow 00:10:27.709$ 21 isn't a bad beginning for

NOTE Confidence: 0.888240480666667

 $00:10:27.709 \longrightarrow 00:10:28.756$ changing your habit.

NOTE Confidence: 0.888240480666667

00:10:28.756 --> 00:10:30.850 If you've ever tried to do

NOTE Confidence: 0.888240480666667

 $00:10:30.927 \longrightarrow 00:10:33.258$ something that many days in a row.

NOTE Confidence: 0.888240480666667

 $00{:}10{:}33.260 \dashrightarrow 00{:}10{:}36.627$ So that's where we got the idea

NOTE Confidence: 0.888240480666667

00:10:36.627 --> 00:10:39.900 originally and the idea of six hours.

NOTE Confidence: 0.888240480666667

 $00{:}10{:}39.900 --> 00{:}10{:}40.241 \ \mathrm{Well},$

NOTE Confidence: 0.888240480666667 00:10:40.241 --> 00:10:40.923 six hours,

•

NOTE Confidence: 0.888240480666667

 $00:10:40.923 \longrightarrow 00:10:43.310$ is about the number of hours that

NOTE Confidence: 0.888240480666667

 $00{:}10{:}43.380 \dashrightarrow 00{:}10{:}45.236$ typically developing children are

 $00:10:45.236 \longrightarrow 00:10:48.020$ really active and awake and alert.

NOTE Confidence: 0.888240480666667

 $00{:}10{:}48.020 \dashrightarrow 00{:}10{:}50.606$ It also corresponds to the school

NOTE Confidence: 0.888240480666667

00:10:50.606 --> 00:10:53.280 day it corresponds to child care.

NOTE Confidence: 0.888240480666667

 $00:10:53.280 \longrightarrow 00:10:55.230$ If you subtract out the hours

NOTE Confidence: 0.888240480666667

 $00:10:55.230 \longrightarrow 00:10:57.100$ they spend napping and resting,

NOTE Confidence: 0.888240480666667

00:10:57.100 --> 00:10:59.796 so it's roughly what a full day of

NOTE Confidence: 0.888240480666667

00:10:59.796 --> 00:11:03.290 activity is. So that's why 6 hours.

NOTE Confidence: 0.888240480666667

 $00:11:03.290 \longrightarrow 00:11:06.170$ And then three hours is half a day,

NOTE Confidence: 0.888240480666667

 $00{:}11{:}06.170 \dashrightarrow 00{:}11{:}09.236$ and in other trials we have tested

NOTE Confidence: 0.888240480666667

 $00{:}11{:}09.236 \dashrightarrow 00{:}11{:}12.854$ 3 hours and have shown it does

NOTE Confidence: 0.888240480666667

00:11:12.854 --> 00:11:15.614 produce significant gains and they

NOTE Confidence: 0.888240480666667

 $00:11:15.614 \longrightarrow 00:11:18.549$ last at least for six months.

NOTE Confidence: 0.888240480666667

 $00{:}11{:}18.550 \dashrightarrow 00{:}11{:}21.790$ And I'm under an embargo from

NOTE Confidence: 0.888240480666667

 $00:11:21.790 \longrightarrow 00:11:23.410$ the journal Pediatrics,

NOTE Confidence: 0.888240480666667

 $00:11:23.410 \longrightarrow 00:11:27.074$ but one week from today we have an

 $00:11:27.074 \longrightarrow 00:11:29.602$ article coming out in Pediatrics

NOTE Confidence: 0.888240480666667

00:11:29.602 --> 00:11:32.632 comparing dosage for three to 8

NOTE Confidence: 0.888240480666667

 $00:11:32.632 \longrightarrow 00:11:35.324$ year old children with hemiparesis

NOTE Confidence: 0.888240480666667

00:11:35.324 --> 00:11:38.830 and we test and even lower dosage

NOTE Confidence: 0.888240480666667

 $00:11:38.830 \longrightarrow 00:11:40.630$ than what we are doing,

NOTE Confidence: 0.888240480666667

 $00{:}11{:}40.630 \dashrightarrow 00{:}11{:}42.905$ and I acquired and turns out that

NOTE Confidence: 0.888240480666667

 $00:11:42.905 \longrightarrow 00:11:44.616$ really lower dosage didn't produce

NOTE Confidence: 0.888240480666667

 $00:11:44.616 \longrightarrow 00:11:46.975$ the changes I'm allowed to tell you

NOTE Confidence: 0.888240480666667

00:11:46.975 --> 00:11:49.396 that since we've said that previously.

NOTE Confidence: 0.888240480666667

 $00:11:49.400 \longrightarrow 00:11:51.367$ But Will put up the article on

NOTE Confidence: 0.888240480666667

 $00{:}11{:}51.367 \dashrightarrow 00{:}11{:}53.579$ stroke net on for you to be able

NOTE Confidence: 0.888240480666667

00:11:53.579 --> 00:11:55.660 to access those of you interested.

NOTE Confidence: 0.888240480666667

 $00:11:55.660 \longrightarrow 00:11:57.622$ And then the other thing we're

NOTE Confidence: 0.888240480666667

00:11:57.622 --> 00:12:00.156 doing is we're getting a lot of

NOTE Confidence: 0.888240480666667

 $00:12:00.156 \longrightarrow 00:12:02.096$ parent ratings besides our blinded

NOTE Confidence: 0.888240480666667

 $00:12:02.096 \longrightarrow 00:12:02.872$ objective outcomes,

00:12:02.880 --> 00:12:05.820 because no matter how talented

NOTE Confidence: 0.888240480666667

 $00:12:05.820 \longrightarrow 00:12:07.584$ and assessor is.

NOTE Confidence: 0.888240480666667

 $00:12:07.590 \longrightarrow 00:12:10.407$ A two hour session or even a 3 hour

NOTE Confidence: 0.888240480666667

 $00:12:10.407 \longrightarrow 00:12:12.947$ session with an infant doesn't tell

NOTE Confidence: 0.888240480666667

 $00:12:12.947 \longrightarrow 00:12:15.188$ you everything about that child's

NOTE Confidence: 0.888240480666667

00:12:15.188 --> 00:12:17.778 repertoire and demonstrated everyday skills.

NOTE Confidence: 0.888240480666667

 $00:12:17.780 \longrightarrow 00:12:20.258$ So of course the primary measure

NOTE Confidence: 0.888240480666667

 $00{:}12{:}20.258 \dashrightarrow 00{:}12{:}22.770$ will rely on blinded objective.

NOTE Confidence: 0.888240480666667

00:12:22.770 --> 00:12:24.835 But we highly value parent

NOTE Confidence: 0.888240480666667

 $00{:}12{:}24.835 \rightarrow 00{:}12{:}27.330$ perspectives and I think we're the

NOTE Confidence: 0.888240480666667

00:12:27.330 --> 00:12:29.815 maybe the only trial that from the

NOTE Confidence: 0.888240480666667

00:12:29.815 --> 00:12:32.224 very first application and all the

NOTE Confidence: 0.888240480666667

 $00{:}12{:}32.224 \dashrightarrow 00{:}12{:}34.660$ way through we've had a consumer

NOTE Confidence: 0.92701178

00:12:34.660 --> 00:12:37.878 or patient. In our case, parent council.

NOTE Confidence: 0.92701178

00:12:37.878 --> 00:12:42.098 As partners in our research.

 $00:12:42.100 \longrightarrow 00:12:45.444$ This is just to show you that the

NOTE Confidence: 0.92701178

 $00:12:45.444 \longrightarrow 00:12:47.998$ preliminary data we had on 24 infants

NOTE Confidence: 0.92701178

 $00:12:47.998 \longrightarrow 00:12:51.071$ and toddlers showed that they met or

NOTE Confidence: 0.92701178

00:12:51.071 --> 00:12:53.940 exceeded what we said is our threshold,

NOTE Confidence: 0.92701178

 $00:12:53.940 \longrightarrow 00:12:57.279$ which is the child will acquire 7.

NOTE Confidence: 0.92701178

 $00{:}12{:}57.280 \dashrightarrow 00{:}13{:}00.820$ Brand new emerging behavior skills.

NOTE Confidence: 0.92701178

 $00{:}13{:}00.820 \dashrightarrow 00{:}13{:}03.669$ EBS within a four week period and

NOTE Confidence: 0.92701178

 $00:13:03.669 \longrightarrow 00:13:07.017$ for a little baby doing 7 brand new

NOTE Confidence: 0.92701178

 $00{:}13{:}07.017 \dashrightarrow 00{:}13{:}09.938$ things with arm in hand is a lot.

NOTE Confidence: 0.92701178

 $00:13:09.940 \longrightarrow 00:13:10.816$ Next slide.

NOTE Confidence: 0.92701178

00:13:10.816 --> 00:13:13.882 OK, Warren is going to take you

NOTE Confidence: 0.92701178

 $00:13:13.882 \longrightarrow 00:13:16.623$ through a few minutes of a live

NOTE Confidence: 0.92701178

00:13:16.623 --> 00:13:19.098 session and we have four other

NOTE Confidence: 0.92701178

00:13:19.098 --> 00:13:22.230 video tape examples on our I acquire

NOTE Confidence: 0.92701178

 $00:13:22.230 \longrightarrow 00:13:24.810$ website on stroke Note stroke NET.

NOTE Confidence: 0.92701178

 $00:13:24.810 \longrightarrow 00:13:26.762$ If you want to see even more examples

 $00:13:26.762 \longrightarrow 00:13:28.831$ of what's it really look like when

NOTE Confidence: 0.92701178

 $00:13:28.831 \longrightarrow 00:13:30.220$ we're doing treatment, Warren.

NOTE Confidence: 0.902730250909091

00:13:30.830 --> 00:13:33.246 Sure, let me start the video here and

NOTE Confidence: 0.902730250909091

 $00:13:33.246 \longrightarrow 00:13:35.638$ there's no audio, so I'll voice over.

NOTE Confidence: 0.902730250909091

 $00:13:35.638 \longrightarrow 00:13:38.449$ But the purpose of showing you this five

NOTE Confidence: 0.902730250909091

00:13:38.449 --> 00:13:41.659 minute clip is to really illustrate some key

NOTE Confidence: 0.902730250909091

 $00:13:41.659 \longrightarrow 00:13:45.117$ elements of the acquire protocol number one.

NOTE Confidence: 0.902730250909091

 $00:13:45.120 \longrightarrow 00:13:48.264$ As Sharon said, the real challenge for the

NOTE Confidence: 0.902730250909091

 $00:13:48.264 \longrightarrow 00:13:51.267$ the rapist is to try to stimulate the child,

NOTE Confidence: 0.902730250909091

 $00:13:51.270 \longrightarrow 00:13:53.430$ so this becomes a positive experience

NOTE Confidence: 0.902730250909091

 $00:13:53.430 \longrightarrow 00:13:55.815$ to try to find those things

NOTE Confidence: 0.902730250909091

 $00:13:55.815 \longrightarrow 00:13:57.567$ that motivates the child.

NOTE Confidence: 0.902730250909091

 $00{:}13{:}57.570 \dashrightarrow 00{:}13{:}59.892$ As you can see, this is at the very

NOTE Confidence: 0.902730250909091

 $00{:}13{:}59.892 \dashrightarrow 00{:}14{:}01.358$ beginning of the intervention.

NOTE Confidence: 0.902730250909091

 $00:14:01.360 \longrightarrow 00:14:02.880$ And he's not particularly convinced

 $00:14:02.880 \longrightarrow 00:14:05.240$ that this is in his best interest,

NOTE Confidence: 0.902730250909091

 $00:14:05.240 \longrightarrow 00:14:08.450$ so she's trying to number one.

NOTE Confidence: 0.902730250909091

 $00:14:08.450 \longrightarrow 00:14:13.175$ Stimulate him to use that affected extremity,

NOTE Confidence: 0.902730250909091

 $00:14:13.180 \longrightarrow 00:14:14.071$ the right arm,

NOTE Confidence: 0.902730250909091

 $00:14:14.071 \longrightarrow 00:14:16.690$ and to try to get him to reach.

NOTE Confidence: 0.902730250909091

00:14:16.690 --> 00:14:18.480 And he's obviously not getting

NOTE Confidence: 0.902730250909091

 $00:14:18.480 \longrightarrow 00:14:20.760$ it at this very early stage,

NOTE Confidence: 0.902730250909091

 $00:14:20.760 \longrightarrow 00:14:23.448$ but the goal is to try to

NOTE Confidence: 0.902730250909091

 $00{:}14{:}23.448 \dashrightarrow 00{:}14{:}25.590$ start with simple movements.

NOTE Confidence: 0.902730250909091

00:14:25.590 --> 00:14:28.230 First extension of that hand,

NOTE Confidence: 0.902730250909091

 $00{:}14{:}28.230 \mathrel{--}{>} 00{:}14{:}30.750$ and not extension of the arm,

NOTE Confidence: 0.902730250909091

 $00:14:30.750 \longrightarrow 00:14:32.278$ and not really engaging.

NOTE Confidence: 0.902730250909091

 $00:14:32.278 \longrightarrow 00:14:34.188$ In a more complex measure,

NOTE Confidence: 0.902730250909091

 $00:14:34.190 \longrightarrow 00:14:37.136$ and so this illustrates really a

NOTE Confidence: 0.902730250909091

 $00:14:37.136 \longrightarrow 00:14:39.582$ couple of principles we're trying

NOTE Confidence: 0.902730250909091

 $00:14:39.582 \longrightarrow 00:14:41.466$ to shape the child's behavior.

 $00:14:41.466 \longrightarrow 00:14:43.554$ You're going to see that at

NOTE Confidence: 0.902730250909091

 $00:14:43.554 \longrightarrow 00:14:45.438$ the end of this sequence,

NOTE Confidence: 0.902730250909091

 $00:14:45.440 \longrightarrow 00:14:47.575$ she gives him a hug and gives

NOTE Confidence: 0.902730250909091

 $00:14:47.575 \longrightarrow 00:14:48.929$ him some positive feedback,

NOTE Confidence: 0.902730250909091

 $00:14:48.929 \longrightarrow 00:14:52.002$ so she's really trying to use operant

NOTE Confidence: 0.902730250909091

 $00{:}14{:}52.002 \dashrightarrow 00{:}14{:}54.288$ conditioning to gradually promote the

NOTE Confidence: 0.902730250909091

00:14:54.288 --> 00:14:57.410 behavior that she wants him to accomplish,

NOTE Confidence: 0.902730250909091

00:14:57.410 --> 00:14:59.349 and the other obvious feature is that

NOTE Confidence: 0.902730250909091

 $00:14:59.349 \longrightarrow 00:15:01.247$ this is occurring in the home setting,

NOTE Confidence: 0.902730250909091

 $00:15:01.250 \longrightarrow 00:15:02.756$ so it's easier for the child.

NOTE Confidence: 0.902730250909091

 $00:15:02.760 \longrightarrow 00:15:05.334$ Really generalized this skills that he's

NOTE Confidence: 0.902730250909091

00:15:05.334 --> 00:15:08.340 learned here to the home environment,

NOTE Confidence: 0.902730250909091

 $00:15:08.340 \longrightarrow 00:15:09.320$ so you can say, well,

NOTE Confidence: 0.902730250909091

 $00:15:09.320 \longrightarrow 00:15:10.406$ he's still fussing.

NOTE Confidence: 0.902730250909091

 $00:15:10.406 \longrightarrow 00:15:12.216$ What has she really accomplished,

 $00:15:12.220 \longrightarrow 00:15:14.724$ but you can see that he is actually

NOTE Confidence: 0.902730250909091

 $00{:}15{:}14.724 \to 00{:}15{:}16.978$ beginning to reach out spontaneously.

NOTE Confidence: 0.902730250909091

00:15:16.980 --> 00:15:19.320 She doesn't have to she she?

NOTE Confidence: 0.902730250909091

00:15:19.320 --> 00:15:22.464 She does promote or assist him

NOTE Confidence: 0.902730250909091

 $00:15:22.464 \longrightarrow 00:15:25.070$ in out stretching his arm,

NOTE Confidence: 0.902730250909091

 $00:15:25.070 \longrightarrow 00:15:27.614$ but he's beginning to do this

NOTE Confidence: 0.902730250909091

 $00:15:27.614 \longrightarrow 00:15:28.886$ spontaneously by himself.

NOTE Confidence: 0.902730250909091

 $00:15:28.890 \longrightarrow 00:15:30.390$ He's opening the fingers,

NOTE Confidence: 0.902730250909091

 $00:15:30.390 \longrightarrow 00:15:31.890$ he's opening the hand.

NOTE Confidence: 0.902730250909091

 $00:15:31.890 \longrightarrow 00:15:33.966$ It is clearly still a struggle.

NOTE Confidence: 0.902730250909091

 $00{:}15{:}33.970 \dashrightarrow 00{:}15{:}36.544$ But now he's beginning to reach

NOTE Confidence: 0.902730250909091

 $00:15:36.544 \longrightarrow 00:15:40.280$ out for the toy in a more positive

NOTE Confidence: 0.902730250909091

 $00:15:40.280 \longrightarrow 00:15:42.175$ and more voluntary demonstration

NOTE Confidence: 0.902730250909091

00:15:42.175 --> 00:15:44.845 of what you're trying to achieve.

NOTE Confidence: 0.902730250909091 00:15:44.850 --> 00:15:45.484 Now,

NOTE Confidence: 0.902730250909091

 $00:15:45.484 \longrightarrow 00:15:48.654$ this illustrates that with this

00:15:48.654 --> 00:15:50.556 continued operant conditioning,

NOTE Confidence: 0.902730250909091

 $00:15:50.560 \longrightarrow 00:15:52.414$ this is now becoming a more

NOTE Confidence: 0.902730250909091

 $00:15:52.414 \longrightarrow 00:15:54.060$ positive activity for the child.

NOTE Confidence: 0.902730250909091

 $00:15:54.060 \longrightarrow 00:15:55.664$ He's no longer struggling.

NOTE Confidence: 0.902730250909091

00:15:55.664 --> 00:15:57.268 He's actually reaching out.

NOTE Confidence: 0.902730250909091

00:15:57.270 --> 00:16:00.310 He's using that impaired extremity,

NOTE Confidence: 0.902730250909091

 $00:16:00.310 \longrightarrow 00:16:02.430$ and it's important to demonstrate

NOTE Confidence: 0.902730250909091

 $00:16:02.430 \longrightarrow 00:16:04.126$ that it's not just.

NOTE Confidence: 0.902730250909091

 $00{:}16{:}04.130 \dashrightarrow 00{:}16{:}06.980$ Repetitions movement of the impaired arm.

NOTE Confidence: 0.902730250909091

 $00:16:06.980 \longrightarrow 00:16:09.780$ He is clearly using the casted arms,

NOTE Confidence: 0.902730250909091

00:16:09.780 --> 00:16:12.405 so this is a bimanual activity and

NOTE Confidence: 0.902730250909091

 $00:16:12.405 \longrightarrow 00:16:14.885$ the therapist is trying to stimulate

NOTE Confidence: 0.902730250909091

 $00{:}16{:}14.885 \dashrightarrow 00{:}16{:}17.435$ him to use whole body movements.

NOTE Confidence: 0.902730250909091

00:16:17.440 --> 00:16:19.936 So it's not just her sitting or him

NOTE Confidence: 0.902730250909091

 $00:16:19.936 \longrightarrow 00:16:22.606$ sitting in a chair with her repeatedly

00:16:22.606 --> 00:16:24.920 stretching and flexing his arm,

NOTE Confidence: 0.902730250909091

 $00:16:24.920 \longrightarrow 00:16:28.052$ but it's a more complex functional

NOTE Confidence: 0.902730250909091

 $00:16:28.052 \longrightarrow 00:16:31.640$ series of movements for the child to

NOTE Confidence: 0.902730250909091

 $00:16:31.640 \longrightarrow 00:16:34.460$ reach to crawl to support himself.

NOTE Confidence: 0.902730250909091

 $00:16:34.460 \longrightarrow 00:16:36.959$ To open the uh fingers of that

NOTE Confidence: 0.902730250909091

 $00:16:36.959 \longrightarrow 00:16:39.844$ right hand and you can see that

NOTE Confidence: 0.902730250909091

 $00:16:39.844 \longrightarrow 00:16:42.004$ compared to those initial clips,

NOTE Confidence: 0.902730250909091

 $00:16:42.010 \longrightarrow 00:16:44.530$ he's now a much more functionally

NOTE Confidence: 0.902730250909091

 $00:16:44.530 \longrightarrow 00:16:46.210$ using that impaired extremity.

NOTE Confidence: 0.902730250909091

 $00:16:46.210 \longrightarrow 00:16:48.625$ She has that toy that she's trying

NOTE Confidence: 0.902730250909091

 $00{:}16{:}48.625 \operatorname{--}{>} 00{:}16{:}51.350$ to get him that she'll position,

NOTE Confidence: 0.902730250909091

 $00:16:51.350 \longrightarrow 00:16:52.886$ and then this clip,

NOTE Confidence: 0.902730250909091

 $00:16:52.886 \longrightarrow 00:16:55.190$ and then the following concluding clip

NOTE Confidence: 0.940127760333333

00:16:55.258 --> 00:16:57.308 demonstrates the change that's really

NOTE Confidence: 0.940127760333333

00:16:57.308 --> 00:17:00.171 occurred within a two to three week

NOTE Confidence: 0.940127760333333

00:17:00.171 --> 00:17:02.391 interval from a child who's fussing

 $00:17:02.391 \longrightarrow 00:17:05.030$ who's not able to use that extremity.

NOTE Confidence: 0.940127760333333

 $00{:}17{:}05.030 \dashrightarrow 00{:}17{:}07.130$ He's now able to support himself.

NOTE Confidence: 0.940127760333333

 $00:17:07.130 \longrightarrow 00:17:08.466$ He's able to crawl.

NOTE Confidence: 0.940127760333333

00:17:08.466 --> 00:17:11.742 You can see that he has a a really

NOTE Confidence: 0.940127760333333

 $00:17:11.742 \longrightarrow 00:17:13.722$ a right sided hemiparesis that

NOTE Confidence: 0.940127760333333

00:17:13.722 --> 00:17:16.388 right leg is not fully extending,

NOTE Confidence: 0.940127760333333

00:17:16.390 --> 00:17:18.686 but he's able to use it much more

NOTE Confidence: 0.940127760333333

 $00:17:18.686 \longrightarrow 00:17:20.832$ functionally than he was before, so again,

NOTE Confidence: 0.940127760333333

 $00{:}17{:}20.832 \dashrightarrow 00{:}17{:}22.998$ the emphasis is not just repetitive

NOTE Confidence: 0.940127760333333

00:17:22.998 --> 00:17:25.238 movement of the apparent extremity,

NOTE Confidence: 0.940127760333333

00:17:25.240 --> 00:17:27.753 but really bilateral use of the upper

NOTE Confidence: 0.940127760333333

 $00:17:27.753 \longrightarrow 00:17:29.523$ extremities and more functional use

NOTE Confidence: 0.940127760333333

 $00{:}17{:}29.523 \dashrightarrow 00{:}17{:}32.043$ of the body and then the final clip.

NOTE Confidence: 0.940127760333333

 $00:17:32.050 \longrightarrow 00:17:35.200$ I think really demonstrates and excuse the.

NOTE Confidence: 0.940127760333333

 $00:17:35.200 \longrightarrow 00:17:39.090$ Relaxed attire for this particular example,

 $00:17:39.090 \longrightarrow 00:17:42.520$ but you can see that he's spontaneously

NOTE Confidence: 0.940127760333333

 $00:17:42.520 \longrightarrow 00:17:46.599$ going to position himself into the crawling.

NOTE Confidence: 0.940127760333333

 $00:17:46.600 \longrightarrow 00:17:49.402$ Positioning he crawls over to this

NOTE Confidence: 0.940127760333333

 $00:17:49.402 \longrightarrow 00:17:51.502$ toy and you can see that he's

NOTE Confidence: 0.940127760333333

00:17:51.502 --> 00:17:53.250 actively trying to reach out for it,

NOTE Confidence: 0.940127760333333

 $00:17:53.250 \longrightarrow 00:17:55.440$ and at the very end of the clip he will

NOTE Confidence: 0.940127760333333

 $00:17:55.505 \longrightarrow 00:17:57.584$ actually reach out and grasp the toy.

NOTE Confidence: 0.940127760333333 00:17:57.590 --> 00:17:58.104 So really, NOTE Confidence: 0.940127760333333

 $00:17:58.104 \longrightarrow 00:18:00.160$ over a 3 three and a half week

NOTE Confidence: 0.940127760333333

 $00:18:00.232 \longrightarrow 00:18:02.002$ interval you can see that with

NOTE Confidence: 0.940127760333333

 $00{:}18{:}02.002 \dashrightarrow 00{:}18{:}04.544$ with a child who clearly has a

NOTE Confidence: 0.940127760333333

 $00{:}18{:}04.544 \dashrightarrow 00{:}18{:}06.268$ right upper extremity hemiparesis,

NOTE Confidence: 0.940127760333333

 $00:18:06.270 \longrightarrow 00:18:11.065$ the intervention is extended his his use.

NOTE Confidence: 0.940127760333333

 $00:18:11.070 \dashrightarrow 00:18:15.680$ But really in a play like in a home like.

NOTE Confidence: 0.940127760333333

00:18:15.680 --> 00:18:16.015 Environment,

NOTE Confidence: 0.940127760333333

 $00:18:16.015 \longrightarrow 00:18:18.695$ so let me move to the next slide.

00:18:18.700 --> 00:18:21.276 So how's the acquired trials set up?

NOTE Confidence: 0.940127760333333 00:18:21.280 --> 00:18:21.770 Well,

NOTE Confidence: 0.940127760333333

00:18:21.770 --> 00:18:24.933 we're going to recruit 240 children and

NOTE Confidence: 0.940127760333333

 $00:18:24.933 \longrightarrow 00:18:27.740$ they will be randomized into equal groups.

NOTE Confidence: 0.940127760333333

00:18:27.740 --> 00:18:29.924 I don't know if my mouse displays it,

NOTE Confidence: 0.940127760333333

 $00:18:29.930 \longrightarrow 00:18:32.096$ but one group will get the

NOTE Confidence: 0.940127760333333

00:18:32.096 --> 00:18:34.329 moderate 3 hour per day dose.

NOTE Confidence: 0.940127760333333

 $00{:}18{:}34{.}330 \dashrightarrow 00{:}18{:}39{.}316$ One group will get the six hour high dose

NOTE Confidence: 0.940127760333333

 $00:18:39.320 \longrightarrow 00:18:42.512$ treatment and then 80 children will be

NOTE Confidence: 0.940127760333333

 $00{:}18{:}42.512 \dashrightarrow 00{:}18{:}45.458$ randomized to usual and customary care.

NOTE Confidence: 0.940127760333333

 $00:18:45.460 \longrightarrow 00:18:47.866$ Whatever they can receive within the

NOTE Confidence: 0.940127760333333

00:18:47.866 --> 00:18:50.508 community to serve as a control arm,

NOTE Confidence: 0.940127760333333

 $00{:}18{:}50.510 \dashrightarrow 00{:}18{:}52.844$ there will be a baseline assessment

NOTE Confidence: 0.940127760333333

00:18:52.844 --> 00:18:55.479 using both blinded and parent ratings,

NOTE Confidence: 0.940127760333333

 $00:18:55.480 \longrightarrow 00:18:57.888$ the children will be treated and the

00:18:57.888 --> 00:18:59.724 active treatment will be centrally

NOTE Confidence: 0.940127760333333

 $00:18:59.724 \longrightarrow 00:19:01.932$ monitored for fidelity and then the

NOTE Confidence: 0.940127760333333

 $00:19:01.932 \longrightarrow 00:19:04.158$ children will be assessed immediately.

NOTE Confidence: 0.940127760333333

 $00:19:04.160 \longrightarrow 00:19:06.860$ Post treatment and then it's

NOTE Confidence: 0.940127760333333

 $00:19:06.860 \longrightarrow 00:19:09.560$ six six months post treatment.

NOTE Confidence: 0.940127760333333

 $00{:}19{:}09.560 \dashrightarrow 00{:}19{:}11.800$ Those children who were randomized

NOTE Confidence: 0.940127760333333

00:19:11.800 --> 00:19:14.906 to the usual and customary arm have

NOTE Confidence: 0.940127760333333

00:19:14.906 --> 00:19:17.282 an opportunity to re consent and

NOTE Confidence: 0.940127760333333

 $00:19:17.282 \longrightarrow 00:19:19.804$ re randomize to the three or the

NOTE Confidence: 0.940127760333333

00:19:19.804 --> 00:19:21.840 six hour arm once they've completed

NOTE Confidence: 0.940127760333333

 $00{:}19{:}21.840 \dashrightarrow 00{:}19{:}24.120$ that six month assessment and let

NOTE Confidence: 0.940127760333333

 $00:19:24.120 \longrightarrow 00:19:26.225$ me mention some innovative features

NOTE Confidence: 0.940127760333333

 $00:19:26.225 \longrightarrow 00:19:28.025$ of the acquired study.

NOTE Confidence: 0.940127760333333

00:19:28.030 --> 00:19:30.274 Contrary to many previous

NOTE Confidence: 0.940127760333333

00:19:30.274 --> 00:19:31.957 pediatric rehabilitation studies,

NOTE Confidence: 0.940127760333333

 $00:19:31.960 \longrightarrow 00:19:33.788$ we're looking for efficacy,

 $00:19:33.788 \longrightarrow 00:19:37.185$ not just at the post assessment post

NOTE Confidence: 0.940127760333333

 $00{:}19{:}37.185 \dashrightarrow 00{:}19{:}40.030$ treatment assessment with the children.

NOTE Confidence: 0.940127760333333

 $00:19:40.030 \longrightarrow 00:19:41.880$ Have to maintain their gains,

NOTE Confidence: 0.940127760333333

 $00:19:41.880 \longrightarrow 00:19:43.615$ both post treatment and it's

NOTE Confidence: 0.940127760333333

00:19:43.615 --> 00:19:45.003 six months post treatment.

NOTE Confidence: 0.940127760333333

 $00:19:45.010 \longrightarrow 00:19:48.041$ So really there needs to be a

NOTE Confidence: 0.940127760333333

00:19:48.041 --> 00:19:50.079 sustained sensory motor function

NOTE Confidence: 0.940127760333333

 $00:19:50.079 \longrightarrow 00:19:53.349$ beyond just immediately post treatment.

NOTE Confidence: 0.940127760333333

00:19:53.350 --> 00:19:55.810 Thanks to our Yale colleagues,

NOTE Confidence: 0.940127760333333

 $00{:}19{:}55.810 {\:\dashrightarrow\:} 00{:}19{:}58.006$ we are working to collect genetic

NOTE Confidence: 0.940127760333333

 $00:19:58.006 \longrightarrow 00:20:00.321$ samples and of course we're collecting

NOTE Confidence: 0.940127760333333

 $00{:}20{:}00.321 \dashrightarrow 00{:}20{:}02.673$ MRI samples for these children and

NOTE Confidence: 0.940127760333333

 $00{:}20{:}02.673 \longrightarrow 00{:}20{:}05.660$ we want to test the question whether

NOTE Confidence: 0.940127760333333

 $00:20:05.660 \longrightarrow 00:20:07.790$ genetic markers and imaging markers

NOTE Confidence: 0.940127760333333

00:20:07.790 --> 00:20:09.750 predict the child's responsiveness

 $00:20:09.750 \longrightarrow 00:20:10.730$ to treatment,

NOTE Confidence: 0.940127760333333

 $00{:}20{:}10.730 --> 00{:}20{:}12.644$ and I think that's a very

NOTE Confidence: 0.940127760333333

00:20:12.644 --> 00:20:14.360 innovative feature of this study.

NOTE Confidence: 0.940127760333333

 $00:20:14.360 \longrightarrow 00:20:16.815$ I've talked about the acquire

NOTE Confidence: 0.940127760333333

00:20:16.815 --> 00:20:19.270 form and really illustrated in

NOTE Confidence: 0.858610934

 $00{:}20{:}19.352 \dashrightarrow 00{:}20{:}22.342$ the preceding of video and what other

NOTE Confidence: 0.858610934

 $00:20:22.342 \longrightarrow 00:20:24.066$ what's additionally unique about?

NOTE Confidence: 0.858610934

00:20:24.070 --> 00:20:26.606 Our study is that we're going to have

NOTE Confidence: 0.858610934

 $00{:}20{:}26.606 \to 00{:}20{:}28.565$ the parents provide information from

NOTE Confidence: 0.858610934

00:20:28.565 --> 00:20:31.085 two surveys designed by a parent

NOTE Confidence: 0.858610934

 $00:20:31.085 \longrightarrow 00:20:33.806$ council to really illustrate the parrot

NOTE Confidence: 0.858610934

 $00:20:33.806 \longrightarrow 00:20:36.036$ experience in participating in these.

NOTE Confidence: 0.858610934

 $00:20:36.040 \longrightarrow 00:20:37.516$ In this clinical study.

NOTE Confidence: 0.858610934

 $00:20:37.516 \longrightarrow 00:20:39.730$ So where are we in terms

NOTE Confidence: 0.858610934

 $00:20:39.808 \longrightarrow 00:20:41.500$ of the trial progress?

NOTE Confidence: 0.858610934

00:20:41.500 --> 00:20:44.026 Our first child was enrolled about

00:20:44.026 --> 00:20:47.070 two about two years ago, and today,

NOTE Confidence: 0.858610934

00:20:47.070 --> 00:20:48.990 we've randomized 79 children,

NOTE Confidence: 0.858610934

 $00:20:48.990 \longrightarrow 00:20:53.070$ which is about 33% of our projected total.

NOTE Confidence: 0.858610934

00:20:53.070 --> 00:20:55.476 If you look to this graph

NOTE Confidence: 0.858610934

 $00:20:55.476 \longrightarrow 00:20:57.306$ on the right hand side,

NOTE Confidence: 0.858610934

00:20:57.310 --> 00:21:00.466 the red curve illustrates an ideal

NOTE Confidence: 0.858610934

00:21:00.466 --> 00:21:02.570 idealized rate of recruitment,

NOTE Confidence: 0.858610934

 $00:21:02.570 \longrightarrow 00:21:07.154$ and clearly we were delayed by the pandemic.

NOTE Confidence: 0.858610934

 $00{:}21{:}07.160 \dashrightarrow 00{:}21{:}09.729$ But you can notice that the blue

NOTE Confidence: 0.858610934

 $00{:}21{:}09.729 \dashrightarrow 00{:}21{:}11.692$ dots really illustrate the return

NOTE Confidence: 0.858610934

00:21:11.692 --> 00:21:14.050 to the original rate of recruitment,

NOTE Confidence: 0.858610934

 $00:21:14.050 \longrightarrow 00:21:16.126$ and it really begins to look

NOTE Confidence: 0.858610934

 $00{:}21{:}16.126 \dashrightarrow 00{:}21{:}18.003$ like we're re paralleling the

NOTE Confidence: 0.858610934

 $00:21:18.003 \longrightarrow 00:21:20.138$ projected ideal rate of recruitment.

NOTE Confidence: 0.858610934

00:21:20.140 --> 00:21:22.430 So we've included additional sites,

 $00:21:22.430 \longrightarrow 00:21:23.510$ and we're hopeful.

NOTE Confidence: 0.858610934

 $00:21:23.510 \longrightarrow 00:21:26.030$ That will be able to conclude the

NOTE Confidence: 0.858610934

00:21:26.106 --> 00:21:28.086 trial at the projected conclusion

NOTE Confidence: 0.858610934

 $00:21:28.086 \longrightarrow 00:21:31.030$ of the grant period.

NOTE Confidence: 0.858610934

 $00:21:31.030 \longrightarrow 00:21:32.840$ Some of the challenges come.

NOTE Confidence: 0.858610934

 $00{:}21{:}32.840 \dashrightarrow 00{:}21{:}34.844$ I think it's important to recognize

NOTE Confidence: 0.858610934

 $00:21:34.844 \longrightarrow 00:21:37.413$ that if you're going to do a study

NOTE Confidence: 0.858610934

00:21:37.413 --> 00:21:39.165 where you rely where therapists and

NOTE Confidence: 0.858610934

 $00{:}21{:}39.232 \dashrightarrow 00{:}21{:}41.062$ assessors are key to the conduct

NOTE Confidence: 0.858610934

 $00:21:41.062 \longrightarrow 00:21:43.756$ of the study, you have to prepare,

NOTE Confidence: 0.858610934

 $00{:}21{:}43.756 \dashrightarrow 00{:}21{:}46.420$ you have to assign ongoing resources

NOTE Confidence: 0.858610934

 $00:21:46.505 \longrightarrow 00:21:49.470$ for continued training and certifying.

NOTE Confidence: 0.858610934

 $00{:}21{:}49.470 \dashrightarrow 00{:}21{:}51.997$ You have a natural influx and efflux

NOTE Confidence: 0.858610934

00:21:51.997 --> 00:21:54.663 of of project staff and you just

NOTE Confidence: 0.858610934

00:21:54.663 --> 00:21:56.919 have to prepare for that turnover

NOTE Confidence: 0.858610934

 $00:21:56.992 \longrightarrow 00:21:58.800$ in that ongoing training.

00:21:58.800 --> 00:22:01.420 As I mentioned earlier, COVID-19.

NOTE Confidence: 0.858610934

00:22:01.420 --> 00:22:03.061 Interrupted the study,

NOTE Confidence: 0.858610934

 $00:22:03.061 \longrightarrow 00:22:05.796$ but it is very intriguing.

NOTE Confidence: 0.858610934

 $00:22:05.800 \longrightarrow 00:22:07.392$ There's ongoing parent increase

NOTE Confidence: 0.858610934

 $00:22:07.392 \longrightarrow 00:22:08.984$ interest in the study,

NOTE Confidence: 0.858610934

 $00:22:08.990 \longrightarrow 00:22:11.000$ and that's been a key driver

NOTE Confidence: 0.858610934

 $00:22:11.000 \longrightarrow 00:22:12.005$ for our recruitment,

NOTE Confidence: 0.858610934

00:22:12.010 --> 00:22:14.033 and I believe that that's why you

NOTE Confidence: 0.858610934

00:22:14.033 --> 00:22:15.804 see that curve really approaching

NOTE Confidence: 0.858610934

 $00:22:15.804 \longrightarrow 00:22:17.067$ the ideal range.

NOTE Confidence: 0.858610934

 $00:22:17.070 \longrightarrow 00:22:20.089$ Initially we had trouble recruiting

NOTE Confidence: 0.858610934

00:22:20.089 --> 00:22:21.406 African American children.

NOTE Confidence: 0.858610934

 $00{:}22{:}21.406 {\:{\mbox{--}}\!>}\ 00{:}22{:}23.601$ Stroke net had provided some

NOTE Confidence: 0.858610934

00:22:23.601 --> 00:22:25.339 very helpful suggestions,

NOTE Confidence: 0.858610934

00:22:25.340 --> 00:22:27.838 and we're at implementing those,

 $00:22:27.838 \longrightarrow 00:22:31.550$ and our sites have been able to recruit now.

NOTE Confidence: 0.858610934

 $00{:}22{:}31.550 \dashrightarrow 00{:}22{:}34.074$ African American children up to about 7%,

NOTE Confidence: 0.858610934

 $00:22:34.074 \longrightarrow 00:22:35.530$ so it's an improvement,

NOTE Confidence: 0.858610934

 $00:22:35.530 \longrightarrow 00:22:37.434$ but we clearly have a ways to go

NOTE Confidence: 0.858610934

 $00:22:37.434 \longrightarrow 00:22:39.337$ and for someone like myself who

NOTE Confidence: 0.858610934

00:22:39.337 --> 00:22:41.377 had not worked within stroke net,

NOTE Confidence: 0.858610934

 $00:22:41.380 \longrightarrow 00:22:42.856$ there was a steep learning curve

NOTE Confidence: 0.858610934

00:22:42.856 --> 00:22:44.731 in terms of learning how to work

NOTE Confidence: 0.858610934

00:22:44.731 --> 00:22:45.568 within the organization,

NOTE Confidence: 0.858610934

 $00:22:45.570 \longrightarrow 00:22:47.676$ but clearly there's a lot of

NOTE Confidence: 0.858610934

 $00:22:47.676 \longrightarrow 00:22:50.033$ strengths in terms of working with

NOTE Confidence: 0.858610934

 $00:22:50.033 \longrightarrow 00:22:52.238$ it and establish trial network.

NOTE Confidence: 0.858610934

 $00{:}22{:}52.240 \longrightarrow 00{:}22{:}53.948$ So let me turn the slides back

NOTE Confidence: 0.858610934

 $00:22:53.948 \longrightarrow 00:22:54.680$ over to Sharon.

NOTE Confidence: 0.847903370909091

 $00:22:57.730 \longrightarrow 00:22:59.998$ Thanks so much more and so

NOTE Confidence: 0.847903370909091

00:22:59.998 --> 00:23:02.050 our 12 month follow-up study.

00:23:02.050 --> 00:23:07.246 Well, I'm a developmental scientist and

NOTE Confidence: 0.847903370909091

00:23:07.250 --> 00:23:09.866 Craig and I this month or finishing a

NOTE Confidence: 0.847903370909091

 $00:23:09.866 \longrightarrow 00:23:12.264$ book about a study where we followed

NOTE Confidence: 0.847903370909091

 $00:23:12.264 \longrightarrow 00:23:14.620$ the same babies who for 50 years.

NOTE Confidence: 0.847903370909091

 $00:23:14.620 \longrightarrow 00:23:16.083$ So that's both how old we are

NOTE Confidence: 0.847903370909091

 $00:23:16.083 \longrightarrow 00:23:17.630$ and how old those babies are.

NOTE Confidence: 0.847903370909091

 $00:23:17.630 \longrightarrow 00:23:19.298$ So do I always want more

NOTE Confidence: 0.847903370909091

 $00:23:19.298 \longrightarrow 00:23:20.850$ data as children get older?

NOTE Confidence: 0.847903370909091

 $00:23:20.850 \longrightarrow 00:23:23.846$ Yes, is it a fishing expedition sometimes,

NOTE Confidence: 0.847903370909091

 $00:23:23.850 \longrightarrow 00:23:25.190$ but we've learned a lot.

NOTE Confidence: 0.847903370909091

00:23:25.190 --> 00:23:27.776 Meanwhile, this is not some broad.

NOTE Confidence: 0.847903370909091

 $00:23:27.780 \longrightarrow 00:23:29.620$ Horrible fishing expedition that no

NOTE Confidence: 0.847903370909091

 $00{:}23{:}29.620 \to 00{:}23{:}31.920$ peer review group would fund appear.

NOTE Confidence: 0.847903370909091

 $00{:}23{:}31.920 \longrightarrow 00{:}23{:}34.720$ We group group did fund it based on

NOTE Confidence: 0.847903370909091

00:23:34.720 --> 00:23:37.000 the following rationale number one,

 $00:23:37.000 \longrightarrow 00:23:39.898$ we are not changing the definition

NOTE Confidence: 0.847903370909091

00:23:39.898 --> 00:23:43.267 of efficacy to require that the child

NOTE Confidence: 0.847903370909091

 $00:23:43.267 \longrightarrow 00:23:45.961$ continue to not only maintain but

NOTE Confidence: 0.847903370909091

00:23:45.961 --> 00:23:49.130 grow and develop another six months,

NOTE Confidence: 0.847903370909091

 $00:23:49.130 \longrightarrow 00:23:51.764$ but we had compelling evidence from

NOTE Confidence: 0.847903370909091

 $00:23:51.764 \longrightarrow 00:23:54.640$ the study that will be published.

NOTE Confidence: 0.847903370909091

 $00:23:54.640 \longrightarrow 00:23:57.230$ And available next week in

NOTE Confidence: 0.847903370909091

 $00:23:57.230 \longrightarrow 00:23:59.714$ Pediatrics that at 12 months.

NOTE Confidence: 0.847903370909091

 $00{:}23{:}59.714 \dashrightarrow 00{:}24{:}02.660$ Post treatment we found even bigger

NOTE Confidence: 0.847903370909091

00:24:02.753 --> 00:24:06.442 effects of dosage difference is and we

NOTE Confidence: 0.847903370909091

 $00:24:06.442 \longrightarrow 00:24:09.939$ think that's really about developmental.

NOTE Confidence: 0.847903370909091

 $00:24:09.940 \longrightarrow 00:24:11.500$ Neuroplasticity, we think.

NOTE Confidence: 0.847903370909091

 $00{:}24{:}11.500 \dashrightarrow 00{:}24{:}15.140$ And this was true in the nonhuman.

NOTE Confidence: 0.847903370909091

00:24:15.140 --> 00:24:18.092 I used to work with monkeys many decades ago,

NOTE Confidence: 0.847903370909091

 $00:24:18.100 \longrightarrow 00:24:21.376$ but the nonhuman primate research on C.

NOTE Confidence: 0.847903370909091

 $00:24:21.380 \longrightarrow 00:24:24.270$ IMT in stroke experimental stroke

00:24:24.270 --> 00:24:27.733 models showed that you could get

NOTE Confidence: 0.847903370909091

 $00:24:27.733 \longrightarrow 00:24:30.607$ the same short turn chain short.

NOTE Confidence: 0.847903370909091

00:24:30.610 --> 00:24:32.310 Term changes with the low

NOTE Confidence: 0.847903370909091

 $00:24:32.310 \longrightarrow 00:24:34.879$ dose as well as a high dose,

NOTE Confidence: 0.847903370909091

 $00:24:34.880 \longrightarrow 00:24:37.057$ but the only rhesus monkeys that were

NOTE Confidence: 0.847903370909091

 $00:24:37.057 \longrightarrow 00:24:39.108$ changed for the rest of the light.

NOTE Confidence: 0.847903370909091

 $00:24:39.110 \longrightarrow 00:24:40.760$ Their lives were the ones

NOTE Confidence: 0.847903370909091

 $00:24:40.760 \longrightarrow 00:24:42.410$ who got the high dose.

NOTE Confidence: 0.847903370909091

 $00:24:42.410 \longrightarrow 00:24:46.652$ So we think probably at a neural

NOTE Confidence: 0.847903370909091

 $00:24:46.652 \longrightarrow 00:24:50.039$ anatomical and functional systems level,

NOTE Confidence: 0.847903370909091

 $00:24:50.040 \longrightarrow 00:24:53.407$ the higher dose might really be a

NOTE Confidence: 0.847903370909091

00:24:53.407 --> 00:24:56.340 substrate for much greater growth,

NOTE Confidence: 0.847903370909091

 $00:24:56.340 \longrightarrow 00:24:57.738$ and we want to study that,

NOTE Confidence: 0.847903370909091

 $00:24:57.740 \longrightarrow 00:25:00.568$ so we'll be able to test whether

NOTE Confidence: 0.847903370909091

 $00:25:00.568 \longrightarrow 00:25:02.889$ the dosages differ at 12 months.

00:25:02.890 --> 00:25:03.718 But you know,

NOTE Confidence: 0.847903370909091

00:25:03.718 --> 00:25:04.546 if they differ,

NOTE Confidence: 0.847903370909091

 $00:25:04.550 \longrightarrow 00:25:06.686$ we're not sure it's just changes

NOTE Confidence: 0.847903370909091 00:25:06.686 --> 00:25:07.754 in the brain.

NOTE Confidence: 0.847903370909091

 $00:25:07.760 \longrightarrow 00:25:09.980$ It could be even that that

NOTE Confidence: 0.847903370909091

 $00:25:09.980 \longrightarrow 00:25:11.460$ clip Warren showed today.

NOTE Confidence: 0.847903370909091

00:25:11.460 --> 00:25:13.700 You can see how happy the children are.

NOTE Confidence: 0.847903370909091

00:25:13.700 --> 00:25:14.831 And of course,

NOTE Confidence: 0.847903370909091

 $00:25:14.831 \longrightarrow 00:25:16.716$ that child probably everyday participated

NOTE Confidence: 0.847903370909091

 $00{:}25{:}16.716 \dashrightarrow 00{:}25{:}19.276$ in about 15 to 20 different activities.

NOTE Confidence: 0.847903370909091

 $00:25:19.280 \longrightarrow 00:25:22.885$ The child wasn't crawling all day long.

NOTE Confidence: 0.847903370909091

00:25:22.890 --> 00:25:27.606 But they become so excited to see the changes

NOTE Confidence: 0.847903370909091

 $00:25:27.610 \longrightarrow 00:25:30.050$ in our early years of doing this therapy.

NOTE Confidence: 0.847903370909091

 $00{:}25{:}30.050 \dashrightarrow 00{:}25{:}32.610$ We called it Olympic training.

NOTE Confidence: 0.847903370909091

 $00:25:32.610 \longrightarrow 00:25:35.562$ Both children who prepare to compete

NOTE Confidence: 0.847903370909091

 $00{:}25{:}35.562 \dashrightarrow 00{:}25{:}39.211$ in the Olympics and children who are

00:25:39.211 --> 00:25:42.506 musical performers under the age of 10.

NOTE Confidence: 0.847903370909091

 $00:25:42.510 \longrightarrow 00:25:45.294$ They usually practice four to six

NOTE Confidence: 0.847903370909091

00:25:45.294 --> 00:25:48.710 hours a day, almost seven days a week,

NOTE Confidence: 0.847903370909091

 $00:25:48.710 \longrightarrow 00:25:50.900$ year in and year out.

NOTE Confidence: 0.847903370909091

 $00:25:50.900 \longrightarrow 00:25:53.100$ So we really think that.

NOTE Confidence: 0.847903370909091

 $00:25:53.100 \longrightarrow 00:25:57.615$ But they also these babies who have

NOTE Confidence: 0.847903370909091

00:25:57.615 --> 00:26:01.146 the hemiparesis gets so excited and

NOTE Confidence: 0.847903370909091

 $00{:}26{:}01.146 \dashrightarrow 00{:}26{:}03.428$ we we have things like the parents

NOTE Confidence: 0.847903370909091

 $00{:}26{:}03.428 \dashrightarrow 00{:}26{:}06.047$ saying the child looks at the arm

NOTE Confidence: 0.847903370909091

 $00{:}26{:}06.047 \dashrightarrow 00{:}26{:}07.942$ that previously was scarcely used.

NOTE Confidence: 0.847903370909091

 $00:26:07.950 \longrightarrow 00:26:10.360$ Some children actually totally neglected.

NOTE Confidence: 0.847903370909091

 $00:26:10.360 \longrightarrow 00:26:13.096$ They look at their arm and some of the

NOTE Confidence: 0.847903370909091

 $00{:}26{:}13.096 \dashrightarrow 00{:}26{:}15.402$ children start to laugh or just wave

NOTE Confidence: 0.847903370909091

 $00:26:15.402 \longrightarrow 00:26:17.446$ it around because they couldn't even

NOTE Confidence: 0.847903370909091

00:26:17.446 --> 00:26:19.840 wave the arm around before and just

 $00:26:19.840 \longrightarrow 00:26:22.386$ are so excited they learn to clap.

NOTE Confidence: 0.847903370909091

 $00{:}26{:}22.390 \dashrightarrow 00{:}26{:}23.840$ I mean they are so.

NOTE Confidence: 0.847903370909091

 $00:26:23.840 \longrightarrow 00:26:25.580$ Motivated so maybe.

NOTE Confidence: 0.847903370909091

00:26:25.580 --> 00:26:28.480 In addition to changing brain,

NOTE Confidence: 0.847903370909091

 $00:26:28.480 \longrightarrow 00:26:30.470$ the child's willing to stick

NOTE Confidence: 0.847903370909091

 $00:26:30.470 \longrightarrow 00:26:32.460$ with the difficult tasks that

NOTE Confidence: 0.900726367916666

 $00:26:32.532 \longrightarrow 00:26:34.590$ at first makes you frustrated any

NOTE Confidence: 0.900726367916666

 $00:26:34.590 \longrightarrow 00:26:37.339$ of you have ever been around a baby.

NOTE Confidence: 0.900726367916666

 $00{:}26{:}37.340 \dashrightarrow 00{:}26{:}38.584$ Do babies get frustrated

NOTE Confidence: 0.900726367916666

 $00:26:38.584 \longrightarrow 00:26:40.139$ when they can't do something?

NOTE Confidence: 0.900726367916666

 $00{:}26{:}40.140 \dashrightarrow 00{:}26{:}43.206$ This is, this is how children grow.

NOTE Confidence: 0.900726367916666

00:26:43.210 --> 00:26:44.938 You want to keep the frustration

NOTE Confidence: 0.900726367916666

 $00:26:44.938 \longrightarrow 00:26:46.971$ to a minimum and we don't allow

NOTE Confidence: 0.900726367916666

 $00:26:46.971 \longrightarrow 00:26:48.868$ our babies to cry or fuss over.

NOTE Confidence: 0.900726367916666

 $00:26:48.870 \longrightarrow 00:26:50.322$ Is there a two minute limit

NOTE Confidence: 0.900726367916666

 $00:26:50.322 \longrightarrow 00:26:51.290$ Warren or three minute?

00:26:51.290 --> 00:26:53.194 Anyway, we don't let it happen forever.

NOTE Confidence: 0.900726367916666

 $00:26:53.200 \longrightarrow 00:26:56.386$ We're really kind and considerate, but.

NOTE Confidence: 0.900726367916666

 $00:26:56.386 \longrightarrow 00:26:59.033$ We are probably a little more

NOTE Confidence: 0.900726367916666

00:26:59.033 --> 00:27:02.111 demanding than parents who never had

NOTE Confidence: 0.900726367916666

00:27:02.111 --> 00:27:04.766 a child with a potential disability.

NOTE Confidence: 0.900726367916666

00:27:04.766 --> 00:27:07.370 Often think my child can't do it.

NOTE Confidence: 0.900726367916666

00:27:07.370 --> 00:27:10.637 It's not fair of me to demand that the

NOTE Confidence: 0.900726367916666

 $00:27:10.637 \longrightarrow 00:27:13.808$ child try when the child can't help it.

NOTE Confidence: 0.900726367916666

 $00:27:13.810 \longrightarrow 00:27:14.830$ He or she had a stroke,

NOTE Confidence: 0.900726367916666

00:27:14.830 --> 00:27:17.770 so our our therapists are quite demanding,

NOTE Confidence: 0.900726367916666

 $00:27:17.770 \longrightarrow 00:27:19.158$ but also very kind.

NOTE Confidence: 0.900726367916666

 $00:27:19.158 \longrightarrow 00:27:22.790$ So we will be able in the 12 month study

NOTE Confidence: 0.900726367916666

 $00{:}27{:}22.790 \dashrightarrow 00{:}27{:}26.509$ to collect a lot of rich descriptive data.

NOTE Confidence: 0.900726367916666

 $00:27:26.510 \longrightarrow 00:27:28.774$ About whether the parents,

NOTE Confidence: 0.900726367916666

 $00:27:28.774 \longrightarrow 00:27:32.170$ the physicians and the therapist altered

 $00:27:32.255 \longrightarrow 00:27:35.549$ their expectations for the child after.

NOTE Confidence: 0.900726367916666

00:27:35.550 --> 00:27:37.805 They had I acquired and

NOTE Confidence: 0.900726367916666

 $00:27:37.805 \longrightarrow 00:27:39.609$ whether the child change,

NOTE Confidence: 0.900726367916666

00:27:39.610 --> 00:27:42.445 so we have historically written

NOTE Confidence: 0.900726367916666

 $00:27:42.445 \longrightarrow 00:27:44.146$ about spillover effects,

NOTE Confidence: 0.900726367916666

00:27:44.150 --> 00:27:46.194 and we didn't tell you until right

NOTE Confidence: 0.900726367916666

00:27:46.194 --> 00:27:47.887 now we're measuring a lot of them,

NOTE Confidence: 0.900726367916666

 $00:27:47.890 \longrightarrow 00:27:50.676$ so we don't try to teach language

NOTE Confidence: 0.900726367916666

 $00:27:50.676 \longrightarrow 00:27:51.472$ and cognition,

NOTE Confidence: 0.900726367916666

 $00:27:51.480 \longrightarrow 00:27:53.363$ and you know how to be a

NOTE Confidence: 0.900726367916666

00:27:53.363 --> 00:27:54.610 nice sharing human being.

NOTE Confidence: 0.900726367916666 00:27:54.610 --> 00:27:55.206 I mean,

NOTE Confidence: 0.900726367916666

 $00:27:55.206 \longrightarrow 00:27:58.140$ we're focused on the arm in the hand mostly,

NOTE Confidence: 0.900726367916666

00:27:58.140 --> 00:27:59.676 but lo and behold,

NOTE Confidence: 0.900726367916666

00:27:59.676 --> 00:28:01.596 children who acquire those skills,

NOTE Confidence: 0.900726367916666

 $00:28:01.600 \longrightarrow 00:28:03.850$ many of them begin to speak.

 $00:28:03.850 \longrightarrow 00:28:05.728$ Many of them begin to laugh.

NOTE Confidence: 0.900726367916666

 $00:28:05.730 \longrightarrow 00:28:08.940$ And interact and become way more

NOTE Confidence: 0.900726367916666

 $00:28:08.940 \longrightarrow 00:28:11.659$ social rather than reserved and

NOTE Confidence: 0.900726367916666

00:28:11.659 --> 00:28:14.016 passive or overly demanding.

NOTE Confidence: 0.900726367916666

 $00:28:14.016 \longrightarrow 00:28:18.370$ And they have to now collaborate with

NOTE Confidence: 0.900726367916666

 $00:28:18.480 \longrightarrow 00:28:22.067$ the therapist everyday so we see

NOTE Confidence: 0.900726367916666

00:28:22.067 --> 00:28:24.112 psychological changes and will be

NOTE Confidence: 0.900726367916666

 $00{:}28{:}24.112 \dashrightarrow 00{:}28{:}27.429$ able to measure more about that topic.

NOTE Confidence: 0.900726367916666

 $00{:}28{:}27.430 \dashrightarrow 00{:}28{:}31.453$ In our 12 month follow up next slide Warren.

NOTE Confidence: 0.900726367916666

 $00{:}28{:}31.460 \dashrightarrow 00{:}28{:}34.212$ Opportunities will stroke overall

NOTE Confidence: 0.900726367916666

 $00:28:34.212 \longrightarrow 00:28:37.652$ thank goodness across the whole

NOTE Confidence: 0.900726367916666

 $00{:}28{:}37.652 \dashrightarrow 00{:}28{:}40.637$ pediatric spectrum is kind of rare

NOTE Confidence: 0.900726367916666

 $00:28:40.640 \longrightarrow 00:28:43.368$ but but we hope that there will be

NOTE Confidence: 0.900726367916666

 $00{:}28{:}43.368 \longrightarrow 00{:}28{:}45.436$ people today in this audience and

NOTE Confidence: 0.900726367916666

 $00:28:45.436 \longrightarrow 00:28:47.928$ also as you reach out to colleagues

 $00:28:47.928 \longrightarrow 00:28:50.670$ who have ideas about different ways

NOTE Confidence: 0.900726367916666

 $00:28:50.670 \longrightarrow 00:28:54.150$ and whether it's higher intensity

NOTE Confidence: 0.900726367916666

 $00:28:54.150 \longrightarrow 00:28:57.300$ or combination therapies.

NOTE Confidence: 0.900726367916666

00:28:57.300 --> 00:29:02.226 Adam curtain in Canada is combining.

NOTE Confidence: 0.900726367916666

 $00:29:02.230 \longrightarrow 00:29:04.146$ Direct stimulation with more

NOTE Confidence: 0.900726367916666

 $00:29:04.146 \longrightarrow 00:29:06.541$ traditional forms of therapy and

NOTE Confidence: 0.900726367916666

 $00{:}29{:}06.541 \dashrightarrow 00{:}29{:}08.806$ actually with C IMT and comparing.

NOTE Confidence: 0.900726367916666

 $00:29:08.810 \longrightarrow 00:29:11.105$ What if you do one or the other or

NOTE Confidence: 0.900726367916666

 $00{:}29{:}11.105 \dashrightarrow 00{:}29{:}13.642$ you combine them? What are the benefits?

NOTE Confidence: 0.900726367916666

 $00:29:13.642 \longrightarrow 00:29:16.359$ We'd love to see more trials like that.

NOTE Confidence: 0.900726367916666

 $00{:}29{:}16.360 \dashrightarrow 00{:}29{:}18.999$ Anyone who wants to go through the

NOTE Confidence: 0.900726367916666

 $00:29:18.999 \longrightarrow 00:29:20.870$ challenging lengthy process and stroke.

NOTE Confidence: 0.900726367916666

 $00:29:20.870 \longrightarrow 00:29:21.166$ Net,

NOTE Confidence: 0.900726367916666

 $00:29:21.166 \longrightarrow 00:29:23.534$ we promise we will be at your side

NOTE Confidence: 0.900726367916666

 $00:29:23.534 \longrightarrow 00:29:27.800$ and help you get funding and.

NOTE Confidence: 0.925724035238095

 $00:29:30.150 \longrightarrow 00:29:33.183$ I really hope that we can get some more

 $00:29:33.183 \longrightarrow 00:29:35.662$ rehab and recovery trials in Pediatrics

NOTE Confidence: 0.925724035238095

 $00:29:35.662 \longrightarrow 00:29:38.480$ or those of you doing recovery.

NOTE Confidence: 0.925724035238095

00:29:38.480 --> 00:29:40.615 Rehab in adults might think of well,

NOTE Confidence: 0.925724035238095

 $00:29:40.620 \longrightarrow 00:29:42.812$ could we at least add a teenage or

NOTE Confidence: 0.925724035238095

00:29:42.812 --> 00:29:44.813 school age child population and will

NOTE Confidence: 0.925724035238095

00:29:44.813 --> 00:29:46.895 help you do the child portions?

NOTE Confidence: 0.925724035238095

 $00:29:46.900 \longrightarrow 00:29:50.980$ So we want to see a lot more

NOTE Confidence: 0.925724035238095

 $00:29:50.980 \longrightarrow 00:29:52.000$ pediatric trials.

NOTE Confidence: 0.925724035238095

 $00{:}29{:}52.000 \dashrightarrow 00{:}29{:}57.586$ And hope you'll get excited about that.

NOTE Confidence: 0.925724035238095

 $00{:}29{:}57.590 \dashrightarrow 00{:}30{:}00.838$ Kate last slide, I think says Q&A is.

NOTE Confidence: 0.925724035238095

00:30:00.840 --> 00:30:05.142 Yes, we want to especially thank our Yale,

NOTE Confidence: 0.925724035238095

 $00{:}30{:}05.142 \dashrightarrow 00{:}30{:}08.596$ New Haven and Brown Stroke net team

NOTE Confidence: 0.925724035238095

 $00{:}30{:}08.596 \dashrightarrow 00{:}30{:}11.270$ for inviting us in our clinical sites.

NOTE Confidence: 0.925724035238095

00:30:11.270 --> 00:30:12.530 If you don't already know,

NOTE Confidence: 0.925724035238095

 $00:30:12.530 \longrightarrow 00:30:15.350$ we have University of Michigan.

00:30:15.350 --> 00:30:18.325 We have Kennedy Krieger at Johns Hopkins.

NOTE Confidence: 0.925724035238095

 $00:30:18.330 \dashrightarrow 00:30:21.528$ We have UAB and Birmingham Boston.

NOTE Confidence: 0.925724035238095

 $00:30:21.530 \longrightarrow 00:30:24.274$ We have a Harvard and the two

NOTE Confidence: 0.925724035238095

 $00{:}30{:}24.274 \dashrightarrow 00{:}30{:}25.678$ wonderful children's hospitals.

NOTE Confidence: 0.925724035238095

 $00:30:25.678 \longrightarrow 00:30:29.452$ Charleston's are 14th site at MUSC Chicago.

NOTE Confidence: 0.925724035238095

 $00:30:29.452 \longrightarrow 00:30:32.582$ We have a fabulous rehab

NOTE Confidence: 0.925724035238095

00:30:32.582 --> 00:30:34.960 center there Cincinnati. Uh,

NOTE Confidence: 0.925724035238095

00:30:34.960 --> 00:30:37.960 it's a great Children's Hospital Columbus.

NOTE Confidence: 0.925724035238095 00:30:37.960 --> 00:30:38.988 Of course,

NOTE Confidence: 0.925724035238095

00:30:38.988 --> 00:30:43.890 we're Warren is our New Haven and Brown site,

NOTE Confidence: 0.925724035238095

 $00{:}30{:}43.890 \dashrightarrow 00{:}30{:}46.138$ Philadelphia Chop and Roanoke.

NOTE Confidence: 0.925724035238095

 $00:30:46.138 \longrightarrow 00:30:48.386$ We are a site,

NOTE Confidence: 0.925724035238095

00:30:48.390 --> 00:30:49.312 San Diego,

NOTE Confidence: 0.925724035238095

00:30:49.312 --> 00:30:51.617 UCLA and Saint Louis Washington

NOTE Confidence: 0.925724035238095

 $00:30:51.617 \longrightarrow 00:30:53.917$ University website 13 and they're

NOTE Confidence: 0.925724035238095

00:30:53.917 --> 00:30:55.597 going full steam ahead.

00:30:55.600 --> 00:30:57.750 So any questions I see

NOTE Confidence: 0.925724035238095

 $00:30:57.750 \longrightarrow 00:31:00.420$ under chat we had a nice

NOTE Confidence: 0.883486957857143

 $00:31:01.670 \longrightarrow 00:31:03.137$ question from Kevin.

NOTE Confidence: 0.883486957857143

00:31:03.137 --> 00:31:06.071 He's curious about the specificity of

NOTE Confidence: 0.883486957857143

 $00:31:06.071 \longrightarrow 00:31:09.087$ the potential for the intervention.

NOTE Confidence: 0.883486957857143

 $00:31:09.090 \longrightarrow 00:31:11.603$ To work on the arm versus the

NOTE Confidence: 0.883486957857143

 $00:31:11.603 \longrightarrow 00:31:13.820$ hand and fingers, and does that.

NOTE Confidence: 0.891969942307692

 $00:31:14.720 \longrightarrow 00:31:17.888$ We work on all of that and we work

NOTE Confidence: 0.891969942307692

 $00{:}31{:}17.888 \dashrightarrow 00{:}31{:}21.816$ on trunk control so anything that

NOTE Confidence: 0.891969942307692

 $00:31:21.816 \longrightarrow 00:31:26.706$ promotes using the entire arm.

NOTE Confidence: 0.891969942307692

00:31:26.710 --> 00:31:27.830 All of the you know,

NOTE Confidence: 0.891969942307692

 $00:31:27.830 \longrightarrow 00:31:30.626$ dissociated movements at elbow and wrist,

NOTE Confidence: 0.891969942307692

 $00{:}31{:}30.630 \dashrightarrow 00{:}31{:}32.328$ and we use hand and fingers.

NOTE Confidence: 0.891969942307692

 $00:31:32.330 \longrightarrow 00:31:34.610$ And it's not like the old fashioned where

NOTE Confidence: 0.891969942307692

00:31:34.610 --> 00:31:37.228 you say oh we're going for a pincer grasp,

 $00:31:37.230 \longrightarrow 00:31:38.793$ its developmental and

NOTE Confidence: 0.891969942307692

00:31:38.793 --> 00:31:40.877 we train our therapists.

NOTE Confidence: 0.891969942307692

 $00:31:40.880 \longrightarrow 00:31:43.274$ It takes a lot of training and give them

NOTE Confidence: 0.891969942307692

 $00:31:43.274 \longrightarrow 00:31:45.738$ a lot of feedback but they also know

NOTE Confidence: 0.891969942307692

 $00:31:45.738 \longrightarrow 00:31:48.005$ about some of the natural progression

NOTE Confidence: 0.891969942307692

 $00{:}31{:}48.005 \dashrightarrow 00{:}31{:}50.145$ of the entire upper extremity.

NOTE Confidence: 0.891969942307692

 $00:31:50.150 \longrightarrow 00:31:51.980$ So we do all of that.

NOTE Confidence: 0.891969942307692

 $00:31:51.980 \longrightarrow 00:31:53.485$ It's not like we have a goal.

NOTE Confidence: 0.891969942307692

 $00{:}31{:}53.490 --> 00{:}31{:}57.360$ OK, now release the hand.

NOTE Confidence: 0.891969942307692

00:31:57.360 --> 00:31:59.136 But in natural activities,

NOTE Confidence: 0.891969942307692

00:31:59.136 --> 00:32:00.969 the child's you know,

NOTE Confidence: 0.891969942307692

00:32:00.969 --> 00:32:02.862 opening the hand, reaching,

NOTE Confidence: 0.891969942307692

 $00:32:02.862 \longrightarrow 00:32:05.372$ grasping and then doing more

NOTE Confidence: 0.891969942307692

 $00:32:05.372 \longrightarrow 00:32:08.340$ refined movements, and then we do,

NOTE Confidence: 0.891969942307692

 $00:32:08.340 \longrightarrow 00:32:08.830$ he

NOTE Confidence: 0.909458593478261

 $00:32:08.840 \longrightarrow 00:32:10.802$ had an additional part of the

 $00:32:10.802 \longrightarrow 00:32:12.820$ question because for the question

NOTE Confidence: 0.909458593478261

 $00:32:12.820 \longrightarrow 00:32:14.746$ is how does that influence the

NOTE Confidence: 0.909458593478261

 $00:32:14.746 \longrightarrow 00:32:17.028$ choice of your outcome measure is?

NOTE Confidence: 0.909458593478261

00:32:17.028 --> 00:32:19.534 In other words, is there a differential

NOTE Confidence: 0.909458593478261

 $00:32:19.534 \longrightarrow 00:32:21.947$ in terms of the results with the

NOTE Confidence: 0.909458593478261

 $00:32:21.947 \longrightarrow 00:32:24.190$ arm versus the hand and fingers,

NOTE Confidence: 0.909458593478261

 $00:32:24.190 \longrightarrow 00:32:27.466$ and does that influence the choice?

NOTE Confidence: 0.909458593478261

 $00:32:27.470 \longrightarrow 00:32:28.160$ Outcome measure

NOTE Confidence: 0.9134305775

 $00:32:28.690 \longrightarrow 00:32:30.510$ well or outcome measure.

NOTE Confidence: 0.9134305775

 $00:32:30.510 \longrightarrow 00:32:34.502$ Is a composite that looks at all of

NOTE Confidence: 0.9134305775

 $00{:}32{:}34.502 \dashrightarrow 00{:}32{:}36.850$ those components you've nominated.

NOTE Confidence: 0.9134305775

 $00:32:36.850 \longrightarrow 00:32:37.795$ It's not perfect.

NOTE Confidence: 0.9134305775

 $00:32:37.795 \longrightarrow 00:32:40.000$ I mean if we were totally honest,

NOTE Confidence: 0.9134305775

 $00:32:40.000 \longrightarrow 00:32:41.638$ we'd say there's not a perfect measure,

NOTE Confidence: 0.9134305775

 $00:32:41.640 \longrightarrow 00:32:43.510$ and then we want to done the research at all.

 $00:32:43.510 \longrightarrow 00:32:46.438$ So we went with our best measure that

NOTE Confidence: 0.9134305775

 $00:32:46.438 \longrightarrow 00:32:50.026$ we had and we have multiple other

NOTE Confidence: 0.9134305775

 $00:32:50.026 \longrightarrow 00:32:52.242$ standardized tools and subscales.

NOTE Confidence: 0.9134305775

 $00:32:52.250 \longrightarrow 00:32:54.210$ And our measure is kind of different.

NOTE Confidence: 0.9134305775

 $00:32:54.210 \longrightarrow 00:32:56.652$ It requires that the child demonstrated

NOTE Confidence: 0.9134305775

 $00:32:56.652 \longrightarrow 00:32:59.549$ skill in two or more situations,

NOTE Confidence: 0.9134305775

 $00:32:59.550 \longrightarrow 00:33:01.380$ so we have lots of videotapes

NOTE Confidence: 0.9134305775

 $00:33:01.380 \longrightarrow 00:33:02.295$ on the children.

NOTE Confidence: 0.9134305775

 $00{:}33{:}02.300 \dashrightarrow 00{:}33{:}05.366$ As well as the formal assessment,

NOTE Confidence: 0.9134305775

 $00:33:05.370 \longrightarrow 00:33:07.062$ and so it's a.

NOTE Confidence: 0.9134305775

 $00{:}33{:}07.062 \dashrightarrow 00{:}33{:}08.754$ A pretty rigorous demonstration

NOTE Confidence: 0.9134305775

 $00:33:08.754 \longrightarrow 00:33:11.195$ of new skills and actually

NOTE Confidence: 0.9134305775

 $00:33:11.195 \longrightarrow 00:33:13.710$ children acquire some skills that

NOTE Confidence: 0.9134305775

 $00:33:13.710 \longrightarrow 00:33:16.479$ we're not even fully measuring,

NOTE Confidence: 0.9134305775

 $00:33:16.480 \longrightarrow 00:33:18.370$ so we're not capturing it all,

NOTE Confidence: 0.9134305775

 $00:33:18.370 \longrightarrow 00:33:21.810$ but we hope it's a good enough measure.

 $00:33:21.810 \longrightarrow 00:33:23.994$ Some of the other measures were so

NOTE Confidence: 0.9134305775

 $00:33:23.994 \longrightarrow 00:33:26.371$ narrow if you just measure speed and

NOTE Confidence: 0.9134305775

00:33:26.371 --> 00:33:28.830 strength or hand or fingers or arms,

NOTE Confidence: 0.9134305775

 $00:33:28.830 \longrightarrow 00:33:30.570$ so it's a combined measure.

NOTE Confidence: 0.9134305775

 $00:33:30.570 \longrightarrow 00:33:32.314$ We're happy to share it with you and

NOTE Confidence: 0.9134305775

 $00:33:32.314 \longrightarrow 00:33:33.990$ let you know how it gets coated.

NOTE Confidence: 0.799974864

00:33:34.540 --> 00:33:37.330 Ruth is giving us a two minute 2 minute

NOTE Confidence: 0.799974864

 $00:33:37.330 \longrightarrow 00:33:39.750$ warning, so this is like football.

NOTE Confidence: 0.799974864

00:33:39.750 --> 00:33:42.150 Maarten Lansberg is asking at the

NOTE Confidence: 0.799974864

00:33:42.150 --> 00:33:44.817 12 month group what do you use

NOTE Confidence: 0.799974864

 $00:33:44.817 \longrightarrow 00:33:47.210$ as the control group and do and

NOTE Confidence: 0.799974864

00:33:47.210 --> 00:33:49.562 do the usual and customary kids

NOTE Confidence: 0.799974864

 $00:33:49.562 \longrightarrow 00:33:51.520$ actually have the opportunity have?

NOTE Confidence: 0.799974864

 $00:33:51.520 \longrightarrow 00:33:56.000$ Have they already had CIMT for the UCT group

NOTE Confidence: 0.783864021538462

 $00:33:56.600 \longrightarrow 00:34:00.320$ so we only got funding to follow the

00:34:00.320 --> 00:34:03.417 two original I acquired groups we

NOTE Confidence: 0.783864021538462

 $00:34:03.417 \longrightarrow 00:34:06.359$ just didn't think it would be ethical

NOTE Confidence: 0.783864021538462

 $00:34:06.359 \longrightarrow 00:34:08.172$ or the parents would have signed up

NOTE Confidence: 0.783864021538462

 $00:34:08.172 \longrightarrow 00:34:10.019$ if they had to wait a whole year.

NOTE Confidence: 0.783864021538462

 $00:34:10.020 \longrightarrow 00:34:12.006$ And weren't allowed to get any

NOTE Confidence: 0.783864021538462

00:34:12.006 --> 00:34:14.920 form of C IMT, so it was a choice.

NOTE Confidence: 0.783864021538462

 $00:34:14.920 \longrightarrow 00:34:17.209$ It's not the best of science.

NOTE Confidence: 0.93979214173913

 $00:34:19.680 \longrightarrow 00:34:21.941$ So we just will know about long

NOTE Confidence: 0.93979214173913

 $00:34:21.941 \longrightarrow 00:34:23.716$ term maintenance and growth and

NOTE Confidence: 0.93979214173913

 $00:34:23.716 \longrightarrow 00:34:25.551$ whether there's a differential for

NOTE Confidence: 0.93979214173913

 $00{:}34{:}25.551 \dashrightarrow 00{:}34{:}28.090$ those who did receive the treatment.

NOTE Confidence: 0.93979214173913

 $00:34:28.090 \longrightarrow 00:34:30.306$ If the treatment turns out not to be

NOTE Confidence: 0.93979214173913

 $00:34:30.306 \longrightarrow 00:34:32.280$ efficacious or we end the trial earlier,

NOTE Confidence: 0.93979214173913

 $00:34:32.280 \longrightarrow 00:34:33.846$ of course we won't continue with

NOTE Confidence: 0.93979214173913

 $00:34:33.846 \longrightarrow 00:34:36.211$ the 12 months, but it's it's.

NOTE Confidence: 0.93979214173913

 $00:34:36.211 \longrightarrow 00:34:38.319$ It's a compromise design,

 $00:34:38.320 \longrightarrow 00:34:40.045$ and we recognize its limits

NOTE Confidence: 0.93979214173913

 $00:34:40.045 \longrightarrow 00:34:42.532$ and had to describe them a lot

NOTE Confidence: 0.93979214173913

 $00:34:42.532 \longrightarrow 00:34:43.760$ in that application. Let

NOTE Confidence: 0.944952326666667

 $00:34:43.770 \longrightarrow 00:34:45.498$ me squeeze in one last question.

NOTE Confidence: 0.944952326666667

00:34:45.500 --> 00:34:46.928 Karen Fury is asking,

NOTE Confidence: 0.944952326666667

00:34:46.928 --> 00:34:47.999 could you project?

NOTE Confidence: 0.944952326666667

00:34:48.000 --> 00:34:50.256 What would that baby look like?

NOTE Confidence: 0.944952326666667

 $00:34:50.260 \longrightarrow 00:34:51.416$ And from the video,

NOTE Confidence: 0.944952326666667

 $00:34:51.416 \longrightarrow 00:34:53.150$ by the time he's school age,

NOTE Confidence: 0.944952326666667

 $00:34:53.150 \longrightarrow 00:34:54.239$ in other words,

NOTE Confidence: 0.944952326666667

 $00{:}34{:}54.239 \dashrightarrow 00{:}34{:}56.054$ we've seen that interval change.

NOTE Confidence: 0.944952326666667

 $00:34:56.060 \longrightarrow 00:34:58.184$ But would you have had spontaneous

NOTE Confidence: 0.944952326666667

 $00{:}34{:}58.184 \dashrightarrow 00{:}35{:}00.310$ recovery later on in childhood,

NOTE Confidence: 0.944952326666667

 $00:35:00.310 \longrightarrow 00:35:02.506$ either with or without the intervention?

NOTE Confidence: 0.864028027777778

 $00:35:04.060 \longrightarrow 00:35:06.920$ So that child and and

 $00:35:06.920 \longrightarrow 00:35:09.208$ clinically we have treated.

NOTE Confidence: 0.86402802777778

 $00{:}35{:}09.210 \dashrightarrow 00{:}35{:}12.680$ Dozens of children, not hundreds,

NOTE Confidence: 0.86402802777778

 $00:35:12.680 \longrightarrow 00:35:14.792$ repeatedly so often a parent who

NOTE Confidence: 0.864028027777778

 $00:35:14.792 \longrightarrow 00:35:17.544$ has a child like that who was

NOTE Confidence: 0.864028027777778

 $00:35:17.544 \longrightarrow 00:35:19.654$ told by the pediatric neurologist.

NOTE Confidence: 0.864028027777778

00:35:19.660 --> 00:35:22.780 Your child will never use that arm period.

NOTE Confidence: 0.86402802777778

 $00:35:22.780 \longrightarrow 00:35:25.220$ So all we're my work with is adaptive

NOTE Confidence: 0.864028027777778

 $00:35:25.220 \longrightarrow 00:35:27.086$ equipment and learning to make the

NOTE Confidence: 0.864028027777778

 $00:35:27.086 \dashrightarrow 00:35:29.240$ other arm the left arm really good.

NOTE Confidence: 0.864028027777778

 $00:35:29.240 \longrightarrow 00:35:30.626$ 'cause you can get by in

NOTE Confidence: 0.864028027777778

 $00:35:30.626 \longrightarrow 00:35:32.010$ life that way of course,

NOTE Confidence: 0.864028027777778

 $00:35:32.010 \longrightarrow 00:35:34.138$ but but to us there are a lot

NOTE Confidence: 0.864028027777778

00:35:34.138 --> 00:35:36.549 of limits with going only with

NOTE Confidence: 0.864028027777778

00:35:36.549 --> 00:35:38.357 adaptive equipment and learning.

NOTE Confidence: 0.864028027777778

 $00:35:38.360 \longrightarrow 00:35:41.349$ How to live a one armed life and

NOTE Confidence: 0.864028027777778

 $00:35:41.349 \longrightarrow 00:35:43.194$ children like that often come

 $00:35:43.194 \longrightarrow 00:35:45.629$ back to us about once a year.

NOTE Confidence: 0.864028027777778

 $00:35:45.630 \longrightarrow 00:35:47.190$ Some of the children we've seen

NOTE Confidence: 0.86402802777778

 $00{:}35{:}47.190 \dashrightarrow 00{:}35{:}48.739$ seven or eight years in a row.

NOTE Confidence: 0.864028027777778

00:35:48.740 --> 00:35:51.412 I will tell you one little girl whose

NOTE Confidence: 0.864028027777778

 $00{:}35{:}51.412 \dashrightarrow 00{:}35{:}53.547$ parents were told she'd never use.

NOTE Confidence: 0.864028027777778

 $00:35:53.550 \longrightarrow 00:35:56.418$ That is a competitive tennis player,

NOTE Confidence: 0.864028027777778

 $00:35:56.420 \longrightarrow 00:35:57.810$ and she uses both arms.

NOTE Confidence: 0.864028027777778

 $00:35:57.810 \longrightarrow 00:36:00.033$ She's not going to make it to the Olympics,

NOTE Confidence: 0.86402802777778

 $00:36:00.040 \longrightarrow 00:36:01.420$ but that's not her goal.

NOTE Confidence: 0.86402802777778

 $00:36:01.420 \longrightarrow 00:36:03.400$ But she actually is choosing.

NOTE Confidence: 0.864028027777778

 $00{:}36{:}03.400 \dashrightarrow 00{:}36{:}04.890$ She's now going to college,

NOTE Confidence: 0.864028027777778

 $00{:}36{:}04.890 \dashrightarrow 00{:}36{:}06.365$ and she's going to neuroscience

NOTE Confidence: 0.864028027777778

 $00{:}36{:}06.365 \dashrightarrow 00{:}36{:}08.200$ that she was interested in rehab.

NOTE Confidence: 0.86402802777778

 $00:36:08.200 \longrightarrow 00:36:09.256$ 'cause she said people.

NOTE Confidence: 0.864028027777778

 $00:36:09.256 \longrightarrow 00:36:11.220$ And like me, they gave up on me.

00:36:11.220 --> 00:36:11.780 You know,

NOTE Confidence: 0.864028027777778

 $00:36:11.780 \dashrightarrow 00:36:16.100$ if I hadn't have gotten so we have seen and.

NOTE Confidence: 0.86402802777778

00:36:16.100 --> 00:36:16.824 Broadly speaking,

NOTE Confidence: 0.86402802777778

 $00:36:16.824 \longrightarrow 00:36:19.358$ we know of some families who've come

NOTE Confidence: 0.86402802777778

 $00:36:19.358 \longrightarrow 00:36:21.536$ where the husband and wife almost

NOTE Confidence: 0.86402802777778

 $00:36:21.536 \longrightarrow 00:36:23.659$ landed fighting because one of those

NOTE Confidence: 0.86402802777778

 $00:36:23.659 \longrightarrow 00:36:26.123$ two people says my child is perfect now.

NOTE Confidence: 0.864028027777778

 $00:36:26.130 \longrightarrow 00:36:28.506$ I mean, no one ever thought stroke and

NOTE Confidence: 0.864028027777778

 $00:36:28.506 \longrightarrow 00:36:30.527$ hemiparesis a child would look normal.

NOTE Confidence: 0.864028027777778

00:36:30.530 --> 00:36:33.260 Now some people don't notice mild things.

NOTE Confidence: 0.864028027777778

 $00:36:33.260 \longrightarrow 00:36:34.387$ Some of us who look at it,

NOTE Confidence: 0.864028027777778 00:36:34.390 --> 00:36:34.904 you know,

NOTE Confidence: 0.864028027777778

 $00:36:34.904 \longrightarrow 00:36:36.446$ I think like everybody is impaired.

NOTE Confidence: 0.864028027777778

00:36:36.450 --> 00:36:38.618 I I haven't ever seen anyone work work,

NOTE Confidence: 0.864028027777778

00:36:38.620 --> 00:36:42.316 walk normally or use both hands normally,

NOTE Confidence: 0.864028027777778

 $00{:}36{:}42.320 \dashrightarrow 00{:}36{:}46.778$ but the recovery it isn't spontaneous.

 $00:36:46.780 \longrightarrow 00:36:49.125$ All of these children will get more

NOTE Confidence: 0.864028027777778

 $00{:}36{:}49.125 \to 00{:}36{:}51.517$ the rapy no matter what the question is.

NOTE Confidence: 0.86402802777778

 $00:36:51.520 \longrightarrow 00:36:53.290$ Are they getting some bursts

NOTE Confidence: 0.864028027777778

 $00:36:53.290 \longrightarrow 00:36:55.496$ of high intensity and I guess

NOTE Confidence: 0.864028027777778

 $00:36:55.496 \longrightarrow 00:36:57.656$ how close with the final thing.

NOTE Confidence: 0.864028027777778

 $00:36:57.660 \longrightarrow 00:37:00.236$ What we think is some of the

NOTE Confidence: 0.864028027777778

 $00:37:00.236 \longrightarrow 00:37:02.316$ forms of traditional therapy might

NOTE Confidence: 0.864028027777778

 $00:37:02.316 \longrightarrow 00:37:04.116$ have been really good,

NOTE Confidence: 0.864028027777778

 $00:37:04.120 \longrightarrow 00:37:05.688$ but they didn't get enough of it.

NOTE Confidence: 0.86402802777778

 $00:37:05.690 \longrightarrow 00:37:08.170$ And imagine you want to be a tennis

NOTE Confidence: 0.864028027777778

00:37:08.170 --> 00:37:10.657 player or a pianist concert pianist,

NOTE Confidence: 0.864028027777778

 $00:37:10.660 \longrightarrow 00:37:13.270$ and you only get a practice 2 hours a week.

NOTE Confidence: 0.864028027777778

 $00:37:13.270 \longrightarrow 00:37:14.416$ How good are you may get?

NOTE Confidence: 0.864028027777778

00:37:14.420 --> 00:37:15.897 In fact, you might even give up.

NOTE Confidence: 0.864028027777778

 $00:37:15.900 \longrightarrow 00:37:17.405$ That's why most children in

00:37:17.405 --> 00:37:18.308 elementary schools started.

NOTE Confidence: 0.86402802777778

 $00{:}37{:}18.310 \dashrightarrow 00{:}37{:}19.510$ With an instrument you know,

NOTE Confidence: 0.86402802777778

 $00:37:19.510 \longrightarrow 00:37:21.292$ give it up by the time they're in high

NOTE Confidence: 0.86402802777778

00:37:21.292 --> 00:37:23.079 school 'cause they didn't get good enough.

NOTE Confidence: 0.864028027777778

 $00:37:23.080 \longrightarrow 00:37:25.208$ But if you went away to a

NOTE Confidence: 0.864028027777778

 $00:37:25.208 \longrightarrow 00:37:26.790$ summer camp for a month.

NOTE Confidence: 0.86402802777778

 $00:37:26.790 \longrightarrow 00:37:28.884$ And you came out playing whatever

NOTE Confidence: 0.864028027777778

 $00:37:28.884 \dashrightarrow 00:37:31.310$ instrument or tennis you know at a level.

NOTE Confidence: 0.864028027777778

 $00{:}37{:}31.310 \dashrightarrow 00{:}37{:}32.206$ Like you know, hey,

NOTE Confidence: 0.864028027777778

 $00:37:32.206 \longrightarrow 00:37:33.326$ I'm gonna be really good.

NOTE Confidence: 0.864028027777778

 $00{:}37{:}33.330 \dashrightarrow 00{:}37{:}36.042$ Maybe you'd stick with it and we think

NOTE Confidence: 0.864028027777778

 $00:37:36.042 \longrightarrow 00:37:38.747$ that's what's happening at therapy children.

NOTE Confidence: 0.864028027777778

 $00:37:38.750 \longrightarrow 00:37:40.622$ If you go and you have a really nice

NOTE Confidence: 0.864028027777778

 $00{:}37{:}40.622 \dashrightarrow 00{:}37{:}42.458$ the rapist and you have a great place session,

NOTE Confidence: 0.864028027777778

 $00:37:42.460 \longrightarrow 00:37:44.210$ but you never get better,

NOTE Confidence: 0.864028027777778

00:37:44.210 --> 00:37:45.894 pretty soon you know.

 $00:37:45.894 \longrightarrow 00:37:47.999$ Therapy isn't so much fun.

NOTE Confidence: 0.864028027777778

 $00:37:48.000 \longrightarrow 00:37:48.334$ OK,

NOTE Confidence: 0.864028027777778

 $00:37:48.334 \longrightarrow 00:37:51.340$ thank you so much for inviting us and Ruth.

NOTE Confidence: 0.941713756

 $00{:}37{:}51.340 --> 00{:}37{:}52.330$ I'm sorry if I'm over.

NOTE Confidence: 0.685744442857143

 $00:37:53.890 \longrightarrow 00:37:54.746$ Thank you Doctor Riley.

NOTE Confidence: 0.685744442857143

 $00:37:54.746 \longrightarrow 00:37:55.388$ Thank you doctor.

NOTE Confidence: 0.685744442857143

 $00:37:55.390 \longrightarrow 00:37:58.408$ Love her that very heartwarming talk.

NOTE Confidence: 0.685744442857143

00:37:58.410 --> 00:38:00.000 I really appreciate.