## 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 --> 00:00:05.452 brief comments and then turn it
NOTE Confidence: 0.89189582
00:00:05.452 --> 00:00:07.637 over to our conference organizers.
NOTE Confidence: 0.89189582
00:00:07.640 --> 00:00:10.580 But first of all, I just wanted
NOTE Confidence: 0.89189582
00:00:10.580 --> 00:00:13.249 to say thanks to a few folks
NOTE Confidence: 0.89189582
00:00:13.250 --> 00:00:18.248 thanks to our uh to Ruth Arnold,
NOTE Confidence: 0.89189582
00:00:18.250 --> 00:00:20.760 who has really done a lot of work in the
NOTE Confidence: 0.89189582
00:00:20.824 --> 00:00:23.645 last several weeks to pull everyone together, NOTE Confidence: 0.89189582

00:00:23.650 --> 00:00:25.470 both locally and across the
NOTE Confidence: 0.89189582
00:00:25.470 --> 00:00:27.290 country to to come here.
NOTE Confidence: 0.89189582
00:00:27.290 --> 00:00:30.280 This is our regional, coordinating.
NOTE Confidence: 0.89189582
00:00:30.280 --> 00:00:33.192 Center for stroke Nets the the Southern New NOTE Confidence: 0.89189582

00:00:33.192 --> 00:00:35.138 England Partnership and Stroke Research, NOTE Confidence: 0.89189582

00:00:35.140 --> 00:00:36.733 Innovation and Treatment
NOTE Confidence: 0.89189582
00:00:36.733 --> 00:00:38.857 Conference we affectionately refer
NOTE Confidence: 0.89189582
00:00:38.857 --> 00:00:41.299 to ourselves as the spirit,
NOTE Confidence: 0.89189582
00:00:41.300 --> 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 --> 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 --> 00:00:58.450 We're really glad that you can join us today.
NOTE Confidence: 0.89189582
00:00:58.450 --> 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 --> 00:01:05.964 to hear really from so many of the
NOTE Confidence: 0.89189582
00:01:05.964 --> 00:01:07.894 national leaders across the spectrum
NOTE Confidence: 0.89189582
00:01:07.894 --> 00:01:10.289 of stroke net clinical trials.
NOTE Confidence: 0.89189582
00:01:10.290 --> 00:01:16.550 I'll just say that the perhaps the most.

NOTE Confidence: 0.89189582
00:01:16.550 --> 00:01:19.238 Part of stroke net.
NOTE Confidence: 0.89189582
00:01:19.240 --> 00:01:22.310 That's my favorite part really.
NOTE Confidence: 0.89189582
00:01:22.310 --> 00:01:24.650 Are these conferences and is the
NOTE Confidence: 0.89189582
00:01:24.650 --> 00:01:27.432 ability for our centers to be able
NOTE Confidence: 0.89189582
00:01:27.432 --> 00:01:29.347 to come together both nationally,
NOTE Confidence: 0.89189582
00:01:29.350 --> 00:01:31.770 but especially within our
NOTE Confidence: 0.89189582
00:01:31.770 --> 00:01:32.980 regional consortium.
NOTE Confidence: 0.89189582
00:01:32.980 --> 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 --> 00:01:43.195 introduce Shadi Yaghi so Shadi is
NOTE Confidence: 0.89189582
00:01:43.195 --> 00:01:46.680 the stroke division chief at Brown.
NOTE Confidence: 0.89189582
00:01:46.680 --> 00:01:49.860 And is incredibly involved in both,
NOTE Confidence: 0.89189582
00:01:49.860 --> 00:01:52.920 contributing to spirit and to stroke.
NOTE Confidence: 0.89189582
00:01:52.920 --> 00:01:55.256 Net clinical trial recruitment,
NOTE Confidence: 0.89189582

00:01:55.256 --> 00:02:00.050 but has a number of different interests in NOTE Confidence: 0.89189582

00:02:00.050 --> 00:02:04.180 investigation and also to reach a Sharma.
NOTE Confidence: 0.89189582
00:02:04.180 --> 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 --> 00:02:12.164 stroke net fellow but now also
NOTE Confidence: 0.89189582
00:02:12.164 --> 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 --> 00:02:19.730 Also involved in pushing forward stroke
NOTE Confidence: 0.89189582
00:02:19.730 --> 00:02:21.980 net trial concepts and has other
NOTE Confidence: 0.89189582
00:02:22.045 --> 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 --> 00:02:27.502 I'll turn it over to you but
NOTE Confidence: 0.89189582
00:02:27.502 --> 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 --> 00:02:32.760 I'm so excited about the
NOTE Confidence: 0.88172607
00:02:32.760 --> 00:02:34.440 conference today and about

NOTE Confidence: 0.88172607
00:02:34.440 --> 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 --> 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 --> 00:02:59.384 at thank you Shadi Yaghi for moderating,
NOTE Confidence: 0.791893538571429
00:02:59.390 --> 00:03:01.830 along with me and today.
NOTE Confidence: 0.791893538571429
00:03:01.830 --> 00:03:04.504 We will have a series of interesting
NOTE Confidence: 0.791893538571429
00:03:04.504 --> 00:03:07.351 talks and we will start off the
NOTE Confidence: 0.791893538571429
00:03:07.351 --> 00:03:09.860 morning with talks from representative
NOTE Confidence: 0.791893538571429
00:03:09.860 --> 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 --> 00:03:18.320 And then that will be followed by Doctor
NOTE Confidence: 0.791893538571429
00:03:18.320 --> 00:03:20.550 Richard Benson talking about diversity,
NOTE Confidence: 0.791893538571429
00:03:20.550 --> 00:03:22.330 equity and recruitment will have
NOTE Confidence: 0.791893538571429
00:03:22.330 --> 00:03:25.179 a little bit of a break at noon.
NOTE Confidence: 0.791893538571429

00:03:25.180 --> 00:03:27.480 Doctor Joe Broderick will be NOTE Confidence: 0.791893538571429

00:03:27.480 --> 00:03:29.280 talking about clinical stroke, NOTE Confidence: 0.791893538571429

00:03:29.280 --> 00:03:32.360 trial networks and particularly in the end.
NOTE Confidence: 0.791893538571429
00:03:32.360 --> 00:03:35.300 And yes, stroke net infrastructure
NOTE Confidence: 0.791893538571429
00:03:35.300 --> 00:03:37.995 will have lunch at 1:00 to 1:30.
NOTE Confidence: 0.791893538571429
00:03:38.000 --> 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 --> 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 --> 00:03:53.885 Jahnke where we will hear from NOTE Confidence: 0.791893538571429

00:03:53.885 --> 00:03:57.290 the P eyes from Aspire Arcadia.
NOTE Confidence: 0.791893538571429
00:03:57.290 --> 00:03:59.775 And most and then that will be
NOTE Confidence: 0.791893538571429
00:03:59.775 --> 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 --> 00:04:07.310 four of our spirit sites.

NOTE Confidence: 0.791893538571429
00:04:07.310 --> 00:04:08.974 So without further ado,
NOTE Confidence: 0.791893538571429
00:04:08.974 --> 00:04:12.208 we'd like to maybe go ahead and get
NOTE Confidence: 0.791893538571429
00:04:12.208 --> 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 --> 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 --> 00:04:32.205 would you like to share your screen?
NOTE Confidence: 0.857018987142857
00:04:33.540 --> 00:04:36.795 Yes, so once you let me share,
NOTE Confidence: 0.857018987142857
00:04:36.800 --> 00:04:39.761 I will be happy to pull our
NOTE Confidence: 0.857018987142857
00:04:39.761 --> 00:04:44.470 presentation up. Here we are and.
NOTE Confidence: 0.857018987142857
00:04:44.470 --> 00:04:48.772 Let me start this slideshow from
NOTE Confidence: 0.857018987142857
00:04:48.772 --> 00:04:51.705 here and let me have Sharon
NOTE Confidence: 0.857018987142857
00:04:51.705 --> 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.
NOTE Confidence: 0.7547118384

00:04:59.270 --> 00:05:01.727 Thank you Doctor Ramey and Doctor Low NOTE Confidence: 0.7547118384

00:05:01.727 --> 00:05:05.048 for joining us today to speak about the NOTE Confidence: 0.7547118384

00:05:05.048 --> 00:05:07.243 I acquired trial studying rehabilitation NOTE Confidence: 0.7547118384

00:05:07.316 --> 00:05:10.016 strategies for paralegal arterial stroke NOTE Confidence: 0.7547118384

00:05:10.020 --> 00:05:12.360 Doctor Shannon Ramey is professor of NOTE Confidence: 0.7547118384

00:05:12.360 --> 00:05:14.440 psychology and professor of psychiatry NOTE Confidence: 0.7547118384

00:05:14.440 --> 00:05:17.158 and Behavioral Medicine at Virginia Tech. NOTE Confidence: 0.7547118384

00:05:17.160 --> 00:05:19.656 Dr Warren Lewis of Pediatric neurologist
NOTE Confidence: 0.7547118384
00:05:19.656 --> 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 --> 00:05:26.429 at Ohio State College of Medicine.
NOTE Confidence: 0.7547118384
00:05:26.430 --> 00:05:27.550 So, without further ado.
NOTE Confidence: 0.91218853375
00:05:30.720 --> 00:05:32.019 Well, thank you.
NOTE Confidence: 0.91218853375
00:05:32.019 --> 00:05:35.050 We're so pleased to be here and
NOTE Confidence: 0.91218853375
00:05:35.142 --> 00:05:38.028 today what we hope to accomplish NOTE Confidence: 0.91218853375

00:05:38.030 --> 00:05:41.480 is letting you know the overview,

NOTE Confidence: 0.91218853375
00:05:41.480 --> 00:05:43.450 the design of our study.
NOTE Confidence: 0.91218853375
00:05:43.450 --> 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 --> 00:05:50.695 One is how did we really pick
NOTE Confidence: 0.91218853375
00:05:50.695 --> 00:05:52.399 those dosages for the children?
NOTE Confidence: 0.91218853375
00:05:52.400 --> 00:05:54.476 I mean, three hours, six hours,
NOTE Confidence: 0.91218853375
00:05:54.480 --> 00:05:55.912 what's what's that rationale?
NOTE Confidence: 0.91218853375
00:05:55.912 --> 00:05:57.702 So we'll spend a minute
NOTE Confidence: 0.91218853375
00:05:57.702 --> 00:05:59.380 and share that with you,
NOTE Confidence: 0.91218853375
00:05:59.380 --> 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 --> 00:06:04.584 not because we're trying
NOTE Confidence: 0.91218853375
00:06:04.584 --> 00:06:06.028 to get funded anymore,
NOTE Confidence: 0.91218853375
00:06:06.030 --> 00:06:07.980 but because we hope that those
NOTE Confidence: 0.91218853375
00:06:07.980 --> 00:06:09.815 of you who study different
NOTE Confidence: 0.91218853375

00:06:09.815 --> 00:06:12.130 dimensions of stroke across the NOTE Confidence: 0.91218853375

00:06:12.130 --> 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 --> 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 --> 00:06:25.900 especially if you work in rehab and recovery,
NOTE Confidence: 0.91218853375
00:06:25.900 --> 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 --> 00:06:33.130 about and then we'll talk about some
NOTE Confidence: 0.91218853375
00:06:33.130 --> 00:06:34.998 other opportunities for collaborations,
NOTE Confidence: 0.91218853375
00:06:35.000 --> 00:06:37.225 because I always think things
NOTE Confidence: 0.91218853375
00:06:37.225 --> 00:06:39.450 like a regional conference really
NOTE Confidence: 0.91218853375
00:06:39.521 --> 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,

NOTE Confidence: 0.91218853375
00:06:51.590 --> 00:06:54.320 the first 28 days of life and NOTE Confidence: 0.91218853375

00:06:54.320 --> 00:06:55.490 also the prenatal.
NOTE Confidence: 0.91218853375
00:06:55.490 --> 00:06:57.990 We presume strokes are there NOTE Confidence: 0.91218853375

00:06:57.990 --> 00:07:00.490 based on clinical MRI data.
NOTE Confidence: 0.91218853375
00:07:00.490 --> 00:07:04.598 We estimate it's about one in 1100 or 1200.
NOTE Confidence: 0.91218853375
00:07:04.598 --> 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 --> 00:07:11.610 recognize and hemiparesis occurs.
NOTE Confidence: 0.91218853375
00:07:11.610 --> 00:07:14.116 Maybe in about $40 \%$ of the children.
NOTE Confidence: 0.91218853375
00:07:14.120 --> 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 --> 00:07:21.170 and many of the children have impairments.
NOTE Confidence: 0.91218853375
00:07:21.170 --> 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 --> 00:07:26.749 we launched this,
NOTE Confidence: 0.91218853375

00:07:26.750 --> 00:07:30.398 there was and still is not a true NOTE Confidence: 0.91218853375

00:07:30.398 --> 00:07:34.486 consensus on how best to treat the children, NOTE Confidence: 0.91218853375

00:07:34.490 --> 00:07:36.920 so they usually are referred for NOTE Confidence: 0.91218853375

00:07:36.920 --> 00:07:39.907 therapy and then the therapy is a NOTE Confidence: 0.91218853375

00:07:39.907 --> 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 --> 00:07:50.940 PT often couple hours a week.
NOTE Confidence: 0.91218853375
00:07:50.940 --> 00:07:53.817 That's increased a little over the years.
NOTE Confidence: 0.91218853375
00:07:53.820 --> 00:07:55.878 And it's really not evidence based.
NOTE Confidence: 0.91218853375
00:07:55.880 --> 00:07:58.922 It's not highly specified and there's
NOTE Confidence: 0.91218853375
00:07:58.922 --> 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 --> 00:08:08.260 The version adapted for children which
NOTE Confidence: 0.91218853375
00:08:08.260 --> 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,

NOTE Confidence: 0.91218853375
00:08:15.590 --> 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 --> 00:08:23.010 focused solely on children who have the NOTE Confidence: 0.91218853375

00:08:23.010 --> 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 --> 00:08:32.684 We did this because some of our team
NOTE Confidence: 0.91218853375
00:08:32.684 --> 00:08:35.765 were among the people who did the very NOTE Confidence: 0.91218853375

00:08:35.765 --> 00:08:38.389 first adaptation from adult to Pediatrics.
NOTE Confidence: 0.91218853375
00:08:38.390 --> 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 --> 00:08:42.242 great challenge.
NOTE Confidence: 0.91218853375
00:08:42.242 --> 00:08:45.350 We've already done three other multi
NOTE Confidence: 0.91218853375
00:08:45.434 --> 00:08:47.944 site worked for older children
NOTE Confidence: 0.91218853375
00:08:47.944 --> 00:08:50.454 and testing various components of NOTE Confidence: 0.91218853375

00:08:50.541 --> 00:08:53.369 constraint induced movement therapy.
NOTE Confidence: 0.91218853375

00:08:53.370 --> 00:08:56.220 And why did we pick dosage?
NOTE Confidence: 0.91218853375
00:08:56.220 --> 00:09:00.408 It is the single most controversial
NOTE Confidence: 0.91218853375
00:09:00.408 --> 00:09:05.222 thing many parents but especially
NOTE Confidence: 0.91218853375
00:09:05.222 --> 00:09:07.218 clinicians MD's think.
NOTE Confidence: 0.91218853375
00:09:07.218 --> 00:09:10.606 Our original dose 6 hours a day.
NOTE Confidence: 0.91218853375
00:09:10.610 --> 00:09:12.640 Originally we did it for 21
NOTE Confidence: 0.91218853375
00:09:12.640 --> 00:09:15.580 days like that is way too much.
NOTE Confidence: 0.91218853375
00:09:15.580 --> 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 --> 00:09:22.435 like a child sitting in a chair at a
NOTE Confidence: 0.888240480666667
00:09:22.435 --> 00:09:24.021 table and someone handing the child NOTE Confidence: 0.888240480666667

00:09:24.021 --> 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 --> 00:09:29.468 it would be atrocious.
NOTE Confidence: 0.888240480666667
00:09:29.468 --> 00:09:33.697 But what we do is in the home it's play like.
NOTE Confidence: 0.888240480666667
00:09:33.700 --> 00:09:36.780 It includes self-help skills kids.

NOTE Confidence: 0.888240480666667
00:09:36.780 --> 00:09:39.284 Have you ever met a baby or toddler?
NOTE Confidence: 0.888240480666667
00:09:39.290 --> 00:09:41.684 When he or she is awake, who doesn't NOTE Confidence: 0.888240480666667

00:09:41.684 --> 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 --> 00:09:50.288 and people they like to hang out with.
NOTE Confidence: 0.888240480666667
00:09:50.290 --> 00:09:52.719 So children are active all day long
NOTE Confidence: 0.888240480666667
00:09:52.719 --> 00:09:54.502 and basically the therapy becomes NOTE Confidence: 0.888240480666667

00:09:54.502 --> 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 --> 00:10:00.870 why dosage?
NOTE Confidence: 0.888240480666667
00:10:00.870 --> 00:10:03.990 We wanted to really cover today and in
NOTE Confidence: 0.888240480666667
00:10:03.990 --> 00:10:06.127 psychology going back to really the
NOTE Confidence: 0.888240480666667
00:10:06.130 --> 00:10:08.426 1930s and 40s there was this idea.
NOTE Confidence: 0.888240480666667
00:10:08.430 --> 00:10:09.996 If you want a new habit.
NOTE Confidence: 0.888240480666667
00:10:10.000 --> 00:10:11.968 For the rest of your life.
NOTE Confidence: 0.888240480666667

00:10:11.970 --> 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 --> 00:10:21.480 but it was widely accepted.
NOTE Confidence: 0.888240480666667
00:10:21.480 --> 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 --> 00:10:27.709 21 isn't a bad beginning for
NOTE Confidence: 0.888240480666667
00:10:27.709 --> 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 --> 00:10:33.258 something that many days in a row.
NOTE Confidence: 0.888240480666667
00:10:33.260 --> 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 Well,
NOTE Confidence: 0.888240480666667
00:10:40.241 --> 00:10:40.923 six hours,
NOTE Confidence: 0.888240480666667
00:10:40.923 --> 00:10:43.310 is about the number of hours that NOTE Confidence: 0.888240480666667

00:10:43.380 --> 00:10:45.236 typically developing children are

NOTE Confidence: 0.888240480666667
00:10:45.236 --> 00:10:48.020 really active and awake and alert.
NOTE Confidence: 0.888240480666667
00:10:48.020 --> 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 --> 00:10:55.230 If you subtract out the hours
NOTE Confidence: 0.888240480666667
00:10:55.230 --> 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 --> 00:11:06.170 And then three hours is half a day,
NOTE Confidence: 0.888240480666667
00:11:06.170 --> 00:11:09.236 and in other trials we have tested
NOTE Confidence: 0.888240480666667
00:11:09.236 --> 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 --> 00:11:18.549 last at least for six months.
NOTE Confidence: 0.888240480666667
00:11:18.550 --> 00:11:21.790 And I'm under an embargo from
NOTE Confidence: 0.888240480666667
00:11:21.790 --> 00:11:23.410 the journal Pediatrics,
NOTE Confidence: 0.888240480666667
00:11:23.410 --> 00:11:27.074 but one week from today we have an NOTE Confidence: 0.888240480666667

00:11:27.074 --> 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 --> 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 --> 00:11:40.630 than what we are doing,
NOTE Confidence: 0.888240480666667
00:11:40.630 --> 00:11:42.905 and I acquired and turns out that
NOTE Confidence: 0.888240480666667
00:11:42.905 --> 00:11:44.616 really lower dosage didn't produce NOTE Confidence: 0.888240480666667

00:11:44.616 --> 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 --> 00:11:51.367 But Will put up the article on
NOTE Confidence: 0.888240480666667
00:11:51.367 --> 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 --> 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 --> 00:12:02.096 parent ratings besides our blinded NOTE Confidence: 0.888240480666667

00:12:02.096 --> 00:12:02.872 objective outcomes,

NOTE Confidence: 0.888240480666667
00:12:02.880 --> 00:12:05.820 because no matter how talented
NOTE Confidence: 0.888240480666667
00:12:05.820 --> 00:12:07.584 and assessor is.
NOTE Confidence: 0.888240480666667
00:12:07.590 --> 00:12:10.407 A two hour session or even a 3 hour
NOTE Confidence: 0.888240480666667
00:12:10.407 --> 00:12:12.947 session with an infant doesn't tell
NOTE Confidence: 0.888240480666667
00:12:12.947 --> 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 --> 00:12:20.258 So of course the primary measure
NOTE Confidence: 0.888240480666667
00:12:20.258 --> 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 --> 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 --> 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.
NOTE Confidence: 0.92701178

00:12:42.100 --> 00:12:45.444 This is just to show you that the NOTE Confidence: 0.92701178

00:12:45.444 --> 00:12:47.998 preliminary data we had on 24 infants
NOTE Confidence: 0.92701178
00:12:47.998 --> 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 --> 00:12:57.279 which is the child will acquire 7 .
NOTE Confidence: 0.92701178
00:12:57.280 --> 00:13:00.820 Brand new emerging behavior skills.
NOTE Confidence: 0.92701178
00:13:00.820 --> 00:13:03.669 EBS within a four week period and NOTE Confidence: 0.92701178

00:13:03.669 --> 00:13:07.017 for a little baby doing 7 brand new
NOTE Confidence: 0.92701178
00:13:07.017 --> 00:13:09.938 things with arm in hand is a lot.
NOTE Confidence: 0.92701178
00:13:09.940 --> 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 --> 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 --> 00:13:24.810 website on stroke Note stroke NET.
NOTE Confidence: 0.92701178
00:13:24.810 --> 00:13:26.762 If you want to see even more examples

NOTE Confidence: 0.92701178
00:13:26.762 --> 00:13:28.831 of what's it really look like when
NOTE Confidence: 0.92701178
00:13:28.831 --> 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 --> 00:13:35.638 there's no audio, so I'll voice over.
NOTE Confidence: 0.902730250909091
00:13:35.638 --> 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 --> 00:13:45.117 elements of the acquire protocol number one.
NOTE Confidence: 0.902730250909091
00:13:45.120 --> 00:13:48.264 As Sharon said, the real challenge for the
NOTE Confidence: 0.902730250909091
00:13:48.264 --> 00:13:51.267 therapist is to try to stimulate the child,
NOTE Confidence: 0.902730250909091
00:13:51.270 --> 00:13:53.430 so this becomes a positive experience
NOTE Confidence: 0.902730250909091
00:13:53.430 --> 00:13:55.815 to try to find those things
NOTE Confidence: 0.902730250909091
00:13:55.815 --> 00:13:57.567 that motivates the child.
NOTE Confidence: 0.902730250909091
00:13:57.570 --> 00:13:59.892 As you can see, this is at the very
NOTE Confidence: 0.902730250909091
00:13:59.892 --> 00:14:01.358 beginning of the intervention.
NOTE Confidence: 0.902730250909091
00:14:01.360 --> 00:14:02.880 And he's not particularly convinced
NOTE Confidence: 0.902730250909091

00:14:02.880 --> 00:14:05.240 that this is in his best interest,
NOTE Confidence: 0.902730250909091
00:14:05.240 --> 00:14:08.450 so she's trying to number one.
NOTE Confidence: 0.902730250909091
00:14:08.450 --> 00:14:13.175 Stimulate him to use that affected extremity, NOTE Confidence: 0.902730250909091

00:14:13.180 --> 00:14:14.071 the right arm,
NOTE Confidence: 0.902730250909091
00:14:14.071 --> 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 --> 00:14:20.760 it at this very early stage,
NOTE Confidence: 0.902730250909091
00:14:20.760 --> 00:14:23.448 but the goal is to try to
NOTE Confidence: 0.902730250909091
00:14:23.448 --> 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 --> 00:14:30.750 and not extension of the arm, NOTE Confidence: 0.902730250909091

00:14:30.750 --> 00:14:32.278 and not really engaging.
NOTE Confidence: 0.902730250909091
00:14:32.278 --> 00:14:34.188 In a more complex measure,
NOTE Confidence: 0.902730250909091
00:14:34.190 --> 00:14:37.136 and so this illustrates really a
NOTE Confidence: 0.902730250909091
00:14:37.136 --> 00:14:39.582 couple of principles we're trying
NOTE Confidence: 0.902730250909091
00:14:39.582 --> 00:14:41.466 to shape the child's behavior.

NOTE Confidence: 0.902730250909091
00:14:41.466 --> 00:14:43.554 You're going to see that at
NOTE Confidence: 0.902730250909091
00:14:43.554 --> 00:14:45.438 the end of this sequence,
NOTE Confidence: 0.902730250909091
00:14:45.440 --> 00:14:47.575 she gives him a hug and gives
NOTE Confidence: 0.902730250909091
00:14:47.575 --> 00:14:48.929 him some positive feedback,
NOTE Confidence: 0.902730250909091
00:14:48.929 --> 00:14:52.002 so she's really trying to use operant
NOTE Confidence: 0.902730250909091
00:14:52.002 --> 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 --> 00:15:01.247 this is occurring in the home setting,
NOTE Confidence: 0.902730250909091
00:15:01.250 --> 00:15:02.756 so it's easier for the child.
NOTE Confidence: 0.902730250909091
00:15:02.760 --> 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 --> 00:15:09.320 so you can say, well,
NOTE Confidence: 0.902730250909091
00:15:09.320 --> 00:15:10.406 he's still fussing.
NOTE Confidence: 0.902730250909091
00:15:10.406 --> 00:15:12.216 What has she really accomplished,
NOTE Confidence: 0.902730250909091

00:15:12.220 --> 00:15:14.724 but you can see that he is actually
NOTE Confidence: 0.902730250909091
00:15:14.724 --> 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 --> 00:15:25.070 in out stretching his arm,
NOTE Confidence: 0.902730250909091
00:15:25.070 --> 00:15:27.614 but he's beginning to do this
NOTE Confidence: 0.902730250909091
00:15:27.614 --> 00:15:28.886 spontaneously by himself.
NOTE Confidence: 0.902730250909091
00:15:28.890 --> 00:15:30.390 He's opening the fingers,
NOTE Confidence: 0.902730250909091
00:15:30.390 --> 00:15:31.890 he's opening the hand.
NOTE Confidence: 0.902730250909091
00:15:31.890 --> 00:15:33.966 It is clearly still a struggle.
NOTE Confidence: 0.902730250909091
00:15:33.970 --> 00:15:36.544 But now he's beginning to reach NOTE Confidence: 0.902730250909091

00:15:36.544 --> 00:15:40.280 out for the toy in a more positive
NOTE Confidence: 0.902730250909091
00:15:40.280 --> 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 --> 00:15:48.654 this illustrates that with this

NOTE Confidence: 0.902730250909091
00:15:48.654 --> 00:15:50.556 continued operant conditioning,
NOTE Confidence: 0.902730250909091
00:15:50.560 --> 00:15:52.414 this is now becoming a more
NOTE Confidence: 0.902730250909091
00:15:52.414 --> 00:15:54.060 positive activity for the child.
NOTE Confidence: 0.902730250909091
00:15:54.060 --> 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 --> 00:16:02.430 and it's important to demonstrate
NOTE Confidence: 0.902730250909091
00:16:02.430 --> 00:16:04.126 that it's not just.
NOTE Confidence: 0.902730250909091
00:16:04.130 --> 00:16:06.980 Repetitions movement of the impaired arm.
NOTE Confidence: 0.902730250909091
00:16:06.980 --> 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 --> 00:16:14.885 the therapist is trying to stimulate
NOTE Confidence: 0.902730250909091
00:16:14.885 --> 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 --> 00:16:22.606 sitting in a chair with her repeatedly
NOTE Confidence: 0.902730250909091

00:16:22.606 --> 00:16:24.920 stretching and and flexing his arm, NOTE Confidence: 0.902730250909091

00:16:24.920 --> 00:16:28.052 but it's a more complex functional
NOTE Confidence: 0.902730250909091
00:16:28.052 --> 00:16:31.640 series of movements for the child to NOTE Confidence: 0.902730250909091

00:16:31.640 --> 00:16:34.460 reach to crawl to support himself.
NOTE Confidence: 0.902730250909091
00:16:34.460 --> 00:16:36.959 To open the uh fingers of that
NOTE Confidence: 0.902730250909091
00:16:36.959 --> 00:16:39.844 right hand and you can see that
NOTE Confidence: 0.902730250909091
00:16:39.844 --> 00:16:42.004 compared to those initial clips, NOTE Confidence: 0.902730250909091

00:16:42.010 --> 00:16:44.530 he's now a much more functionally
NOTE Confidence: 0.902730250909091
00:16:44.530 --> 00:16:46.210 using that impaired extremity.
NOTE Confidence: 0.902730250909091
00:16:46.210 --> 00:16:48.625 She has that toy that she's trying
NOTE Confidence: 0.902730250909091
00:16:48.625 --> 00:16:51.350 to get him that she'll position, NOTE Confidence: 0.902730250909091
00:16:51.350 --> 00:16:52.886 and then this clip,
NOTE Confidence: 0.902730250909091
00:16:52.886 --> 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

NOTE Confidence: 0.940127760333333
00:17:02.391 --> 00:17:05.030 who's not able to use that extremity.
NOTE Confidence: 0.940127760333333
00:17:05.030 --> 00:17:07.130 He's now able to support himself.
NOTE Confidence: 0.940127760333333
00:17:07.130 --> 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 --> 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 --> 00:17:20.832 functionally than he was before, so again,
NOTE Confidence: 0.940127760333333
00:17:20.832 --> 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 --> 00:17:29.523 extremities and more functional use
NOTE Confidence: 0.940127760333333
00:17:29.523 --> 00:17:32.043 of the body and then the final clip.
NOTE Confidence: 0.940127760333333
00:17:32.050 --> 00:17:35.200 I think really demonstrates and excuse the.
NOTE Confidence: 0.940127760333333
00:17:35.200 --> 00:17:39.090 Relaxed attire for this particular example,
NOTE Confidence: 0.940127760333333

00:17:39.090 --> 00:17:42.520 but you can see that he's spontaneously
NOTE Confidence: 0.940127760333333
00:17:42.520 --> 00:17:46.599 going to position himself into the crawling.
NOTE Confidence: 0.940127760333333
00:17:46.600 --> 00:17:49.402 Positioning he crawls over to this
NOTE Confidence: 0.940127760333333
00:17:49.402 --> 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 --> 00:17:55.440 and at the very end of the clip he will
NOTE Confidence: 0.940127760333333
00:17:55.505 --> 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 --> 00:18:00.160 over a 3 three and a half week
NOTE Confidence: 0.940127760333333
00:18:00.232 --> 00:18:02.002 interval you can see that with
NOTE Confidence: 0.940127760333333
00:18:02.002 --> 00:18:04.544 with a child who clearly has a
NOTE Confidence: 0.940127760333333
00:18:04.544 --> 00:18:06.268 right upper extremity hemiparesis,
NOTE Confidence: 0.940127760333333
00:18:06.270 --> 00:18:11.065 the intervention is extended his his use.
NOTE Confidence: 0.940127760333333
00:18:11.070 --> 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 --> 00:18:18.695 so let me move to the next slide.

NOTE Confidence: 0.940127760333333
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 --> 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 --> 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 --> 00:18:39.316 One group will get the six hour high dose
NOTE Confidence: 0.940127760333333
00:18:39.320 --> 00:18:42.512 treatment and then 80 children will be
NOTE Confidence: 0.940127760333333
00:18:42.512 --> 00:18:45.458 randomized to usual and customary care.
NOTE Confidence: 0.940127760333333
00:18:45.460 --> 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 --> 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 --> 00:18:57.888 the children will be treated and the NOTE Confidence: 0.940127760333333

00:18:57.888 --> 00:18:59.724 active treatment will be centrally
NOTE Confidence: 0.940127760333333
00:18:59.724 --> 00:19:01.932 monitored for fidelity and then the
NOTE Confidence: 0.940127760333333
00:19:01.932 --> 00:19:04.158 children will be assessed immediately.
NOTE Confidence: 0.940127760333333
00:19:04.160 --> 00:19:06.860 Post treatment and then it's
NOTE Confidence: 0.940127760333333
00:19:06.860 --> 00:19:09.560 six six months post treatment.
NOTE Confidence: 0.940127760333333
00:19:09.560 --> 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 --> 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 --> 00:19:24.120 that six month assessment and let NOTE Confidence: 0.940127760333333

00:19:24.120 --> 00:19:26.225 me mention some innovative features
NOTE Confidence: 0.940127760333333
00:19:26.225 --> 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 --> 00:19:33.788 we're looking for efficacy,

NOTE Confidence: 0.940127760333333
00:19:33.788 --> 00:19:37.185 not just at the post assessment post
NOTE Confidence: 0.940127760333333
00:19:37.185 --> 00:19:40.030 treatment assessment with the children.
NOTE Confidence: 0.940127760333333
00:19:40.030 --> 00:19:41.880 Have to maintain their gains,
NOTE Confidence: 0.940127760333333
00:19:41.880 --> 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 --> 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 --> 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 --> 00:19:58.006 we are working to collect genetic
NOTE Confidence: 0.940127760333333
00:19:58.006 --> 00:20:00.321 samples and of course we're collecting
NOTE Confidence: 0.940127760333333
00:20:00.321 --> 00:20:02.673 MRI samples for these children and
NOTE Confidence: 0.940127760333333
00:20:02.673 --> 00:20:05.660 we want to test the question whether
NOTE Confidence: 0.940127760333333
00:20:05.660 --> 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
NOTE Confidence: 0.940127760333333

00:20:09.750 --> 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 --> 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 --> 00:20:22.342 the preceding of video and what other
NOTE Confidence: 0.858610934
00:20:22.342 --> 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 --> 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 --> 00:20:33.806 council to really illustrate the parrot NOTE Confidence: 0.858610934

00:20:33.806 --> 00:20:36.036 experience in participating in these.
NOTE Confidence: 0.858610934
00:20:36.040 --> 00:20:37.516 In this clinical study.
NOTE Confidence: 0.858610934
00:20:37.516 --> 00:20:39.730 So where are we in terms
NOTE Confidence: 0.858610934
00:20:39.808 --> 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

NOTE Confidence: 0.858610934
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 --> 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 --> 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 --> 00:21:07.154 and clearly we were delayed by the pandemic.
NOTE Confidence: 0.858610934
00:21:07.160 --> 00:21:09.729 But you can notice that the blue
NOTE Confidence: 0.858610934
00:21:09.729 --> 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 --> 00:21:16.126 and it really begins to look
NOTE Confidence: 0.858610934
00:21:16.126 --> 00:21:18.003 like we're re paralleling the
NOTE Confidence: 0.858610934
00:21:18.003 --> 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, NOTE Confidence: 0.858610934

00:21:22.430 --> 00:21:23.510 and we're hopeful.
NOTE Confidence: 0.858610934
00:21:23.510 --> 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 --> 00:21:31.030 of the grant period.
NOTE Confidence: 0.858610934
00:21:31.030 --> 00:21:32.840 Some of the challenges come.
NOTE Confidence: 0.858610934
00:21:32.840 --> 00:21:34.844 I think it's important to recognize
NOTE Confidence: 0.858610934
00:21:34.844 --> 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 --> 00:21:41.062 assessors are key to the conduct
NOTE Confidence: 0.858610934
00:21:41.062 --> 00:21:43.756 of the study, you have to prepare,
NOTE Confidence: 0.858610934
00:21:43.756 --> 00:21:46.420 you have to assign ongoing resources NOTE Confidence: 0.858610934

00:21:46.505 --> 00:21:49.470 for continued training and certifying.
NOTE Confidence: 0.858610934
00:21:49.470 --> 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 --> 00:21:58.800 in that ongoing training.

NOTE Confidence: 0.858610934
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 --> 00:22:05.796 but it is very intriguing.
NOTE Confidence: 0.858610934
00:22:05.800 --> 00:22:07.392 There's ongoing parent increase
NOTE Confidence: 0.858610934
00:22:07.392 --> 00:22:08.984 interest in the study,
NOTE Confidence: 0.858610934
00:22:08.990 --> 00:22:11.000 and that's been a key driver
NOTE Confidence: 0.858610934
00:22:11.000 --> 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 --> 00:22:17.067 the ideal range.
NOTE Confidence: 0.858610934
00:22:17.070 --> 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 --> 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, NOTE Confidence: 0.858610934

00:22:27.838 --> 00:22:31.550 and our sites have been able to recruit now.
NOTE Confidence: 0.858610934
00:22:31.550 --> 00:22:34.074 African American children up to about 7\%,
NOTE Confidence: 0.858610934
00:22:34.074 --> 00:22:35.530 so it's an improvement,
NOTE Confidence: 0.858610934
00:22:35.530 --> 00:22:37.434 but we clearly have a ways to go
NOTE Confidence: 0.858610934
00:22:37.434 --> 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 --> 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 --> 00:22:47.676 but clearly there's a lot of
NOTE Confidence: 0.858610934
00:22:47.676 --> 00:22:50.033 strengths in terms of working with NOTE Confidence: 0.858610934

00:22:50.033 --> 00:22:52.238 it and establish trial network.
NOTE Confidence: 0.858610934
00:22:52.240 --> 00:22:53.948 So let me turn the slides back
NOTE Confidence: 0.858610934
00:22:53.948 --> 00:22:54.680 over to Sharon.
NOTE Confidence: 0.847903370909091
00:22:57.730 --> 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.

NOTE Confidence: 0.847903370909091
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 --> 00:23:12.264 book about a study where we followed NOTE Confidence: 0.847903370909091
00:23:12.264 --> 00:23:14.620 the same babies who for 50 years.
NOTE Confidence: 0.847903370909091
00:23:14.620 --> 00:23:16.083 So that's both how old we are
NOTE Confidence: 0.847903370909091
00:23:16.083 --> 00:23:17.630 and how old those babies are.
NOTE Confidence: 0.847903370909091
00:23:17.630 --> 00:23:19.298 So do I always want more
NOTE Confidence: 0.847903370909091
00:23:19.298 --> 00:23:20.850 data as children get older?
NOTE Confidence: 0.847903370909091
00:23:20.850 --> 00:23:23.846 Yes, is it a fishing expedition sometimes,
NOTE Confidence: 0.847903370909091
00:23:23.850 --> 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 --> 00:23:29.620 Horrible fishing expedition that no
NOTE Confidence: 0.847903370909091
00:23:29.620 --> 00:23:31.920 peer review group would fund appear.
NOTE Confidence: 0.847903370909091
00:23:31.920 --> 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, NOTE Confidence: 0.847903370909091

00:23:37.000 --> 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 --> 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 --> 00:23:51.764 but we had compelling evidence from
NOTE Confidence: 0.847903370909091
00:23:51.764 --> 00:23:54.640 the study that will be published.
NOTE Confidence: 0.847903370909091
00:23:54.640 --> 00:23:57.230 And available next week in
NOTE Confidence: 0.847903370909091
00:23:57.230 --> 00:23:59.714 Pediatrics that at 12 months.
NOTE Confidence: 0.847903370909091
00:23:59.714 --> 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 --> 00:24:09.939 think that's really about developmental.
NOTE Confidence: 0.847903370909091
00:24:09.940 --> 00:24:11.500 Neuroplasticity, we think.
NOTE Confidence: 0.847903370909091
00:24:11.500 --> 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 --> 00:24:21.376 but the nonhuman primate research on C.
NOTE Confidence: 0.847903370909091
00:24:21.380 --> 00:24:24.270 IMT in stroke experimental stroke

NOTE Confidence: 0.847903370909091
00:24:24.270 --> 00:24:27.733 models showed that you could get
NOTE Confidence: 0.847903370909091
00:24:27.733 --> 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 --> 00:24:34.879 dose as well as a high dose,
NOTE Confidence: 0.847903370909091
00:24:34.880 --> 00:24:37.057 but the only rhesus monkeys that were
NOTE Confidence: 0.847903370909091
00:24:37.057 --> 00:24:39.108 changed for the rest of the light.
NOTE Confidence: 0.847903370909091
00:24:39.110 --> 00:24:40.760 Their lives were the ones
NOTE Confidence: 0.847903370909091
00:24:40.760 --> 00:24:42.410 who got the high dose.
NOTE Confidence: 0.847903370909091
00:24:42.410 --> 00:24:46.652 So we think probably at a neural
NOTE Confidence: 0.847903370909091
00:24:46.652 --> 00:24:50.039 anatomical and functional systems level, NOTE Confidence: 0.847903370909091

00:24:50.040 --> 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 --> 00:24:57.738 and we want to study that,
NOTE Confidence: 0.847903370909091
00:24:57.740 --> 00:25:00.568 so we'll be able to test whether
NOTE Confidence: 0.847903370909091
00:25:00.568 --> 00:25:02.889 the dosages differ at 12 months.
NOTE Confidence: 0.847903370909091

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 --> 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 --> 00:25:09.980 It could be even that that
NOTE Confidence: 0.847903370909091
00:25:09.980 --> 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 --> 00:25:16.716 that child probably everyday participated
NOTE Confidence: 0.847903370909091
00:25:16.716 --> 00:25:19.276 in about 15 to 20 different activities.
NOTE Confidence: 0.847903370909091
00:25:19.280 --> 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 --> 00:25:30.050 in our early years of doing this therapy.
NOTE Confidence: 0.847903370909091
00:25:30.050 --> 00:25:32.610 We called it Olympic training.
NOTE Confidence: 0.847903370909091
00:25:32.610 --> 00:25:35.562 Both children who prepare to compete NOTE Confidence: 0.847903370909091

00:25:35.562 --> 00:25:39.211 in the Olympics and children who are

NOTE Confidence: 0.847903370909091
00:25:39.211 --> 00:25:42.506 musical performers under the age of 10 .
NOTE Confidence: 0.847903370909091
00:25:42.510 --> 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 --> 00:25:50.900 year in and year out.
NOTE Confidence: 0.847903370909091
00:25:50.900 --> 00:25:53.100 So we really think that.
NOTE Confidence: 0.847903370909091
00:25:53.100 --> 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 --> 00:26:03.428 we we have things like the parents
NOTE Confidence: 0.847903370909091
00:26:03.428 --> 00:26:06.047 saying the child looks at the arm
NOTE Confidence: 0.847903370909091
00:26:06.047 --> 00:26:07.942 that previously was scarcely used.
NOTE Confidence: 0.847903370909091
00:26:07.950 --> 00:26:10.360 Some children actually totally neglected.
NOTE Confidence: 0.847903370909091
00:26:10.360 --> 00:26:13.096 They look at their arm and some of the
NOTE Confidence: 0.847903370909091
00:26:13.096 --> 00:26:15.402 children start to laugh or just wave
NOTE Confidence: 0.847903370909091
00:26:15.402 --> 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 NOTE Confidence: 0.847903370909091

00:26:19.840 --> 00:26:22.386 are so excited they learn to clap.
NOTE Confidence: 0.847903370909091
00:26:22.390 --> 00:26:23.840 I mean they are so.
NOTE Confidence: 0.847903370909091
00:26:23.840 --> 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 --> 00:26:30.470 the child's willing to stick
NOTE Confidence: 0.847903370909091
00:26:30.470 --> 00:26:32.460 with the difficult tasks that
NOTE Confidence: 0.900726367916666
00:26:32.532 --> 00:26:34.590 at first makes you frustrated any
NOTE Confidence: 0.900726367916666
00:26:34.590 --> 00:26:37.339 of you have ever been around a baby.
NOTE Confidence: 0.900726367916666
00:26:37.340 --> 00:26:38.584 Do babies get frustrated
NOTE Confidence: 0.900726367916666
00:26:38.584 --> 00:26:40.139 when they can't do something?
NOTE Confidence: 0.900726367916666
00:26:40.140 --> 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 --> 00:26:46.971 to a minimum and we don't allow
NOTE Confidence: 0.900726367916666
00:26:46.971 --> 00:26:48.868 our babies to cry or fuss over.
NOTE Confidence: 0.900726367916666
00:26:48.870 --> 00:26:50.322 Is there a two minute limit NOTE Confidence: 0.900726367916666

00:26:50.322 --> 00:26:51.290 Warren or three minute?

NOTE Confidence: 0.900726367916666
00:26:51.290 --> 00:26:53.194 Anyway, we don't let it happen forever.
NOTE Confidence: 0.900726367916666
00:26:53.200 --> 00:26:56.386 We're really kind and considerate, but.
NOTE Confidence: 0.900726367916666
00:26:56.386 --> 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 --> 00:27:13.808 child try when the child can't help it.
NOTE Confidence: 0.900726367916666
00:27:13.810 --> 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 --> 00:27:19.158 but also very kind.
NOTE Confidence: 0.900726367916666
00:27:19.158 --> 00:27:22.790 So we will be able in the 12 month study
NOTE Confidence: 0.900726367916666
00:27:22.790 --> 00:27:26.509 to collect a lot of rich descriptive data.
NOTE Confidence: 0.900726367916666
00:27:26.510 --> 00:27:28.774 About whether the parents,
NOTE Confidence: 0.900726367916666
00:27:28.774 --> 00:27:32.170 the physicians and the therapist altered
NOTE Confidence: 0.900726367916666

00:27:32.255 --> 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 --> 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 --> 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 --> 00:27:50.676 so we don't try to teach language
NOTE Confidence: 0.900726367916666
00:27:50.676 --> 00:27:51.472 and cognition,
NOTE Confidence: 0.900726367916666
00:27:51.480 --> 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 --> 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 --> 00:28:03.850 many of them begin to speak.

NOTE Confidence: 0.900726367916666
00:28:03.850 --> 00:28:05.728 Many of them begin to laugh.
NOTE Confidence: 0.900726367916666
00:28:05.730 --> 00:28:08.940 And interact and become way more
NOTE Confidence: 0.900726367916666
00:28:08.940 --> 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 --> 00:28:18.370 And they have to now collaborate with
NOTE Confidence: 0.900726367916666
00:28:18.480 --> 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 --> 00:28:27.429 able to measure more about that topic.
NOTE Confidence: 0.900726367916666
00:28:27.430 --> 00:28:31.453 In our 12 month follow up next slide Warren.
NOTE Confidence: 0.900726367916666
00:28:31.460 --> 00:28:34.212 Opportunities will stroke overall NOTE Confidence: 0.900726367916666

00:28:34.212 --> 00:28:37.652 thank goodness across the whole NOTE Confidence: 0.900726367916666

00:28:37.652 --> 00:28:40.637 pediatric spectrum is kind of rare
NOTE Confidence: 0.900726367916666
00:28:40.640 --> 00:28:43.368 but but we hope that there will be
NOTE Confidence: 0.900726367916666
00:28:43.368 --> 00:28:45.436 people today in this audience and NOTE Confidence: 0.900726367916666

00:28:45.436 --> 00:28:47.928 also as you reach out to colleagues
NOTE Confidence: 0.900726367916666

00:28:47.928 --> 00:28:50.670 who have ideas about different ways NOTE Confidence: 0.900726367916666 00:28:50.670 --> 00:28:54.150 and whether it's higher intensity

NOTE Confidence: 0.900726367916666
00:28:54.150 --> 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 --> 00:29:04.146 Direct stimulation with more
NOTE Confidence: 0.900726367916666
00:29:04.146 --> 00:29:06.541 traditional forms of therapy and
NOTE Confidence: 0.900726367916666
00:29:06.541 --> 00:29:08.806 actually with C IMT and comparing. NOTE Confidence: 0.900726367916666

00:29:08.810 --> 00:29:11.105 What if you do one or the other or NOTE Confidence: 0.900726367916666

00:29:11.105 --> 00:29:13.642 you combine them? What are the benefits?
NOTE Confidence: 0.900726367916666
00:29:13.642 --> 00:29:16.359 We'd love to see more trials like that.
NOTE Confidence: 0.900726367916666
00:29:16.360 --> 00:29:18.999 Anyone who wants to go through the NOTE Confidence: 0.900726367916666

00:29:18.999 --> 00:29:20.870 challenging lengthy process and stroke.
NOTE Confidence: 0.900726367916666
00:29:20.870 --> 00:29:21.166 Net,
NOTE Confidence: 0.900726367916666
00:29:21.166 --> 00:29:23.534 we promise we will be at your side
NOTE Confidence: 0.900726367916666
00:29:23.534 --> 00:29:27.800 and help you get funding and.
NOTE Confidence: 0.925724035238095
00:29:30.150 --> 00:29:33.183 I really hope that we can get some more

NOTE Confidence: 0.925724035238095
00:29:33.183 --> 00:29:35.662 rehab and recovery trials in Pediatrics
NOTE Confidence: 0.925724035238095
00:29:35.662 --> 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 --> 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 --> 00:29:50.980 So we want to see a lot more
NOTE Confidence: 0.925724035238095
00:29:50.980 --> 00:29:52.000 pediatric trials.
NOTE Confidence: 0.925724035238095
00:29:52.000 --> 00:29:57.586 And hope you'll get excited about that.
NOTE Confidence: 0.925724035238095
00:29:57.590 --> 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 --> 00:30:08.596 New Haven and Brown Stroke net team
NOTE Confidence: 0.925724035238095
00:30:08.596 --> 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 --> 00:30:15.350 we have University of Michigan.
NOTE Confidence: 0.925724035238095

00:30:15.350 --> 00:30:18.325 We have Kennedy Krieger at Johns Hopkins.
NOTE Confidence: 0.925724035238095
00:30:18.330 --> 00:30:21.528 We have UAB and Birmingham Boston.
NOTE Confidence: 0.925724035238095
00:30:21.530 --> 00:30:24.274 We have a Harvard and the two
NOTE Confidence: 0.925724035238095
00:30:24.274 --> 00:30:25.678 wonderful children's hospitals.
NOTE Confidence: 0.925724035238095
00:30:25.678 --> 00:30:29.452 Charleston's are 14th site at MUSC Chicago.
NOTE Confidence: 0.925724035238095
00:30:29.452 --> 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 --> 00:30:46.138 Philadelphia Chop and Roanoke.
NOTE Confidence: 0.925724035238095
00:30:46.138 --> 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 --> 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.

NOTE Confidence: 0.925724035238095
00:30:55.600 --> 00:30:57.750 So any questions I see
NOTE Confidence: 0.925724035238095
00:30:57.750 --> 00:31:00.420 under chat we had a nice
NOTE Confidence: 0.883486957857143
00:31:01.670 --> 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 --> 00:31:09.087 the potential for the intervention.
NOTE Confidence: 0.883486957857143
00:31:09.090 --> 00:31:11.603 To work on the arm versus the
NOTE Confidence: 0.883486957857143
00:31:11.603 --> 00:31:13.820 hand and fingers, and does that.
NOTE Confidence: 0.891969942307692
00:31:14.720 --> 00:31:17.888 We work on all of that and we work
NOTE Confidence: 0.891969942307692
00:31:17.888 --> 00:31:21.816 on trunk control so anything that
NOTE Confidence: 0.891969942307692
00:31:21.816 --> 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 --> 00:31:30.626 dissociated movements at elbow and wrist,
NOTE Confidence: 0.891969942307692
00:31:30.630 --> 00:31:32.328 and we use hand and fingers.
NOTE Confidence: 0.891969942307692
00:31:32.330 --> 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, NOTE Confidence: 0.891969942307692

00:31:37.230 --> 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 --> 00:31:43.274 It takes a lot of training and give them NOTE Confidence: 0.891969942307692

00:31:43.274 --> 00:31:45.738 a lot of feedback but they also know
NOTE Confidence: 0.891969942307692
00:31:45.738 --> 00:31:48.005 about some of the natural progression
NOTE Confidence: 0.891969942307692
00:31:48.005 --> 00:31:50.145 of the entire upper extremity.
NOTE Confidence: 0.891969942307692
00:31:50.150 --> 00:31:51.980 So we do all of that.
NOTE Confidence: 0.891969942307692
00:31:51.980 --> 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 --> 00:32:05.372 grasping and then doing more
NOTE Confidence: 0.891969942307692
00:32:05.372 --> 00:32:08.340 refined movements, and then we do,
NOTE Confidence: 0.891969942307692
00:32:08.340 --> 00:32:08.830 he
NOTE Confidence: 0.909458593478261
00:32:08.840 --> 00:32:10.802 had an additional part of the

NOTE Confidence: 0.909458593478261
00:32:10.802 --> 00:32:12.820 question because for the the question NOTE Confidence: 0.909458593478261

00:32:12.820 --> 00:32:14.746 is how does that influence the
NOTE Confidence: 0.909458593478261
00:32:14.746 --> 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 --> 00:32:21.947 in terms of the results with the
NOTE Confidence: 0.909458593478261
00:32:21.947 --> 00:32:24.190 arm versus the hand and fingers,
NOTE Confidence: 0.909458593478261
00:32:24.190 --> 00:32:27.466 and does that influence the choice?
NOTE Confidence: 0.909458593478261
00:32:27.470 --> 00:32:28.160 Outcome measure
NOTE Confidence: 0.9134305775
00:32:28.690 --> 00:32:30.510 well or outcome measure.
NOTE Confidence: 0.9134305775
00:32:30.510 --> 00:32:34.502 Is a composite that looks at all of NOTE Confidence: 0.9134305775

00:32:34.502 --> 00:32:36.850 those components you've nominated.
NOTE Confidence: 0.9134305775
00:32:36.850 --> 00:32:37.795 It's not perfect.
NOTE Confidence: 0.9134305775
00:32:37.795 --> 00:32:40.000 I mean if we were totally honest,
NOTE Confidence: 0.9134305775
00:32:40.000 --> 00:32:41.638 we'd say there's not a perfect measure, NOTE Confidence: 0.9134305775

00:32:41.640 --> 00:32:43.510 and then we want to done the research at all.
NOTE Confidence: 0.9134305775

00:32:43.510 --> 00:32:46.438 So we went with our best measure that NOTE Confidence: 0.9134305775

00:32:46.438 --> 00:32:50.026 we had and we have multiple other NOTE Confidence: 0.9134305775

00:32:50.026 --> 00:32:52.242 standardized tools and subscales.
NOTE Confidence: 0.9134305775
00:32:52.250 --> 00:32:54.210 And our measure is kind of different.
NOTE Confidence: 0.9134305775
00:32:54.210 --> 00:32:56.652 It requires that the child demonstrated
NOTE Confidence: 0.9134305775
00:32:56.652 --> 00:32:59.549 skill in two or more situations,
NOTE Confidence: 0.9134305775
00:32:59.550 --> 00:33:01.380 so we have lots of videotapes
NOTE Confidence: 0.9134305775
00:33:01.380 --> 00:33:02.295 on the children.
NOTE Confidence: 0.9134305775
00:33:02.300 --> 00:33:05.366 As well as the formal assessment,
NOTE Confidence: 0.9134305775
00:33:05.370 --> 00:33:07.062 and so it's a.
NOTE Confidence: 0.9134305775
00:33:07.062 --> 00:33:08.754 A pretty rigorous demonstration
NOTE Confidence: 0.9134305775
00:33:08.754 --> 00:33:11.195 of new skills and actually
NOTE Confidence: 0.9134305775
00:33:11.195 --> 00:33:13.710 children acquire some skills that
NOTE Confidence: 0.9134305775
00:33:13.710 --> 00:33:16.479 we're not even fully measuring,
NOTE Confidence: 0.9134305775
00:33:16.480 --> 00:33:18.370 so we're not capturing it all, NOTE Confidence: 0.9134305775

00:33:18.370 --> 00:33:21.810 but we hope it's a good enough measure.

NOTE Confidence: 0.9134305775
00:33:21.810 --> 00:33:23.994 Some of the other measures were so NOTE Confidence: 0.9134305775

00:33:23.994 --> 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 --> 00:33:30.570 so it's a combined measure.
NOTE Confidence: 0.9134305775
00:33:30.570 --> 00:33:32.314 We're happy to share it with you and
NOTE Confidence: 0.9134305775
00:33:32.314 --> 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 --> 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 --> 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 --> 00:33:51.520 actually have the opportunity have?
NOTE Confidence: 0.799974864
00:33:51.520 --> 00:33:56.000 Have they already had CIMT for the UCT group NOTE Confidence: 0.783864021538462

00:33:56.600 --> 00:34:00.320 so we only got funding to follow the
NOTE Confidence: 0.783864021538462

00:34:00.320 --> 00:34:03.417 two original I acquired groups we NOTE Confidence: 0.783864021538462

00:34:03.417 --> 00:34:06.359 just didn't think it would be ethical NOTE Confidence: 0.783864021538462

00:34:06.359 --> 00:34:08.172 or the parents would have signed up NOTE Confidence: 0.783864021538462

00:34:08.172 --> 00:34:10.019 if they had to wait a whole year.
NOTE Confidence: 0.783864021538462
00:34:10.020 --> 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 --> 00:34:17.209 It's not the the best of science.
NOTE Confidence: 0.93979214173913
00:34:19.680 --> 00:34:21.941 So we just will know about long
NOTE Confidence: 0.93979214173913
00:34:21.941 --> 00:34:23.716 term maintenance and growth and NOTE Confidence: 0.93979214173913

00:34:23.716 --> 00:34:25.551 whether there's a differential for
NOTE Confidence: 0.93979214173913
00:34:25.551 --> 00:34:28.090 those who did receive the treatment.
NOTE Confidence: 0.93979214173913
00:34:28.090 --> 00:34:30.306 If the treatment turns out not to be
NOTE Confidence: 0.93979214173913
00:34:30.306 --> 00:34:32.280 efficacious or we end the trial earlier, NOTE Confidence: 0.93979214173913

00:34:32.280 --> 00:34:33.846 of course we won't continue with
NOTE Confidence: 0.93979214173913
00:34:33.846 --> 00:34:36.211 the 12 months, but it's it's.
NOTE Confidence: 0.93979214173913
00:34:36.211 --> 00:34:38.319 It's a compromise design,

NOTE Confidence: 0.93979214173913
00:34:38.320 --> 00:34:40.045 and we recognize its limits
NOTE Confidence: 0.93979214173913
00:34:40.045 --> 00:34:42.532 and had to describe them a lot
NOTE Confidence: 0.93979214173913
00:34:42.532 --> 00:34:43.760 in that application. Let
NOTE Confidence: 0.944952326666667
00:34:43.770 --> 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 --> 00:34:51.416 And from the video,
NOTE Confidence: 0.944952326666667
00:34:51.416 --> 00:34:53.150 by the time he's school age,
NOTE Confidence: 0.944952326666667
00:34:53.150 --> 00:34:54.239 in other words,
NOTE Confidence: 0.944952326666667
00:34:54.239 --> 00:34:56.054 we've seen that interval change.
NOTE Confidence: 0.944952326666667
00:34:56.060 --> 00:34:58.184 But would you have had spontaneous
NOTE Confidence: 0.944952326666667
00:34:58.184 --> 00:35:00.310 recovery later on in childhood,
NOTE Confidence: 0.944952326666667
00:35:00.310 --> 00:35:02.506 either with or without the intervention?
NOTE Confidence: 0.864028027777778
00:35:04.060 --> 00:35:06.920 So that child and and
NOTE Confidence: 0.864028027777778

00:35:06.920 --> 00:35:09.208 clinically we have treated.
NOTE Confidence: 0.864028027777778
00:35:09.210 --> 00:35:12.680 Dozens of children, not hundreds,
NOTE Confidence: 0.864028027777778
00:35:12.680 --> 00:35:14.792 repeatedly so often a parent who NOTE Confidence: 0.864028027777778

00:35:14.792 --> 00:35:17.544 has a child like that who was
NOTE Confidence: 0.864028027777778
00:35:17.544 --> 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: 0.864028027777778
00:35:22.780 --> 00:35:25.220 So all we're my work with is adaptive
NOTE Confidence: 0.864028027777778
00:35:25.220 --> 00:35:27.086 equipment and learning to make the
NOTE Confidence: 0.864028027777778
00:35:27.086 --> 00:35:29.240 other arm the left arm really good.
NOTE Confidence: 0.864028027777778
00:35:29.240 --> 00:35:30.626 'cause you can get by in
NOTE Confidence: 0.864028027777778
00:35:30.626 --> 00:35:32.010 life that way of course,
NOTE Confidence: 0.864028027777778
00:35:32.010 --> 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 --> 00:35:41.349 How to live a one armed life and NOTE Confidence: 0.864028027777778

00:35:41.349 --> 00:35:43.194 children like that often come

NOTE Confidence: 0.864028027777778
00:35:43.194 --> 00:35:45.629 back to us about once a year.
NOTE Confidence: 0.864028027777778
00:35:45.630 --> 00:35:47.190 Some of the children we've seen
NOTE Confidence: 0.864028027777778
00:35:47.190 --> 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 --> 00:35:53.547 parents were told she'd never use.
NOTE Confidence: 0.864028027777778
00:35:53.550 --> 00:35:56.418 That is a competitive tennis player,
NOTE Confidence: 0.864028027777778
00:35:56.420 --> 00:35:57.810 and she uses both arms.
NOTE Confidence: 0.864028027777778
00:35:57.810 --> 00:36:00.033 She's not going to make it to the Olympics,
NOTE Confidence: 0.864028027777778
00:36:00.040 --> 00:36:01.420 but that's not her goal.
NOTE Confidence: 0.864028027777778
00:36:01.420 --> 00:36:03.400 But she actually is choosing.
NOTE Confidence: 0.864028027777778
00:36:03.400 --> 00:36:04.890 She's now going to college,
NOTE Confidence: 0.864028027777778
00:36:04.890 --> 00:36:06.365 and she's going to neuroscience
NOTE Confidence: 0.864028027777778
00:36:06.365 --> 00:36:08.200 that she was interested in rehab.
NOTE Confidence: 0.864028027777778
00:36:08.200 --> 00:36:09.256 'cause she said people.
NOTE Confidence: 0.864028027777778
00:36:09.256 --> 00:36:11.220 And like me, they gave up on me.
NOTE Confidence: 0.864028027777778

00:36:11.220 --> 00:36:11.780 You know,
NOTE Confidence: 0.864028027777778
00:36:11.780 --> 00:36:16.100 if I hadn't have gotten so we have seen and.
NOTE Confidence: 0.864028027777778
00:36:16.100 --> 00:36:16.824 Broadly speaking,
NOTE Confidence: 0.864028027777778
00:36:16.824 --> 00:36:19.358 we know of some families who've come
NOTE Confidence: 0.864028027777778
00:36:19.358 --> 00:36:21.536 where the husband and wife almost
NOTE Confidence: 0.864028027777778
00:36:21.536 --> 00:36:23.659 landed fighting because one of those
NOTE Confidence: 0.864028027777778
00:36:23.659 --> 00:36:26.123 two people says my child is perfect now.
NOTE Confidence: 0.864028027777778
00:36:26.130 --> 00:36:28.506 I mean, no one ever thought stroke and
NOTE Confidence: 0.864028027777778
00:36:28.506 --> 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 --> 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 --> 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 --> 00:36:46.778 but the recovery it isn't spontaneous.

NOTE Confidence: 0.864028027777778
00:36:46.780 --> 00:36:49.125 All of these children will get more
NOTE Confidence: 0.864028027777778
00:36:49.125 --> 00:36:51.517 therapy no matter what the question is.
NOTE Confidence: 0.864028027777778
00:36:51.520 --> 00:36:53.290 Are they getting some bursts
NOTE Confidence: 0.864028027777778
00:36:53.290 --> 00:36:55.496 of high intensity and I guess
NOTE Confidence: 0.864028027777778
00:36:55.496 --> 00:36:57.656 how close with the final thing.
NOTE Confidence: 0.864028027777778
00:36:57.660 --> 00:37:00.236 What we think is some of the
NOTE Confidence: 0.864028027777778
00:37:00.236 --> 00:37:02.316 forms of traditional therapy might
NOTE Confidence: 0.864028027777778
00:37:02.316 --> 00:37:04.116 have been really good,
NOTE Confidence: 0.864028027777778
00:37:04.120 --> 00:37:05.688 but they didn't get enough of it.
NOTE Confidence: 0.864028027777778
00:37:05.690 --> 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 --> 00:37:13.270 and you only get a practice 2 hours a week.
NOTE Confidence: 0.864028027777778
00:37:13.270 --> 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 --> 00:37:17.405 That's why most children in
NOTE Confidence: 0.864028027777778

00:37:17.405 --> 00:37:18.308 elementary schools started.
NOTE Confidence: 0.864028027777778
00:37:18.310 --> 00:37:19.510 With an instrument you know,
NOTE Confidence: 0.864028027777778
00:37:19.510 --> 00:37:21.292 give it up by the time they're in high NOTE Confidence: 0.864028027777778

00:37:21.292 --> 00:37:23.079 school 'cause they didn't get good enough.
NOTE Confidence: 0.864028027777778
00:37:23.080 --> 00:37:25.208 But if you went away to a
NOTE Confidence: 0.864028027777778
00:37:25.208 --> 00:37:26.790 summer camp for a month.
NOTE Confidence: 0.864028027777778
00:37:26.790 --> 00:37:28.884 And you came out playing whatever
NOTE Confidence: 0.864028027777778
00:37:28.884 --> 00:37:31.310 instrument or tennis you know at a level.
NOTE Confidence: 0.864028027777778
00:37:31.310 --> 00:37:32.206 Like you know, hey,
NOTE Confidence: 0.864028027777778
00:37:32.206 --> 00:37:33.326 I'm gonna be really good.
NOTE Confidence: 0.864028027777778
00:37:33.330 --> 00:37:36.042 Maybe you'd stick with it and we think NOTE Confidence: 0.864028027777778

00:37:36.042 --> 00:37:38.747 that's what's happening at therapy children.
NOTE Confidence: 0.864028027777778
00:37:38.750 --> 00:37:40.622 If you go and you have a really nice
NOTE Confidence: 0.864028027777778
00:37:40.622 --> 00:37:42.458 therapist and you have a great place session,
NOTE Confidence: 0.864028027777778
00:37:42.460 --> 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.

NOTE Confidence: 0.864028027777778
00:37:45.894 --> 00:37:47.999 Therapy isn't so much fun.
NOTE Confidence: 0.864028027777778
00:37:48.000 --> 00:37:48.334 OK,
NOTE Confidence: 0.864028027777778
00:37:48.334 --> 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 --> 00:37:54.746 Thank you Doctor Riley.
NOTE Confidence: 0.685744442857143
00:37:54.746 --> 00:37:55.388 Thank you doctor.
NOTE Confidence: 0.685744442857143
00:37:55.390 --> 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.

