

WEBVTT

NOTE duration:"00:52:51"

NOTE recognizability:0.869

NOTE language:en-us

NOTE Confidence: 0.512075305

00:00:00.000 --> 00:00:00.480 We think

NOTE Confidence: 0.89521418625

00:00:02.680 --> 00:00:04.280 even these simple descriptions,

NOTE Confidence: 0.89521418625

00:00:04.280 --> 00:00:06.552 we think have value in teaching.

NOTE Confidence: 0.89521418625

00:00:06.552 --> 00:00:07.909 Even, you know, clinicians,

NOTE Confidence: 0.89521418625

00:00:07.909 --> 00:00:09.654 physicians who may encounter people

NOTE Confidence: 0.89521418625

00:00:09.654 --> 00:00:12.193 not have any place to look in the

NOTE Confidence: 0.89521418625

00:00:12.193 --> 00:00:13.910 literature that tells him, you know,

NOTE Confidence: 0.89521418625

00:00:13.910 --> 00:00:16.115 that that these people are not unique.

NOTE Confidence: 0.89521418625

00:00:16.120 --> 00:00:17.040 In fact, they're, you know,

NOTE Confidence: 0.89521418625

00:00:17.040 --> 00:00:18.792 they're not alone in any by any means

NOTE Confidence: 0.89521418625

00:00:18.792 --> 00:00:20.748 and that there are a lot of people

NOTE Confidence: 0.89521418625

00:00:20.748 --> 00:00:22.888 who are experiencing similar things.

NOTE Confidence: 0.89521418625

00:00:22.888 --> 00:00:25.264 So for example, Tiana,

NOTE Confidence: 0.89521418625

00:00:25.264 --> 00:00:26.584 who was medical student working  
NOTE Confidence: 0.89521418625

00:00:26.584 --> 00:00:28.200 with us for a long time,  
NOTE Confidence: 0.89521418625

00:00:28.200 --> 00:00:30.075 had written a paper on  
NOTE Confidence: 0.89521418625

00:00:30.075 --> 00:00:31.200 vibrations and tremors.  
NOTE Confidence: 0.89521418625

00:00:31.200 --> 00:00:32.960 We pre printed it, believe it or not,  
NOTE Confidence: 0.89521418625

00:00:32.960 --> 00:00:34.420 we sent it to a medical journal, PLOS,  
NOTE Confidence: 0.89521418625

00:00:34.420 --> 00:00:37.120 and they sat on it for like 9 months.  
NOTE Confidence: 0.89521418625

00:00:37.120 --> 00:00:38.920 I, I don't know what was going on there.  
NOTE Confidence: 0.89521418625

00:00:38.920 --> 00:00:41.264 So we had another journal that was interested  
NOTE Confidence: 0.89521418625

00:00:41.264 --> 00:00:43.395 in long COVID and we sent it there,  
NOTE Confidence: 0.89521418625

00:00:43.400 --> 00:00:45.112 American Journal of Medicine,  
NOTE Confidence: 0.89521418625

00:00:45.112 --> 00:00:46.396 very good journal.  
NOTE Confidence: 0.89521418625

00:00:46.400 --> 00:00:47.955 And they, they rapidly accepted  
NOTE Confidence: 0.89521418625

00:00:47.955 --> 00:00:49.888 it and we'll be publishing it.  
NOTE Confidence: 0.89521418625

00:00:49.888 --> 00:00:50.920 So, you know,  
NOTE Confidence: 0.89521418625

00:00:50.920 --> 00:00:54.316 sometimes we're running into headwinds by,

NOTE Confidence: 0.89521418625

00:00:54.320 --> 00:00:55.280 by some of the journals.

NOTE Confidence: 0.89521418625

00:00:55.280 --> 00:00:56.780 I don't know whether it's their

NOTE Confidence: 0.89521418625

00:00:56.780 --> 00:00:58.147 attitude toward this condition or

NOTE Confidence: 0.89521418625

00:00:58.147 --> 00:00:59.439 they're just generally dysfunctional,

NOTE Confidence: 0.89521418625

00:00:59.440 --> 00:01:01.540 but it just can take a long

NOTE Confidence: 0.89521418625

00:01:01.540 --> 00:01:04.320 time to get things going.

NOTE Confidence: 0.89521418625

00:01:04.320 --> 00:01:05.560 We meanwhile,

NOTE Confidence: 0.89521418625

00:01:05.560 --> 00:01:05.815 I,

NOTE Confidence: 0.89521418625

00:01:05.815 --> 00:01:07.600 I've always thought that one of the

NOTE Confidence: 0.89521418625

00:01:07.600 --> 00:01:09.360 major ways that we're gonna make

NOTE Confidence: 0.89521418625

00:01:09.360 --> 00:01:11.302 progress is through this association

NOTE Confidence: 0.89521418625

00:01:11.302 --> 00:01:15.754 with Akiko Iwasaki in her lab.

NOTE Confidence: 0.89521418625

00:01:15.760 --> 00:01:19.730 Bernali by Chargi is with us today who's

NOTE Confidence: 0.89521418625

00:01:19.730 --> 00:01:21.200 who's been with us from the beginning,

NOTE Confidence: 0.89521418625

00:01:21.200 --> 00:01:22.985 who was just an extraordinary

NOTE Confidence: 0.89521418625

00:01:22.985 --> 00:01:25.114 researcher and has been doing an

NOTE Confidence: 0.89521418625

00:01:25.114 --> 00:01:28.016 amazing job so devoted to this.

NOTE Confidence: 0.89521418625

00:01:28.016 --> 00:01:29.052 And you know,

NOTE Confidence: 0.89521418625

00:01:29.052 --> 00:01:31.270 so there's a a a lot of work still

NOTE Confidence: 0.89521418625

00:01:31.270 --> 00:01:33.340 going on with trying to combine

NOTE Confidence: 0.89521418625

00:01:33.340 --> 00:01:34.919 the survey responses with the

NOTE Confidence: 0.89521418625

00:01:34.920 --> 00:01:36.984 deep phenotyping that can go on

NOTE Confidence: 0.89521418625

00:01:36.984 --> 00:01:39.408 in a lab that lab's doing so that

NOTE Confidence: 0.89521418625

00:01:39.408 --> 00:01:40.980 that's really where I think some

NOTE Confidence: 0.89521418625

00:01:41.031 --> 00:01:42.391 of the insights about mechanism

NOTE Confidence: 0.89521418625

00:01:42.391 --> 00:01:44.507 can come from that can then lead

NOTE Confidence: 0.89521418625

00:01:44.507 --> 00:01:45.915 to diagnostics and therapeutics.

NOTE Confidence: 0.89521418625

00:01:45.920 --> 00:01:48.878 There's also for those of you

NOTE Confidence: 0.89521418625

00:01:48.880 --> 00:01:50.240 we have a kind of a mixed group,

NOTE Confidence: 0.89521418625

00:01:50.240 --> 00:01:51.196 of course,

NOTE Confidence: 0.89521418625

00:01:51.196 --> 00:01:53.586 always between people on COVID

NOTE Confidence: 0.89521418625

00:01:53.586 --> 00:01:55.800 and post vaccination syndrome.

NOTE Confidence: 0.89521418625

00:01:55.800 --> 00:01:59.725 The the post vaccination descriptive

NOTE Confidence: 0.89521418625

00:01:59.725 --> 00:02:03.640 study is in on preprint.

NOTE Confidence: 0.89521418625

00:02:03.640 --> 00:02:07.639 It the journal vaccine looked like they

NOTE Confidence: 0.89521418625

00:02:07.639 --> 00:02:09.397 were gonna take it pretty rapidly,

NOTE Confidence: 0.89521418625

00:02:09.400 --> 00:02:10.888 but then now have been dragging

NOTE Confidence: 0.89521418625

00:02:10.888 --> 00:02:11.880 their feet on it.

NOTE Confidence: 0.89521418625

00:02:11.880 --> 00:02:14.662 So we're continuing to think they've got it.

NOTE Confidence: 0.89521418625

00:02:14.662 --> 00:02:16.306 We they have our response that

NOTE Confidence: 0.89521418625

00:02:16.306 --> 00:02:17.746 they'll respond to that soon and

NOTE Confidence: 0.89521418625

00:02:17.746 --> 00:02:19.320 it'll come out in a journal.

NOTE Confidence: 0.89521418625

00:02:19.320 --> 00:02:20.640 Just for those of you listening.

NOTE Confidence: 0.89521418625

00:02:20.640 --> 00:02:22.120 The the distinction is this.

NOTE Confidence: 0.89521418625

00:02:22.120 --> 00:02:24.670 The preprints are useful in giving

NOTE Confidence: 0.89521418625

00:02:24.670 --> 00:02:26.960 everybody access to the article

NOTE Confidence: 0.89521418625

00:02:26.960 --> 00:02:27.653 In peer review.  
NOTE Confidence: 0.89521418625

00:02:27.653 --> 00:02:29.270 We get comments and we tend to  
NOTE Confidence: 0.89521418625

00:02:29.323 --> 00:02:30.678 make tweaks in the article.  
NOTE Confidence: 0.89521418625

00:02:30.680 --> 00:02:32.316 Honestly, in general in,  
NOTE Confidence: 0.89521418625

00:02:32.316 --> 00:02:34.361 in our experience hasn't changed  
NOTE Confidence: 0.89521418625

00:02:34.361 --> 00:02:35.800 it fundamentally.  
NOTE Confidence: 0.89521418625

00:02:35.800 --> 00:02:37.376 Article establishment will view  
NOTE Confidence: 0.89521418625

00:02:37.376 --> 00:02:39.740 articles that have come out in  
NOTE Confidence: 0.89521418625

00:02:39.811 --> 00:02:41.313 journals a little differently  
NOTE Confidence: 0.89521418625

00:02:41.313 --> 00:02:43.073 than they will peer preprints  
NOTE Confidence: 0.89521418625

00:02:43.073 --> 00:02:45.238 because of the peer review.  
NOTE Confidence: 0.89521418625

00:02:45.240 --> 00:02:48.600 It gives it more credibility and it  
NOTE Confidence: 0.89521418625

00:02:48.600 --> 00:02:50.480 means when we get this out to doctors,  
NOTE Confidence: 0.89521418625

00:02:50.480 --> 00:02:52.839 or if you point doctors to these  
NOTE Confidence: 0.89521418625

00:02:52.839 --> 00:02:53.860 journal articles, you know,  
NOTE Confidence: 0.89521418625

00:02:53.860 --> 00:02:54.880 they have a little more force.

NOTE Confidence: 0.909594479

00:02:54.880 --> 00:02:56.064 And that's why we're,

NOTE Confidence: 0.909594479

00:02:56.064 --> 00:02:57.840 we don't stop with the preprint,

NOTE Confidence: 0.909594479

00:02:57.840 --> 00:02:58.959 even though that's,

NOTE Confidence: 0.909594479

00:02:58.959 --> 00:03:00.662 that's kind of the main thing.

NOTE Confidence: 0.909594479

00:03:00.662 --> 00:03:02.020 But we try to continue to get

NOTE Confidence: 0.909594479

00:03:02.069 --> 00:03:03.279 it into the journal article.

NOTE Confidence: 0.909594479

00:03:03.280 --> 00:03:04.912 So there's a that post vaccination

NOTE Confidence: 0.909594479

00:03:04.912 --> 00:03:06.000 syndrome is coming out.

NOTE Confidence: 0.909594479

00:03:06.000 --> 00:03:08.674 We have another paper that compares post

NOTE Confidence: 0.909594479

00:03:08.674 --> 00:03:10.624 vaccination syndrome and long COVID to

NOTE Confidence: 0.909594479

00:03:10.624 --> 00:03:12.400 show that there are some similarities,

NOTE Confidence: 0.909594479

00:03:12.400 --> 00:03:14.056 but also some differences,

NOTE Confidence: 0.909594479

00:03:14.056 --> 00:03:15.712 which are suggesting that

NOTE Confidence: 0.909594479

00:03:15.712 --> 00:03:17.080 mechanisms might diverge.

NOTE Confidence: 0.909594479

00:03:17.080 --> 00:03:19.191 And then there's a paper analysis.

NOTE Confidence: 0.909594479

00:03:19.191 --> 00:03:20.808 And ultimately there will be a paper  
NOTE Confidence: 0.909594479

00:03:20.808 --> 00:03:22.720 that we will pre print and seek to the  
NOTE Confidence: 0.909594479

00:03:22.720 --> 00:03:24.477 my journals that we're now he's working on,  
NOTE Confidence: 0.909594479

00:03:24.480 --> 00:03:26.305 which is looking at post  
NOTE Confidence: 0.909594479

00:03:26.305 --> 00:03:28.288 vaccination syndrome in in the lab,  
NOTE Confidence: 0.909594479

00:03:28.288 --> 00:03:30.360 looking at at this deep immune phenotyping,  
NOTE Confidence: 0.909594479

00:03:30.360 --> 00:03:33.440 trying to draw some inferences about again,  
NOTE Confidence: 0.909594479

00:03:33.440 --> 00:03:36.400 underlying causes.  
NOTE Confidence: 0.909594479

00:03:36.400 --> 00:03:37.228 And we're going.  
NOTE Confidence: 0.909594479

00:03:37.228 --> 00:03:39.160 So what are we doing going forward?  
NOTE Confidence: 0.909594479

00:03:39.160 --> 00:03:40.312 First of all,  
NOTE Confidence: 0.909594479

00:03:40.312 --> 00:03:43.000 we have finished the trial of Paxlovid  
NOTE Confidence: 0.909594479

00:03:43.079 --> 00:03:46.320 in long COVID and are finishing up our,  
NOTE Confidence: 0.909594479

00:03:46.320 --> 00:03:49.632 our kind of, there's a,  
NOTE Confidence: 0.909594479

00:03:49.632 --> 00:03:52.839 a part that where you're assembling all the  
NOTE Confidence: 0.909594479

00:03:52.839 --> 00:03:55.791 data that's accepted in into the trial and,

NOTE Confidence: 0.909594479

00:03:55.800 --> 00:04:00.039 and organizing it so that the FDA and other

NOTE Confidence: 0.909594479

00:04:00.039 --> 00:04:02.640 regulatory bodies will feel that it's,

NOTE Confidence: 0.909594479

00:04:02.640 --> 00:04:04.080 it's up to snuff.

NOTE Confidence: 0.909594479

00:04:04.080 --> 00:04:05.520 So that takes, you know,

NOTE Confidence: 0.909594479

00:04:05.520 --> 00:04:07.676 a couple months to get everything organized.

NOTE Confidence: 0.909594479

00:04:07.680 --> 00:04:08.888 We're in that process.

NOTE Confidence: 0.909594479

00:04:08.888 --> 00:04:11.636 I would say this by the end of July,

NOTE Confidence: 0.909594479

00:04:11.640 --> 00:04:14.840 we, we should be at a point where we,

NOTE Confidence: 0.909594479

00:04:14.840 --> 00:04:16.756 we'll know more about, you know,

NOTE Confidence: 0.909594479

00:04:16.756 --> 00:04:18.982 what that trial showed and hopefully we

NOTE Confidence: 0.909594479

00:04:18.982 --> 00:04:21.516 can get that out as quickly as possible.

NOTE Confidence: 0.909594479

00:04:21.520 --> 00:04:22.158 There's also,

NOTE Confidence: 0.909594479

00:04:22.158 --> 00:04:24.391 we will talk to you about a

NOTE Confidence: 0.909594479

00:04:24.391 --> 00:04:25.998 study we wanna do today.

NOTE Confidence: 0.909594479

00:04:26.000 --> 00:04:27.000 Rishi Shaw,

NOTE Confidence: 0.909594479

00:04:27.000 --> 00:04:29.000 who's a Yale undergrad,  
NOTE Confidence: 0.909594479

00:04:29.000 --> 00:04:29.640 I believe it or not,  
NOTE Confidence: 0.909594479

00:04:29.640 --> 00:04:31.816 a really remarkable individual,  
NOTE Confidence: 0.909594479

00:04:31.816 --> 00:04:34.632 smart and has devoted a lot of time to  
NOTE Confidence: 0.909594479

00:04:34.632 --> 00:04:37.239 trying to derive insights from the data  
NOTE Confidence: 0.909594479

00:04:37.240 --> 00:04:39.358 that exists around around long COVID.  
NOTE Confidence: 0.909594479

00:04:39.360 --> 00:04:40.800 It's gonna talk to you about  
NOTE Confidence: 0.909594479

00:04:40.800 --> 00:04:41.760 recovery after long COVID.  
NOTE Confidence: 0.909594479

00:04:41.760 --> 00:04:43.520 We're also gonna launch within,  
NOTE Confidence: 0.909594479

00:04:43.520 --> 00:04:44.804 within listen an,  
NOTE Confidence: 0.909594479

00:04:44.804 --> 00:04:47.800 an assessment to see who's gotten better,  
NOTE Confidence: 0.909594479

00:04:47.800 --> 00:04:48.781 who's gotten worse,  
NOTE Confidence: 0.909594479

00:04:48.781 --> 00:04:51.475 and can we draw any conclusions from the  
NOTE Confidence: 0.909594479

00:04:51.475 --> 00:04:53.876 experience of people who've had and listen.  
NOTE Confidence: 0.909594479

00:04:53.880 --> 00:04:56.319 And then we're also going to be launching a,  
NOTE Confidence: 0.909594479

00:04:56.320 --> 00:04:58.808 a cohort of people,

NOTE Confidence: 0.909594479

00:04:58.808 --> 00:05:01.320 particularly with POTS and long

NOTE Confidence: 0.909594479

00:05:01.320 --> 00:05:02.920 COVID and post vaccination syndrome.

NOTE Confidence: 0.909594479

00:05:02.920 --> 00:05:05.279 That will be combined with a lab

NOTE Confidence: 0.909594479

00:05:05.279 --> 00:05:07.238 study that Akiko's lab will do

NOTE Confidence: 0.909594479

00:05:07.238 --> 00:05:09.275 to try to learn more about that.

NOTE Confidence: 0.909594479

00:05:09.280 --> 00:05:09.473 Again,

NOTE Confidence: 0.909594479

00:05:09.473 --> 00:05:10.438 if I had my druthers,

NOTE Confidence: 0.909594479

00:05:10.440 --> 00:05:12.596 we'd be doing a lot more trials.

NOTE Confidence: 0.909594479

00:05:12.600 --> 00:05:14.055 Trials take resources and you

NOTE Confidence: 0.909594479

00:05:14.055 --> 00:05:15.840 know that that's one of them,

NOTE Confidence: 0.909594479

00:05:15.840 --> 00:05:19.599 one of the I guess limiting factors.

NOTE Confidence: 0.909594479

00:05:19.600 --> 00:05:21.856 I'm hopeful that when we published

NOTE Confidence: 0.909594479

00:05:21.856 --> 00:05:26.154 the the Paxlova trial that we will

NOTE Confidence: 0.909594479

00:05:26.154 --> 00:05:29.211 show the world how we can work in a

NOTE Confidence: 0.909594479

00:05:29.211 --> 00:05:31.416 very participant centric trial and

NOTE Confidence: 0.909594479

00:05:31.416 --> 00:05:34.520 and do it relatively quickly by the  
NOTE Confidence: 0.909594479

00:05:34.520 --> 00:05:36.680 measures of what trials usually take.  
NOTE Confidence: 0.909594479

00:05:36.680 --> 00:05:36.934 We're,  
NOTE Confidence: 0.909594479

00:05:36.934 --> 00:05:38.458 we're going much faster than what  
NOTE Confidence: 0.909594479

00:05:38.458 --> 00:05:40.040 like the NIH trials are going  
NOTE Confidence: 0.909594479

00:05:40.040 --> 00:05:42.077 and for a fraction of the cost.  
NOTE Confidence: 0.909594479

00:05:42.080 --> 00:05:43.760 And so then maybe people will,  
NOTE Confidence: 0.909594479

00:05:43.760 --> 00:05:44.915 if, even if we don't do it,  
NOTE Confidence: 0.909594479

00:05:44.920 --> 00:05:46.918 we want to hand out as much as possible.  
NOTE Confidence: 0.948734875714286

00:05:46.920 --> 00:05:48.075 This is how it can be done.  
NOTE Confidence: 0.948734875714286

00:05:48.080 --> 00:05:50.240 We want as many people to learn how to do it.  
NOTE Confidence: 0.948734875714286

00:05:50.240 --> 00:05:52.688 I see Kirk asked if we're going to  
NOTE Confidence: 0.948734875714286

00:05:52.688 --> 00:05:54.602 let the PAX LC participants know which  
NOTE Confidence: 0.948734875714286

00:05:54.602 --> 00:05:56.137 cohort they're into and that that  
NOTE Confidence: 0.948734875714286

00:05:56.137 --> 00:05:57.793 is also going to be coming up soon.  
NOTE Confidence: 0.948734875714286

00:05:57.800 --> 00:05:59.816 We will be able to do that 90

NOTE Confidence: 0.948734875714286  
00:05:59.816 --> 00:06:01.400 days after the last person.  
NOTE Confidence: 0.948734875714286  
00:06:01.400 --> 00:06:03.361 So we're going to try to do that  
NOTE Confidence: 0.948734875714286  
00:06:03.361 --> 00:06:05.608 even as we won't say what the  
NOTE Confidence: 0.948734875714286  
00:06:05.608 --> 00:06:07.638 result is yet by that point.  
NOTE Confidence: 0.948734875714286  
00:06:07.640 --> 00:06:09.439 So let me this was just kind  
NOTE Confidence: 0.948734875714286  
00:06:09.439 --> 00:06:11.000 of quick briefing about saying,  
NOTE Confidence: 0.948734875714286  
00:06:11.000 --> 00:06:12.040 you know, we're not stopping.  
NOTE Confidence: 0.948734875714286  
00:06:12.040 --> 00:06:13.120 We'd still stand with you.  
NOTE Confidence: 0.948734875714286  
00:06:13.120 --> 00:06:15.238 We know Kindred is wound down,  
NOTE Confidence: 0.948734875714286  
00:06:15.240 --> 00:06:16.885 but the listen study continues and we're  
NOTE Confidence: 0.948734875714286  
00:06:16.885 --> 00:06:18.800 going to try to be a source of information.  
NOTE Confidence: 0.948734875714286  
00:06:18.800 --> 00:06:22.779 David Petrino is going to do a a Listen Cafe.  
NOTE Confidence: 0.948734875714286  
00:06:22.779 --> 00:06:24.750 This is again, you know,  
NOTE Confidence: 0.948734875714286  
00:06:24.750 --> 00:06:27.120 something for just for listen participants.  
NOTE Confidence: 0.948734875714286  
00:06:27.120 --> 00:06:28.632 And we're going to try to  
NOTE Confidence: 0.948734875714286

00:06:28.632 --> 00:06:29.640 keep up the education,  
NOTE Confidence: 0.948734875714286

00:06:29.640 --> 00:06:32.360 keep up the communication and try to be,  
NOTE Confidence: 0.948734875714286

00:06:32.360 --> 00:06:33.487 you know, worthy of the trust that  
NOTE Confidence: 0.948734875714286

00:06:33.487 --> 00:06:34.876 you've put in us to try to move forward.  
NOTE Confidence: 0.948734875714286

00:06:34.880 --> 00:06:35.639 I know, again,  
NOTE Confidence: 0.948734875714286

00:06:35.639 --> 00:06:37.410 some of you have communicated to me  
NOTE Confidence: 0.948734875714286

00:06:37.468 --> 00:06:39.598 frustrations that we're not moving faster.  
NOTE Confidence: 0.948734875714286

00:06:39.600 --> 00:06:41.280 We don't have the answers.  
NOTE Confidence: 0.948734875714286

00:06:41.280 --> 00:06:42.520 I know we're frustrated too,  
NOTE Confidence: 0.948734875714286

00:06:42.520 --> 00:06:44.680 which we could move faster or learn faster,  
NOTE Confidence: 0.948734875714286

00:06:44.680 --> 00:06:45.960 but we're we're doing,  
NOTE Confidence: 0.948734875714286

00:06:45.960 --> 00:06:47.712 you know, we're trying to still,  
NOTE Confidence: 0.948734875714286

00:06:47.712 --> 00:06:49.380 we're trying to still move forward  
NOTE Confidence: 0.948734875714286

00:06:49.436 --> 00:06:50.439 as best we can to,  
NOTE Confidence: 0.948734875714286

00:06:50.439 --> 00:06:52.353 to stand with the community and  
NOTE Confidence: 0.948734875714286

00:06:52.353 --> 00:06:53.865 produce knowledge that's useful and

NOTE Confidence: 0.948734875714286  
00:06:53.865 --> 00:06:55.670 do it with your input, you know,  
NOTE Confidence: 0.948734875714286  
00:06:55.670 --> 00:06:57.595 and the wisdom that you can provide.  
NOTE Confidence: 0.948734875714286  
00:06:57.600 --> 00:07:01.040 Let me hand it over to Heidi next.  
NOTE Confidence: 0.948734875714286  
00:07:01.040 --> 00:07:01.690 And anyway,  
NOTE Confidence: 0.948734875714286  
00:07:01.690 --> 00:07:03.640 just thank you all for sticking  
NOTE Confidence: 0.948734875714286  
00:07:03.640 --> 00:07:05.400 with with the Listen study.  
NOTE Confidence: 0.948734875714286  
00:07:05.400 --> 00:07:07.680 And we're always open to suggestions,  
NOTE Confidence: 0.948734875714286  
00:07:07.680 --> 00:07:09.558 comments, ideas that you guys have,  
NOTE Confidence: 0.948734875714286  
00:07:09.560 --> 00:07:09.880 Heidi.  
NOTE Confidence: 0.869196671666667  
00:07:10.960 --> 00:07:14.320 Thanks, Harlan. So first of all,  
NOTE Confidence: 0.869196671666667  
00:07:14.320 --> 00:07:17.320 I'm gonna be speaking to you about the  
NOTE Confidence: 0.869196671666667  
00:07:17.320 --> 00:07:20.920 transition from Kindred over to Listen.  
NOTE Confidence: 0.869196671666667  
00:07:20.920 --> 00:07:22.680 For those of you that haven't met me,  
NOTE Confidence: 0.869196671666667  
00:07:22.680 --> 00:07:25.376 I am Heidi Braden and I'm a research  
NOTE Confidence: 0.869196671666667  
00:07:25.376 --> 00:07:27.239 affiliate with the Listen study.  
NOTE Confidence: 0.869196671666667

00:07:27.240 --> 00:07:29.520 I also previously worked for Hugo,  
NOTE Confidence: 0.869196671666667

00:07:29.520 --> 00:07:32.001 so some of you got to know me when  
NOTE Confidence: 0.869196671666667

00:07:32.001 --> 00:07:34.808 I was over there and primarily have  
NOTE Confidence: 0.869196671666667

00:07:34.808 --> 00:07:37.400 helped people with their connections,  
NOTE Confidence: 0.869196671666667

00:07:37.400 --> 00:07:39.064 which I am going to speak to you  
NOTE Confidence: 0.869196671666667

00:07:39.064 --> 00:07:40.757 just a little bit about today.  
NOTE Confidence: 0.869196671666667

00:07:40.760 --> 00:07:42.881 But first, I wanna start by letting  
NOTE Confidence: 0.869196671666667

00:07:42.881 --> 00:07:45.165 you know how much we wanna express  
NOTE Confidence: 0.869196671666667

00:07:45.165 --> 00:07:47.133 our appreciation to all of the  
NOTE Confidence: 0.869196671666667

00:07:47.200 --> 00:07:49.220 participants who had previously joined  
NOTE Confidence: 0.869196671666667

00:07:49.220 --> 00:07:51.735 Kindred and in the LISTEN study.  
NOTE Confidence: 0.869196671666667

00:07:51.735 --> 00:07:55.200 Your partnership is so crucial to this  
NOTE Confidence: 0.869196671666667

00:07:55.200 --> 00:07:58.551 very important research and we are so  
NOTE Confidence: 0.869196671666667

00:07:58.551 --> 00:08:01.240 excited to continue working with you.  
NOTE Confidence: 0.869196671666667

00:08:01.240 --> 00:08:03.576 So I wanna let you know that current  
NOTE Confidence: 0.869196671666667

00:08:03.576 --> 00:08:05.711 listed members will be receiving an

NOTE Confidence: 0.869196671666667  
00:08:05.711 --> 00:08:07.199 e-mail notification within probably  
NOTE Confidence: 0.869196671666667  
00:08:07.199 --> 00:08:09.645 the next few weeks and that's gonna  
NOTE Confidence: 0.869196671666667  
00:08:09.645 --> 00:08:11.720 outline instructions on how to log  
NOTE Confidence: 0.869196671666667  
00:08:11.720 --> 00:08:13.920 into the Hugo connection portal,  
NOTE Confidence: 0.869196671666667  
00:08:13.920 --> 00:08:16.080 which is called Hugo Connect.  
NOTE Confidence: 0.869196671666667  
00:08:16.080 --> 00:08:18.450 The tool and the process of  
NOTE Confidence: 0.869196671666667  
00:08:18.450 --> 00:08:20.440 connecting are essentially the same,  
NOTE Confidence: 0.869196671666667  
00:08:20.440 --> 00:08:24.080 but how you access the tool has changed.  
NOTE Confidence: 0.869196671666667  
00:08:24.080 --> 00:08:26.068 So I'm going to be sending out  
NOTE Confidence: 0.869196671666667  
00:08:26.068 --> 00:08:28.279 a step by step on that soon,  
NOTE Confidence: 0.869196671666667  
00:08:28.280 --> 00:08:30.965 within hopefully two to three  
NOTE Confidence: 0.869196671666667  
00:08:30.965 --> 00:08:33.113 weeks at the most.  
NOTE Confidence: 0.869196671666667  
00:08:33.120 --> 00:08:35.700 If you already have your medical  
NOTE Confidence: 0.869196671666667  
00:08:35.700 --> 00:08:37.736 records connected, that is great.  
NOTE Confidence: 0.869196671666667  
00:08:37.736 --> 00:08:38.520 Of course,  
NOTE Confidence: 0.869196671666667

00:08:38.520 --> 00:08:41.040 sometimes even those successful connections,  
NOTE Confidence: 0.869196671666667

00:08:41.040 --> 00:08:44.274 they can expire or otherwise stop working.  
NOTE Confidence: 0.869196671666667

00:08:44.280 --> 00:08:46.368 So it's going to be real important to stay  
NOTE Confidence: 0.869196671666667

00:08:46.368 --> 00:08:48.719 on the lookout for the instructions e-mail.  
NOTE Confidence: 0.869196671666667

00:08:48.720 --> 00:08:50.548 If you haven't connected  
NOTE Confidence: 0.869196671666667

00:08:50.548 --> 00:08:51.919 your medical records,  
NOTE Confidence: 0.869196671666667

00:08:51.920 --> 00:08:55.118 I encourage you to do so.  
NOTE Confidence: 0.869196671666667

00:08:55.120 --> 00:08:57.250 So please stay tuned for that  
NOTE Confidence: 0.869196671666667

00:08:57.250 --> 00:08:59.302 information that is going to be  
NOTE Confidence: 0.869196671666667

00:08:59.302 --> 00:09:00.994 coming to you in your e-mail.  
NOTE Confidence: 0.869196671666667

00:09:01.000 --> 00:09:01.246 Lastly,  
NOTE Confidence: 0.869196671666667

00:09:01.246 --> 00:09:03.460 I want to let you know that we are  
NOTE Confidence: 0.869196671666667

00:09:03.520 --> 00:09:05.480 currently working on creating a  
NOTE Confidence: 0.869196671666667

00:09:05.480 --> 00:09:07.440 website for new listen participants  
NOTE Confidence: 0.869196671666667

00:09:07.505 --> 00:09:08.557 to join the study,  
NOTE Confidence: 0.869196671666667

00:09:08.560 --> 00:09:10.576 which is pretty exciting and we

NOTE Confidence: 0.869196671666667  
00:09:10.576 --> 00:09:12.764 expect that to be ready within  
NOTE Confidence: 0.869196671666667  
00:09:12.764 --> 00:09:14.679 the next couple of months.  
NOTE Confidence: 0.869196671666667  
00:09:14.680 --> 00:09:17.740 So now I'm going to turn it over to  
NOTE Confidence: 0.869196671666667  
00:09:17.740 --> 00:09:20.844 Rishi Shaw and he will be discussing  
NOTE Confidence: 0.869196671666667  
00:09:20.844 --> 00:09:22.988 the long COVID recovery research  
NOTE Confidence: 0.869196671666667  
00:09:22.988 --> 00:09:25.076 that he has been working on.  
NOTE Confidence: 0.869196671666667  
00:09:25.080 --> 00:09:28.088 So thanks again and can't wait to move  
NOTE Confidence: 0.869196671666667  
00:09:28.088 --> 00:09:30.720 forward and work with you even more.  
NOTE Confidence: 0.869196671666667  
00:09:30.720 --> 00:09:31.280 Take care  
NOTE Confidence: 0.23126199  
00:09:45.320 --> 00:09:47.120 Ricci. There you go.  
NOTE Confidence: 0.63540345  
00:09:53.660 --> 00:09:55.188 Hi, sorry I was in a host  
NOTE Confidence: 0.63540345  
00:09:55.188 --> 00:09:56.420 that wouldn't let me unmute,  
NOTE Confidence: 0.959729086666667  
00:09:56.420 --> 00:09:59.660 but thank you. Hi everyone.  
NOTE Confidence: 0.959729086666667  
00:09:59.660 --> 00:10:01.970 I'm Rishi. I'm a student at Yale  
NOTE Confidence: 0.959729086666667  
00:10:01.970 --> 00:10:04.114 and I've been working with the  
NOTE Confidence: 0.959729086666667

00:10:04.114 --> 00:10:06.193 Listen project for about a year now.  
NOTE Confidence: 0.959729086666667

00:10:06.200 --> 00:10:08.088 And today I want to talk to everyone  
NOTE Confidence: 0.959729086666667

00:10:08.088 --> 00:10:10.075 about a project that we recently  
NOTE Confidence: 0.959729086666667

00:10:10.075 --> 00:10:12.440 conducted titled Factors associated with  
NOTE Confidence: 0.959729086666667

00:10:12.440 --> 00:10:15.440 long COVID Recovery among US Adults.  
NOTE Confidence: 0.959729086666667

00:10:15.440 --> 00:10:17.140 Before I start talking though  
NOTE Confidence: 0.959729086666667

00:10:17.140 --> 00:10:18.160 about that project,  
NOTE Confidence: 0.959729086666667

00:10:18.160 --> 00:10:21.646 I want to preface this discussion with a  
NOTE Confidence: 0.959729086666667

00:10:21.646 --> 00:10:23.476 project that's already been conducted.  
NOTE Confidence: 0.959729086666667

00:10:23.480 --> 00:10:25.496 And so some of you may have attended a  
NOTE Confidence: 0.959729086666667

00:10:25.496 --> 00:10:27.599 CAFE in March and where another student,  
NOTE Confidence: 0.959729086666667

00:10:27.600 --> 00:10:30.070 Regina, presented a project using  
NOTE Confidence: 0.959729086666667

00:10:30.070 --> 00:10:32.540 national survey data to assess  
NOTE Confidence: 0.959729086666667

00:10:32.627 --> 00:10:35.282 what are factors associated with  
NOTE Confidence: 0.959729086666667

00:10:35.282 --> 00:10:36.875 developing long COVID.  
NOTE Confidence: 0.959729086666667

00:10:36.880 --> 00:10:40.384 And from that study that Regina LED,

NOTE Confidence: 0.959729086666667  
00:10:40.384 --> 00:10:43.240 we found that non Hispanic Asian Americans,  
NOTE Confidence: 0.959729086666667  
00:10:43.240 --> 00:10:45.084 non Hispanic Black Americans,  
NOTE Confidence: 0.959729086666667  
00:10:45.084 --> 00:10:47.389 and individuals with an educational  
NOTE Confidence: 0.959729086666667  
00:10:47.389 --> 00:10:49.490 attainment of more than high school  
NOTE Confidence: 0.959729086666667  
00:10:49.490 --> 00:10:51.800 were less likely to develop long COVID.  
NOTE Confidence: 0.959729086666667  
00:10:51.800 --> 00:10:54.840 Those that were older than 35 years or  
NOTE Confidence: 0.959729086666667  
00:10:54.840 --> 00:10:56.919 greater than or older than 35 years,  
NOTE Confidence: 0.959729086666667  
00:10:56.920 --> 00:10:59.278 had identified with female gender or  
NOTE Confidence: 0.959729086666667  
00:10:59.278 --> 00:11:01.309 reported moderate or severe symptoms  
NOTE Confidence: 0.959729086666667  
00:11:01.309 --> 00:11:03.274 during the acute COVID-19 infection  
NOTE Confidence: 0.959729086666667  
00:11:03.274 --> 00:11:06.079 were more likely to develop long COVID.  
NOTE Confidence: 0.959729086666667  
00:11:06.080 --> 00:11:07.799 So as sort of a sequel to that study,  
NOTE Confidence: 0.959729086666667  
00:11:07.800 --> 00:11:10.445 we wanted to try to answer and study  
NOTE Confidence: 0.959729086666667  
00:11:10.445 --> 00:11:12.215 a question that hasn't really been  
NOTE Confidence: 0.959729086666667  
00:11:12.215 --> 00:11:13.760 covered that much in literature,  
NOTE Confidence: 0.959729086666667

00:11:13.760 --> 00:11:16.016 which is what are factors associated  
NOTE Confidence: 0.959729086666667

00:11:16.016 --> 00:11:17.520 with long COVID recovery?  
NOTE Confidence: 0.959729086666667

00:11:17.520 --> 00:11:18.414 Who is recovering?  
NOTE Confidence: 0.959729086666667

00:11:18.414 --> 00:11:19.904 How many people are recovering  
NOTE Confidence: 0.959729086666667

00:11:19.904 --> 00:11:21.637 and what are characteristics of  
NOTE Confidence: 0.959729086666667

00:11:21.637 --> 00:11:23.077 those that are recovering?  
NOTE Confidence: 0.959729086666667

00:11:23.080 --> 00:11:25.464 And so the question we aim to answer  
NOTE Confidence: 0.959729086666667

00:11:25.464 --> 00:11:27.844 with this study was what are the  
NOTE Confidence: 0.959729086666667

00:11:27.844 --> 00:11:29.970 recovery rates from long COVID and  
NOTE Confidence: 0.959729086666667

00:11:29.970 --> 00:11:31.686 what are the potential predictors  
NOTE Confidence: 0.959729086666667

00:11:31.686 --> 00:11:33.516 of recovery from long COVID?  
NOTE Confidence: 0.8591089358333333

00:11:36.200 --> 00:11:38.184 And so the data that we used in  
NOTE Confidence: 0.8591089358333333

00:11:38.184 --> 00:11:39.990 this study was the 2022 National  
NOTE Confidence: 0.8591089358333333

00:11:39.990 --> 00:11:42.480 Health Interview Survey or the NHIS.  
NOTE Confidence: 0.8591089358333333

00:11:42.480 --> 00:11:44.346 The NHIS is really robust in  
NOTE Confidence: 0.8591089358333333

00:11:44.346 --> 00:11:46.218 that it provides a nationally

NOTE Confidence: 0.859108935833333  
00:11:46.218 --> 00:11:49.028 representative sample of the civilian  
NOTE Confidence: 0.859108935833333  
00:11:49.028 --> 00:11:51.276 non institutionalized US population.  
NOTE Confidence: 0.859108935833333  
00:11:51.280 --> 00:11:53.548 And so this survey seems to monitor  
NOTE Confidence: 0.859108935833333  
00:11:53.548 --> 00:11:55.512 the health status, health behaviours,  
NOTE Confidence: 0.859108935833333  
00:11:55.512 --> 00:11:57.992 healthcare access utilization and health  
NOTE Confidence: 0.859108935833333  
00:11:57.992 --> 00:12:00.439 disparities in the United States.  
NOTE Confidence: 0.859108935833333  
00:12:00.440 --> 00:12:02.855 And so this schematic kind of illustrates  
NOTE Confidence: 0.859108935833333  
00:12:02.855 --> 00:12:05.918 the data collection process of the NHIS,  
NOTE Confidence: 0.859108935833333  
00:12:05.920 --> 00:12:08.545 where households are selected and  
NOTE Confidence: 0.859108935833333  
00:12:08.545 --> 00:12:10.872 adults and children within families  
NOTE Confidence: 0.859108935833333  
00:12:10.872 --> 00:12:13.840 are surveyed on a variety of questions.  
NOTE Confidence: 0.862065004230769  
00:12:15.920 --> 00:12:17.760 And so now I'm going to kind of  
NOTE Confidence: 0.862065004230769  
00:12:17.760 --> 00:12:18.778 outline the selection process  
NOTE Confidence: 0.862065004230769  
00:12:18.778 --> 00:12:20.786 that we use to kind of form a  
NOTE Confidence: 0.862065004230769  
00:12:20.846 --> 00:12:22.556 group that we wanted to analyse.  
NOTE Confidence: 0.862065004230769

00:12:22.560 --> 00:12:24.600 And so in the 2022 NHS,  
NOTE Confidence: 0.862065004230769

00:12:24.600 --> 00:12:26.798 which is the most recently available data,  
NOTE Confidence: 0.862065004230769

00:12:26.800 --> 00:12:29.600 there were about 27,000 or  
NOTE Confidence: 0.862065004230769

00:12:29.600 --> 00:12:31.408 there were 27,651 respondents.  
NOTE Confidence: 0.862065004230769

00:12:31.408 --> 00:12:33.816 And so the first question we asked  
NOTE Confidence: 0.862065004230769

00:12:33.816 --> 00:12:36.094 was how many of these individuals  
NOTE Confidence: 0.862065004230769

00:12:36.094 --> 00:12:37.594 ever reported having COVID.  
NOTE Confidence: 0.862065004230769

00:12:37.600 --> 00:12:39.600 And so if that question was answered yes,  
NOTE Confidence: 0.862065004230769

00:12:39.600 --> 00:12:42.428 that was defined by a self reported  
NOTE Confidence: 0.862065004230769

00:12:42.428 --> 00:12:45.511 doctor's diagnosis for COVID-19 or a self  
NOTE Confidence: 0.862065004230769

00:12:45.511 --> 00:12:47.756 reported positive COVID-19 test result.  
NOTE Confidence: 0.862065004230769

00:12:47.760 --> 00:12:49.860 The individual reported either a doctor's  
NOTE Confidence: 0.862065004230769

00:12:49.860 --> 00:12:51.960 diagnosis or a positive test result,  
NOTE Confidence: 0.862065004230769

00:12:51.960 --> 00:12:55.038 We define them as having COVID-19.  
NOTE Confidence: 0.862065004230769

00:12:55.040 --> 00:12:57.638 Among those that reported having COVID-19,  
NOTE Confidence: 0.862065004230769

00:12:57.640 --> 00:12:59.536 we wanted to see how many

NOTE Confidence: 0.862065004230769  
00:12:59.536 --> 00:13:00.800 people reported long COVID.  
NOTE Confidence: 0.862065004230769  
00:13:00.800 --> 00:13:03.866 And so individuals that said responded  
NOTE Confidence: 0.862065004230769  
00:13:03.866 --> 00:13:07.248 yes to the question of having ever  
NOTE Confidence: 0.862065004230769  
00:13:07.248 --> 00:13:09.746 having COVID and also a responding  
NOTE Confidence: 0.862065004230769  
00:13:09.746 --> 00:13:12.217 yes to the question of having symptoms  
NOTE Confidence: 0.862065004230769  
00:13:12.217 --> 00:13:14.096 lasting 3 months or longer that  
NOTE Confidence: 0.862065004230769  
00:13:14.096 --> 00:13:15.995 they didn't have prior to COVID-19  
NOTE Confidence: 0.862065004230769  
00:13:15.995 --> 00:13:19.360 were defined as having long COVID.  
NOTE Confidence: 0.862065004230769  
00:13:19.360 --> 00:13:21.677 Then among those that had long COVID,  
NOTE Confidence: 0.862065004230769  
00:13:21.680 --> 00:13:23.808 we wanted to figure out how many  
NOTE Confidence: 0.862065004230769  
00:13:23.808 --> 00:13:25.759 still have long COVID and how  
NOTE Confidence: 0.862065004230769  
00:13:25.759 --> 00:13:27.697 many have recovered or don't have  
NOTE Confidence: 0.862065004230769  
00:13:27.697 --> 00:13:29.360 the condition right now.  
NOTE Confidence: 0.862065004230769  
00:13:29.360 --> 00:13:31.747 So if they responded yes to having  
NOTE Confidence: 0.862065004230769  
00:13:31.747 --> 00:13:34.030 long COVID and yes to responding  
NOTE Confidence: 0.862065004230769

00:13:34.030 --> 00:13:36.400 yes to having symptoms right now,  
NOTE Confidence: 0.862065004230769

00:13:36.400 --> 00:13:39.032 we define them as not having recovered and  
NOTE Confidence: 0.862065004230769

00:13:39.032 --> 00:13:41.120 currently still experiencing long COVID.  
NOTE Confidence: 0.862065004230769

00:13:41.120 --> 00:13:41.436 However,  
NOTE Confidence: 0.862065004230769

00:13:41.436 --> 00:13:43.648 if they responded no to the question  
NOTE Confidence: 0.862065004230769

00:13:43.648 --> 00:13:45.438 of having symptoms right now,  
NOTE Confidence: 0.862065004230769

00:13:45.440 --> 00:13:48.040 but having at one point had long COVID,  
NOTE Confidence: 0.862065004230769

00:13:48.040 --> 00:13:50.962 we define them as recovered or  
NOTE Confidence: 0.862065004230769

00:13:50.962 --> 00:13:53.520 not currently having long COVID.  
NOTE Confidence: 0.862065004230769

00:13:53.520 --> 00:13:55.571 And So what we found was that  
NOTE Confidence: 0.862065004230769

00:13:55.571 --> 00:13:56.555 among the 27,000,  
NOTE Confidence: 0.862065004230769

00:13:56.555 --> 00:13:58.135 little more than 27,000  
NOTE Confidence: 0.862065004230769

00:13:58.135 --> 00:13:59.715 respondents in our survey,  
NOTE Confidence: 0.862065004230769

00:13:59.720 --> 00:14:01.440 about a little more than  
NOTE Confidence: 0.862065004230769

00:14:01.440 --> 00:14:03.160 10,000 ever had acute COVID.  
NOTE Confidence: 0.862065004230769

00:14:03.160 --> 00:14:04.876 It's a little more than 1/3.

NOTE Confidence: 0.862065004230769  
00:14:04.880 --> 00:14:06.290 And so the great thing about  
NOTE Confidence: 0.862065004230769  
00:14:06.290 --> 00:14:08.280 NHIS is that these are nationally  
NOTE Confidence: 0.862065004230769  
00:14:08.280 --> 00:14:09.280 representative estimates,  
NOTE Confidence: 0.862065004230769  
00:14:09.280 --> 00:14:11.116 so we can generalize this to  
NOTE Confidence: 0.862065004230769  
00:14:11.116 --> 00:14:12.034 the US population.  
NOTE Confidence: 0.862065004230769  
00:14:12.040 --> 00:14:14.546 So that produced an estimate of about  
NOTE Confidence: 0.862065004230769  
00:14:14.546 --> 00:14:16.442 100 million Americans that reported  
NOTE Confidence: 0.862065004230769  
00:14:16.442 --> 00:14:20.080 ever having acute COVID infection in 2022.  
NOTE Confidence: 0.862065004230769  
00:14:20.080 --> 00:14:21.565 Among those that ever had  
NOTE Confidence: 0.862065004230769  
00:14:21.565 --> 00:14:22.753 an acute COVID infection,  
NOTE Confidence: 0.862065004230769  
00:14:22.760 --> 00:14:25.960 we found that 17.7% or almost one  
NOTE Confidence: 0.862065004230769  
00:14:25.960 --> 00:14:28.760 in five had ever had long COVID.  
NOTE Confidence: 0.862065004230769  
00:14:28.760 --> 00:14:31.160 This corresponds to the national estimate  
NOTE Confidence: 0.862065004230769  
00:14:31.160 --> 00:14:33.193 of about 17.5 million Americans.  
NOTE Confidence: 0.862065004230769  
00:14:33.193 --> 00:14:35.659 And then we found that approximately  
NOTE Confidence: 0.862065004230769

00:14:35.659 --> 00:14:38.422 half of US adults who have experienced  
NOTE Confidence: 0.862065004230769

00:14:38.422 --> 00:14:40.640 long COVID reported having recovered.  
NOTE Confidence: 0.862065004230769

00:14:40.640 --> 00:14:43.240 So of those that ever had long COVID,  
NOTE Confidence: 0.862065004230769

00:14:43.240 --> 00:14:45.470 half of those individuals corresponding  
NOTE Confidence: 0.862065004230769

00:14:45.470 --> 00:14:48.240 to 8.5 million Americans reported  
NOTE Confidence: 0.862065004230769

00:14:48.240 --> 00:14:50.336 having recovered from long COVID.  
NOTE Confidence: 0.862065004230769

00:14:50.336 --> 00:14:53.498 The next step we took was to create a  
NOTE Confidence: 0.862065004230769

00:14:53.498 --> 00:14:55.753 predictive model to identify factors  
NOTE Confidence: 0.862065004230769

00:14:55.753 --> 00:14:58.919 that are associated with long COVID recovery.  
NOTE Confidence: 0.862065004230769

00:14:58.920 --> 00:15:01.216 So what we found was that having an  
NOTE Confidence: 0.862065004230769

00:15:01.216 --> 00:15:03.436 age greater than or equal to 40 years,  
NOTE Confidence: 0.862065004230769

00:15:03.440 --> 00:15:05.092 identifying with female gender,  
NOTE Confidence: 0.862065004230769

00:15:05.092 --> 00:15:06.744 having severe symptoms during  
NOTE Confidence: 0.862065004230769

00:15:06.744 --> 00:15:08.559 the acute COVID infection,  
NOTE Confidence: 0.862065004230769

00:15:08.560 --> 00:15:10.320 and having an educational attainment  
NOTE Confidence: 0.862065004230769

00:15:10.320 --> 00:15:12.886 of more than high school were all

NOTE Confidence: 0.862065004230769  
00:15:12.886 --> 00:15:14.366 factors that were significantly  
NOTE Confidence: 0.862065004230769  
00:15:14.366 --> 00:15:16.280 associated with a lower likelihood  
NOTE Confidence: 0.862065004230769  
00:15:16.280 --> 00:15:18.155 of recovery from long COVID.  
NOTE Confidence: 0.862065004230769  
00:15:18.160 --> 00:15:20.065 And having of and Hispanic  
NOTE Confidence: 0.862065004230769  
00:15:20.065 --> 00:15:21.970 individuals were the only group  
NOTE Confidence: 0.861787111904762  
00:15:22.044 --> 00:15:24.049 that were significantly more likely  
NOTE Confidence: 0.861787111904762  
00:15:24.049 --> 00:15:26.520 to recover than any other group.  
NOTE Confidence: 0.861787111904762  
00:15:26.520 --> 00:15:28.347 And so now I want to talk about what  
NOTE Confidence: 0.861787111904762  
00:15:28.347 --> 00:15:30.235 this means and what could be improved.  
NOTE Confidence: 0.861787111904762  
00:15:30.240 --> 00:15:31.808 And so the main finding from the  
NOTE Confidence: 0.861787111904762  
00:15:31.808 --> 00:15:33.337 study is that recovery rates for  
NOTE Confidence: 0.861787111904762  
00:15:33.337 --> 00:15:35.246 long COVID varied by age, gender,  
NOTE Confidence: 0.861787111904762  
00:15:35.246 --> 00:15:38.076 race, ethnicity, and education level.  
NOTE Confidence: 0.861787111904762  
00:15:38.080 --> 00:15:40.504 And we found that over half the people  
NOTE Confidence: 0.861787111904762  
00:15:40.504 --> 00:15:42.800 that reported having long COVID recovered.  
NOTE Confidence: 0.861787111904762

00:15:42.800 --> 00:15:43.916 So there's a lot of hope,  
NOTE Confidence: 0.861787111904762

00:15:43.920 --> 00:15:45.250 but there's still a lot of work  
NOTE Confidence: 0.861787111904762

00:15:45.250 --> 00:15:46.200 that needs to be done.  
NOTE Confidence: 0.861787111904762

00:15:46.200 --> 00:15:48.720 And so we need to focus for their  
NOTE Confidence: 0.861787111904762

00:15:48.720 --> 00:15:50.680 work on figuring out the causes of  
NOTE Confidence: 0.861787111904762

00:15:50.739 --> 00:15:52.507 these differences and identifying  
NOTE Confidence: 0.861787111904762

00:15:52.507 --> 00:15:54.717 strategies to increase recovery rate.  
NOTE Confidence: 0.861787111904762

00:15:54.720 --> 00:15:56.484 I also want to talk about some  
NOTE Confidence: 0.861787111904762

00:15:56.484 --> 00:15:57.919 of the limitations of the work.  
NOTE Confidence: 0.861787111904762

00:15:57.920 --> 00:16:01.196 So NHIS is self reported data.  
NOTE Confidence: 0.861787111904762

00:16:01.200 --> 00:16:03.566 And so something that we realized while  
NOTE Confidence: 0.861787111904762

00:16:03.566 --> 00:16:05.922 conducting the study is that the way  
NOTE Confidence: 0.861787111904762

00:16:05.922 --> 00:16:07.527 individuals may perceive and report  
NOTE Confidence: 0.861787111904762

00:16:07.527 --> 00:16:09.877 their symptoms can vary across groupings.  
NOTE Confidence: 0.861787111904762

00:16:09.880 --> 00:16:13.240 But the the self report is currently the  
NOTE Confidence: 0.861787111904762

00:16:13.240 --> 00:16:15.279 gold standard for diagnosing long COVID,

NOTE Confidence: 0.861787111904762  
00:16:15.280 --> 00:16:17.200 which is why it's really important  
NOTE Confidence: 0.861787111904762  
00:16:17.200 --> 00:16:19.695 that we continue work like such  
NOTE Confidence: 0.861787111904762  
00:16:19.695 --> 00:16:21.902 as with Professor Iwasaki's lab  
NOTE Confidence: 0.861787111904762  
00:16:21.902 --> 00:16:24.157 to identify biomarkers that can,  
NOTE Confidence: 0.861787111904762  
00:16:24.160 --> 00:16:24.932 you know,  
NOTE Confidence: 0.861787111904762  
00:16:24.932 --> 00:16:27.248 definitively provide a diagnosis for a  
NOTE Confidence: 0.861787111904762  
00:16:27.248 --> 00:16:30.040 condition beyond just self reported data.  
NOTE Confidence: 0.861787111904762  
00:16:30.040 --> 00:16:31.846 We also didn't have any information  
NOTE Confidence: 0.861787111904762  
00:16:31.846 --> 00:16:33.892 about the timing of acute COVID  
NOTE Confidence: 0.861787111904762  
00:16:33.892 --> 00:16:35.448 infection that could potentially  
NOTE Confidence: 0.861787111904762  
00:16:35.448 --> 00:16:37.560 confound our results about recovery.  
NOTE Confidence: 0.861787111904762  
00:16:37.560 --> 00:16:39.576 So we didn't have any information  
NOTE Confidence: 0.861787111904762  
00:16:39.576 --> 00:16:41.559 about when a person had their  
NOTE Confidence: 0.861787111904762  
00:16:41.560 --> 00:16:42.349 initial COVID-19 infection.  
NOTE Confidence: 0.861787111904762  
00:16:42.349 --> 00:16:45.120 And so they may have had a different variant,  
NOTE Confidence: 0.861787111904762

00:16:45.120 --> 00:16:47.276 they may have had a delta Omicron,  
NOTE Confidence: 0.861787111904762

00:16:47.280 --> 00:16:49.332 pre delta post Omicron variant that  
NOTE Confidence: 0.861787111904762

00:16:49.332 --> 00:16:51.480 may affect their time to recovery.  
NOTE Confidence: 0.861787111904762

00:16:51.480 --> 00:16:53.279 And people that may have had COVID  
NOTE Confidence: 0.861787111904762

00:16:53.279 --> 00:16:55.185 on earlier on in the pandemic may  
NOTE Confidence: 0.861787111904762

00:16:55.185 --> 00:16:56.793 have had more time to recover.  
NOTE Confidence: 0.861787111904762

00:16:56.800 --> 00:16:58.164 But there is no,  
NOTE Confidence: 0.861787111904762

00:16:58.164 --> 00:17:00.210 there's limited or to no evidence  
NOTE Confidence: 0.861787111904762

00:17:00.279 --> 00:17:02.487 that in either direction about the  
NOTE Confidence: 0.861787111904762

00:17:02.487 --> 00:17:04.939 effect of timing of acute infection  
NOTE Confidence: 0.861787111904762

00:17:04.939 --> 00:17:06.755 on the recovery process.  
NOTE Confidence: 0.861787111904762

00:17:06.760 --> 00:17:09.560 That also still needs to be studied.  
NOTE Confidence: 0.861787111904762

00:17:09.560 --> 00:17:11.102 We also had a narrow definition  
NOTE Confidence: 0.861787111904762

00:17:11.102 --> 00:17:11.873 of long COVID.  
NOTE Confidence: 0.861787111904762

00:17:11.880 --> 00:17:13.956 So when this survey was administered,  
NOTE Confidence: 0.861787111904762

00:17:13.960 --> 00:17:16.860 the predominant definition that was

NOTE Confidence: 0.861787111904762  
00:17:16.860 --> 00:17:20.972 used in the survey was if you had  
NOTE Confidence: 0.861787111904762  
00:17:20.972 --> 00:17:23.396 symptoms persisting 3 months or longer.  
NOTE Confidence: 0.861787111904762  
00:17:23.400 --> 00:17:25.488 We now have an updated definition  
NOTE Confidence: 0.861787111904762  
00:17:25.488 --> 00:17:27.576 from the CDC that constricts this  
NOTE Confidence: 0.861787111904762  
00:17:27.576 --> 00:17:29.316 to four weeks or more.  
NOTE Confidence: 0.861787111904762  
00:17:29.320 --> 00:17:31.576 So if you have symptoms lasting  
NOTE Confidence: 0.861787111904762  
00:17:31.576 --> 00:17:34.520 4 weeks or more that you did not  
NOTE Confidence: 0.861787111904762  
00:17:34.520 --> 00:17:35.960 have prior to COVID-19,  
NOTE Confidence: 0.861787111904762  
00:17:35.960 --> 00:17:38.319 that's the new definition for long COVID.  
NOTE Confidence: 0.861787111904762  
00:17:38.320 --> 00:17:41.392 And so if we had incorporated  
NOTE Confidence: 0.861787111904762  
00:17:41.392 --> 00:17:43.032 that definition into that survey,  
NOTE Confidence: 0.861787111904762  
00:17:43.040 --> 00:17:45.248 we may have had different results  
NOTE Confidence: 0.861787111904762  
00:17:45.248 --> 00:17:46.720 and estimates for recovery.  
NOTE Confidence: 0.861787111904762  
00:17:46.720 --> 00:17:48.784 We also didn't have any information  
NOTE Confidence: 0.861787111904762  
00:17:48.784 --> 00:17:50.160 about symptoms and treatments,  
NOTE Confidence: 0.861787111904762

00:17:50.160 --> 00:17:52.927 which may have been useful if we were  
NOTE Confidence: 0.861787111904762

00:17:52.927 --> 00:17:55.021 able to determine if certain treatments  
NOTE Confidence: 0.861787111904762

00:17:55.021 --> 00:17:57.746 or symptoms were associated with less  
NOTE Confidence: 0.861787111904762

00:17:57.746 --> 00:17:59.676 or higher likelihood of recovery.  
NOTE Confidence: 0.861787111904762

00:17:59.680 --> 00:18:01.465 And that might help other people who  
NOTE Confidence: 0.861787111904762

00:18:01.465 --> 00:18:03.354 have not yet recovered and formed  
NOTE Confidence: 0.861787111904762

00:18:03.354 --> 00:18:04.839 their own strategies for recovery.  
NOTE Confidence: 0.903003736923077

00:18:07.000 --> 00:18:08.962 This article is currently available and  
NOTE Confidence: 0.903003736923077

00:18:08.962 --> 00:18:11.360 printed in the American Journal of Medicine.  
NOTE Confidence: 0.903003736923077

00:18:11.360 --> 00:18:12.758 So you can scan this QR  
NOTE Confidence: 0.903003736923077

00:18:12.758 --> 00:18:14.200 code to access the article,  
NOTE Confidence: 0.903003736923077

00:18:14.200 --> 00:18:16.348 but we are currently working with  
NOTE Confidence: 0.903003736923077

00:18:16.348 --> 00:18:18.592 the journal to make this Open  
NOTE Confidence: 0.903003736923077

00:18:18.592 --> 00:18:21.172 Access so that everyone can read it.  
NOTE Confidence: 0.903003736923077

00:18:21.172 --> 00:18:24.880 And we'll let you all know when that happens.  
NOTE Confidence: 0.903003736923077

00:18:24.880 --> 00:18:26.920 But yeah, I just want to open it up now.

NOTE Confidence: 0.903003736923077

00:18:26.920 --> 00:18:29.594 If anyone has any questions or comments,

NOTE Confidence: 0.903003736923077

00:18:29.600 --> 00:18:30.836 we'll be happy to answer them.

NOTE Confidence: 0.87721266

00:18:31.680 --> 00:18:34.940 And let me just say a couple things, Rishi,

NOTE Confidence: 0.87721266

00:18:34.940 --> 00:18:38.480 just as a sort of voice over on what you do.

NOTE Confidence: 0.87721266

00:18:38.480 --> 00:18:39.677 That's a beautiful job, by the way.

NOTE Confidence: 0.87721266

00:18:39.680 --> 00:18:41.760 So imagine Rishi's a,

NOTE Confidence: 0.87721266

00:18:41.760 --> 00:18:43.992 a Yale undergrad who spent time doing this

NOTE Confidence: 0.87721266

00:18:43.992 --> 00:18:46.318 study and spent countless hours trying to,

NOTE Confidence: 0.87721266

00:18:46.320 --> 00:18:48.798 you know, produce some knowledge about it.

NOTE Confidence: 0.87721266

00:18:48.800 --> 00:18:50.112 Thought that was great.

NOTE Confidence: 0.87721266

00:18:50.112 --> 00:18:53.960 One of the things it, it said to me when

NOTE Confidence: 0.87721266

00:18:53.960 --> 00:18:57.368 we looked into this was that, you know,

NOTE Confidence: 0.87721266

00:18:57.368 --> 00:18:59.160 there are people who are recovering from it.

NOTE Confidence: 0.87721266

00:18:59.160 --> 00:19:01.360 Some people came back to me and said,

NOTE Confidence: 0.87721266

00:19:01.360 --> 00:19:02.460 well, you're diminishing the

NOTE Confidence: 0.87721266

00:19:02.460 --> 00:19:03.835 people who have persistent disease.

NOTE Confidence: 0.87721266

00:19:03.840 --> 00:19:04.824 And I said, well,

NOTE Confidence: 0.87721266

00:19:04.824 --> 00:19:07.219 I think what it might say is that there's

NOTE Confidence: 0.87721266

00:19:07.219 --> 00:19:09.640 some hope that that the things get better,

NOTE Confidence: 0.87721266

00:19:09.640 --> 00:19:10.114 you know,

NOTE Confidence: 0.87721266

00:19:10.114 --> 00:19:12.320 for some people and we need to learn like,

NOTE Confidence: 0.87721266

00:19:12.320 --> 00:19:13.160 how did they get better?

NOTE Confidence: 0.87721266

00:19:13.160 --> 00:19:15.125 Did they get better because

NOTE Confidence: 0.87721266

00:19:15.125 --> 00:19:16.480 of something they tried?

NOTE Confidence: 0.87721266

00:19:16.480 --> 00:19:18.720 Did they get better because just the

NOTE Confidence: 0.87721266

00:19:18.782 --> 00:19:20.617 Natural History of the disease and,

NOTE Confidence: 0.87721266

00:19:20.617 --> 00:19:21.679 and the fact that we're saying,

NOTE Confidence: 0.87721266

00:19:21.680 --> 00:19:22.632 what are the characteristics?

NOTE Confidence: 0.87721266

00:19:22.632 --> 00:19:24.584 I think it's sort of less important to

NOTE Confidence: 0.87721266

00:19:24.584 --> 00:19:26.236 me because those are all on average,

NOTE Confidence: 0.87721266

00:19:26.240 --> 00:19:27.479 there's a little more in this group,

NOTE Confidence: 0.87721266

00:19:27.480 --> 00:19:29.316 a little less in that group,

NOTE Confidence: 0.87721266

00:19:29.320 --> 00:19:30.923 but but it's more that that in

NOTE Confidence: 0.87721266

00:19:30.923 --> 00:19:32.280 some people it gets better.

NOTE Confidence: 0.87721266

00:19:32.280 --> 00:19:35.220 I had a neighbor who had terrible

NOTE Confidence: 0.87721266

00:19:35.220 --> 00:19:37.224 long COVID symptoms and I,

NOTE Confidence: 0.87721266

00:19:37.224 --> 00:19:40.200 I felt helpless to help him except just

NOTE Confidence: 0.87721266

00:19:40.284 --> 00:19:43.357 to listen to what he was experiencing.

NOTE Confidence: 0.87721266

00:19:43.360 --> 00:19:45.800 And, and one day he woke up and they were,

NOTE Confidence: 0.87721266

00:19:45.800 --> 00:19:47.384 he's told me they,

NOTE Confidence: 0.87721266

00:19:47.384 --> 00:19:49.760 they disappeared like they were gone.

NOTE Confidence: 0.87721266

00:19:49.760 --> 00:19:51.594 That made me wonder about viral persistence.

NOTE Confidence: 0.87721266

00:19:51.600 --> 00:19:51.978 By the way,

NOTE Confidence: 0.87721266

00:19:51.978 --> 00:19:52.356 I don't know,

NOTE Confidence: 0.87721266

00:19:52.360 --> 00:19:54.196 did his body somehow just finally

NOTE Confidence: 0.87721266

00:19:54.196 --> 00:19:56.919 get on top of that and eliminate it?

NOTE Confidence: 0.87721266

00:19:56.920 --> 00:19:58.872 But it it did make me think that  
NOTE Confidence: 0.87721266

00:19:58.872 --> 00:20:00.694 that that there should be hope that  
NOTE Confidence: 0.87721266

00:20:00.694 --> 00:20:02.817 we at least do see this and then  
NOTE Confidence: 0.87721266

00:20:02.817 --> 00:20:04.964 this sort of validate for it's very  
NOTE Confidence: 0.87721266

00:20:04.964 --> 00:20:06.560 limited because you don't know.  
NOTE Confidence: 0.87721266

00:20:06.560 --> 00:20:08.078 Like how long people had it,  
NOTE Confidence: 0.87721266

00:20:08.080 --> 00:20:09.160 how severe they had it,  
NOTE Confidence: 0.87721266

00:20:09.160 --> 00:20:10.966 what whether what they have now is  
NOTE Confidence: 0.87721266

00:20:10.966 --> 00:20:12.598 better than what they had before.  
NOTE Confidence: 0.87721266

00:20:12.600 --> 00:20:14.400 It's a very crude look.  
NOTE Confidence: 0.87721266

00:20:14.400 --> 00:20:16.640 But but there were people who said they  
NOTE Confidence: 0.87721266

00:20:16.640 --> 00:20:18.958 had COVID, who said they had long COVID,  
NOTE Confidence: 0.87721266

00:20:18.960 --> 00:20:21.280 who are saying they don't have it now.  
NOTE Confidence: 0.87721266

00:20:21.280 --> 00:20:24.520 And that that to me was important to report.  
NOTE Confidence: 0.87721266

00:20:24.520 --> 00:20:25.836 You know, it's crude as it was.  
NOTE Confidence: 0.87721266

00:20:25.840 --> 00:20:28.200 Again, nationally representative was good,

NOTE Confidence: 0.87721266

00:20:28.200 --> 00:20:29.558 but it was like an inch thick.

NOTE Confidence: 0.87721266

00:20:29.560 --> 00:20:29.864 You know,

NOTE Confidence: 0.87721266

00:20:29.864 --> 00:20:30.776 it didn't really give us much

NOTE Confidence: 0.87721266

00:20:30.776 --> 00:20:31.520 of the information,

NOTE Confidence: 0.87721266

00:20:31.520 --> 00:20:34.960 which is what led us to think that

NOTE Confidence: 0.87721266

00:20:34.960 --> 00:20:37.595 we should be doing a study in the

NOTE Confidence: 0.87721266

00:20:37.595 --> 00:20:38.775 listening group and collecting

NOTE Confidence: 0.87721266

00:20:38.775 --> 00:20:40.637 a lot more information about,

NOTE Confidence: 0.87721266

00:20:40.640 --> 00:20:41.178 you know,

NOTE Confidence: 0.87721266

00:20:41.178 --> 00:20:43.061 we have a whole bunch of people

NOTE Confidence: 0.87721266

00:20:43.061 --> 00:20:45.022 now will be able to look at maybe

NOTE Confidence: 0.87721266

00:20:45.022 --> 00:20:47.260 a year or two years later and ask

NOTE Confidence: 0.87721266

00:20:47.260 --> 00:20:49.000 people how many people got better.

NOTE Confidence: 0.87721266

00:20:49.000 --> 00:20:49.918 And for those who got better,

NOTE Confidence: 0.87721266

00:20:49.920 --> 00:20:50.796 we can ask them, you know,

NOTE Confidence: 0.87721266

00:20:50.800 --> 00:20:51.598 how much better did you get?  
NOTE Confidence: 0.87721266

00:20:51.600 --> 00:20:54.144 What got better? You know, what did you try?  
NOTE Confidence: 0.87721266

00:20:54.144 --> 00:20:55.759 I don't know who might just generate  
NOTE Confidence: 0.87721266

00:20:55.759 --> 00:20:57.079 some hypothesis about this.  
NOTE Confidence: 0.874592050714286

00:20:57.080 --> 00:20:59.152 So we could learn from the group about  
NOTE Confidence: 0.874592050714286

00:20:59.152 --> 00:21:00.919 comparing the baseline with follow up.  
NOTE Confidence: 0.874592050714286

00:21:00.920 --> 00:21:03.640 And this, this paper is sort of a,  
NOTE Confidence: 0.874592050714286

00:21:03.640 --> 00:21:05.398 you know, foundational piece that sort  
NOTE Confidence: 0.874592050714286

00:21:05.398 --> 00:21:07.814 of lets us know what this similarly  
NOTE Confidence: 0.874592050714286

00:21:07.814 --> 00:21:09.394 with post vaccination syndrome.  
NOTE Confidence: 0.874592050714286

00:21:09.400 --> 00:21:11.240 We there isn't similar information.  
NOTE Confidence: 0.874592050714286

00:21:11.240 --> 00:21:13.880 Those questions weren't asking NHIS,  
NOTE Confidence: 0.874592050714286

00:21:13.880 --> 00:21:16.080 but we can do the same thing and go back  
NOTE Confidence: 0.874592050714286

00:21:16.135 --> 00:21:17.716 and sort of see what the experience is.  
NOTE Confidence: 0.874592050714286

00:21:17.716 --> 00:21:19.200 I wanted to make one other comment,  
NOTE Confidence: 0.874592050714286

00:21:19.200 --> 00:21:20.952 which is when he showed the

NOTE Confidence: 0.874592050714286  
00:21:20.952 --> 00:21:22.120 first article we did,  
NOTE Confidence: 0.874592050714286  
00:21:22.120 --> 00:21:23.720 which was who are the people who are  
NOTE Confidence: 0.874592050714286  
00:21:23.720 --> 00:21:25.437 most at risk for getting long COVID?  
NOTE Confidence: 0.874592050714286  
00:21:25.440 --> 00:21:28.928 You saw there was a funny finding that black  
NOTE Confidence: 0.874592050714286  
00:21:28.928 --> 00:21:32.480 people had a lower risk of long COVID.  
NOTE Confidence: 0.874592050714286  
00:21:32.480 --> 00:21:33.758 You know, race is a we,  
NOTE Confidence: 0.874592050714286  
00:21:33.760 --> 00:21:36.775 we understand it, believe it to be and,  
NOTE Confidence: 0.874592050714286  
00:21:36.775 --> 00:21:39.400 and endorse it as a social construct.  
NOTE Confidence: 0.874592050714286  
00:21:39.400 --> 00:21:39.711 Largely.  
NOTE Confidence: 0.874592050714286  
00:21:39.711 --> 00:21:42.199 You know, there are some based on ancestry,  
NOTE Confidence: 0.874592050714286  
00:21:42.200 --> 00:21:43.607 There are some genes that that are  
NOTE Confidence: 0.874592050714286  
00:21:43.607 --> 00:21:45.199 more likely in some groups than other.  
NOTE Confidence: 0.874592050714286  
00:21:45.200 --> 00:21:47.120 But but largely in our society,  
NOTE Confidence: 0.874592050714286  
00:21:47.120 --> 00:21:48.560 race is a social construct.  
NOTE Confidence: 0.874592050714286  
00:21:48.560 --> 00:21:51.332 And the disparities that people experience  
NOTE Confidence: 0.874592050714286

00:21:51.332 --> 00:21:54.608 in our society are largely a result  
NOTE Confidence: 0.874592050714286

00:21:54.608 --> 00:21:56.632 of things like structural racism,  
NOTE Confidence: 0.874592050714286

00:21:56.632 --> 00:21:58.098 things that happen that,  
NOTE Confidence: 0.874592050714286

00:21:58.098 --> 00:21:59.886 that conspire against their best health  
NOTE Confidence: 0.874592050714286

00:21:59.886 --> 00:22:01.768 and have nothing to do with their  
NOTE Confidence: 0.874592050714286

00:22:01.768 --> 00:22:03.759 intrinsic biology and more to do with their,  
NOTE Confidence: 0.874592050714286

00:22:03.760 --> 00:22:04.224 their,  
NOTE Confidence: 0.874592050714286

00:22:04.224 --> 00:22:06.080 their circumstances and, and,  
NOTE Confidence: 0.874592050714286

00:22:06.080 --> 00:22:08.980 and what happens in society when we have  
NOTE Confidence: 0.874592050714286

00:22:08.980 --> 00:22:11.360 fewer people who are reporting long COVID.  
NOTE Confidence: 0.874592050714286

00:22:11.360 --> 00:22:14.840 It makes me wonder, is that true or,  
NOTE Confidence: 0.874592050714286

00:22:14.840 --> 00:22:18.272 or is that have to do with not being  
NOTE Confidence: 0.874592050714286

00:22:18.272 --> 00:22:20.198 recognized as such, you know, or,  
NOTE Confidence: 0.874592050714286

00:22:20.198 --> 00:22:22.344 or, you know, not being able to,  
NOTE Confidence: 0.874592050714286

00:22:22.344 --> 00:22:25.320 to be access to care or, or,  
NOTE Confidence: 0.874592050714286

00:22:25.320 --> 00:22:26.598 or, or other things, You know,

NOTE Confidence: 0.874592050714286  
00:22:26.600 --> 00:22:28.440 I, I don't take it again,  
NOTE Confidence: 0.874592050714286  
00:22:28.440 --> 00:22:29.640 it's a hypothesis about like,  
NOTE Confidence: 0.874592050714286  
00:22:29.640 --> 00:22:30.684 why would that be?  
NOTE Confidence: 0.874592050714286  
00:22:30.684 --> 00:22:32.800 And it's something we need to dig into.  
NOTE Confidence: 0.874592050714286  
00:22:32.800 --> 00:22:35.236 Are there groups that are neglected,  
NOTE Confidence: 0.874592050714286  
00:22:35.240 --> 00:22:37.640 vulnerable, but aren't actually even,  
NOTE Confidence: 0.874592050714286  
00:22:37.640 --> 00:22:38.140 you know,  
NOTE Confidence: 0.874592050714286  
00:22:38.140 --> 00:22:39.640 being understood as having long COVID?  
NOTE Confidence: 0.874592050714286  
00:22:39.640 --> 00:22:41.764 We have to figure that out as well.  
NOTE Confidence: 0.874592050714286  
00:22:41.764 --> 00:22:42.874 And so that that anyway,  
NOTE Confidence: 0.874592050714286  
00:22:42.880 --> 00:22:43.920 these are the comments I want to make,  
NOTE Confidence: 0.874592050714286  
00:22:43.920 --> 00:22:46.560 but open to questions for Rishi  
NOTE Confidence: 0.874592050714286  
00:22:46.560 --> 00:22:47.640 'cause he did, you know,  
NOTE Confidence: 0.874592050714286  
00:22:47.640 --> 00:22:47.937 he,  
NOTE Confidence: 0.874592050714286  
00:22:47.937 --> 00:22:50.313 he can answer almost anything on this topic.  
NOTE Confidence: 0.19937156

00:22:58.640 --> 00:23:00.245 Rishi, do you want to cover  
NOTE Confidence: 0.19937156

00:23:00.245 --> 00:23:01.530 some of the questions that  
NOTE Confidence: 0.864168519375

00:23:01.587 --> 00:23:03.117 we received in the chat box?  
NOTE Confidence: 0.864168519375

00:23:03.120 --> 00:23:04.926 Maybe you can start off with  
NOTE Confidence: 0.864168519375

00:23:04.926 --> 00:23:06.568 the definition type of like  
NOTE Confidence: 0.864168519375

00:23:06.568 --> 00:23:08.080 questions that we received.  
NOTE Confidence: 0.864168519375

00:23:08.080 --> 00:23:12.000 I think we have a question on how we  
NOTE Confidence: 0.864168519375

00:23:12.000 --> 00:23:15.120 define recovery for a long COVID.  
NOTE Confidence: 0.864168519375

00:23:15.120 --> 00:23:15.864 Yeah, definitely another  
NOTE Confidence: 0.864168519375

00:23:15.864 --> 00:23:18.078 one on the Q COVID, right.  
NOTE Confidence: 0.9212751833333333

00:23:18.200 --> 00:23:20.053 Let me go back to that slide.  
NOTE Confidence: 0.9212751833333333

00:23:20.053 --> 00:23:23.357 And so these were questions that were asked.  
NOTE Confidence: 0.9212751833333333

00:23:23.360 --> 00:23:25.442 So these are the actual questions  
NOTE Confidence: 0.9212751833333333

00:23:25.442 --> 00:23:27.319 that NHS sends field representatives  
NOTE Confidence: 0.9212751833333333

00:23:27.319 --> 00:23:30.287 to go to families and households and  
NOTE Confidence: 0.9212751833333333

00:23:30.287 --> 00:23:32.678 ask questions and conduct the survey.

NOTE Confidence: 0.921275183333333  
00:23:32.680 --> 00:23:36.332 And so the way that we defined acute  
NOTE Confidence: 0.921275183333333  
00:23:36.332 --> 00:23:39.496 COVID-19 was if they had a doctor's  
NOTE Confidence: 0.921275183333333  
00:23:39.496 --> 00:23:42.564 diagnosis for COVID-19 or they self  
NOTE Confidence: 0.921275183333333  
00:23:42.564 --> 00:23:45.672 reported a positive COVID-19 test result.  
NOTE Confidence: 0.921275183333333  
00:23:45.680 --> 00:23:48.800 And so if you had either one of  
NOTE Confidence: 0.921275183333333  
00:23:48.800 --> 00:23:51.130 these things in the NHIS defined  
NOTE Confidence: 0.921275183333333  
00:23:51.130 --> 00:23:53.920 that as ever having acute COVID,  
NOTE Confidence: 0.921275183333333  
00:23:53.920 --> 00:23:55.820 long COVID was then defined  
NOTE Confidence: 0.921275183333333  
00:23:55.820 --> 00:23:57.720 with this question right here.  
NOTE Confidence: 0.921275183333333  
00:23:57.720 --> 00:23:59.130 So among those individuals that  
NOTE Confidence: 0.921275183333333  
00:23:59.130 --> 00:24:00.946 said they did have a doctor's  
NOTE Confidence: 0.921275183333333  
00:24:00.946 --> 00:24:03.040 diagnosis or a positive test result,  
NOTE Confidence: 0.921275183333333  
00:24:03.040 --> 00:24:05.264 they were asked do you have any symptoms  
NOTE Confidence: 0.921275183333333  
00:24:05.264 --> 00:24:07.301 lasting 3 months longer that you did  
NOTE Confidence: 0.921275183333333  
00:24:07.301 --> 00:24:09.280 not have prior to having COVID-19?  
NOTE Confidence: 0.921275183333333

00:24:09.280 --> 00:24:11.135 Those individuals that responded yes  
NOTE Confidence: 0.9212751833333333

00:24:11.135 --> 00:24:13.758 were considered to have a long COVID  
NOTE Confidence: 0.9212751833333333

00:24:13.758 --> 00:24:15.876 and those individuals that responded no  
NOTE Confidence: 0.9212751833333333

00:24:15.876 --> 00:24:18.439 were not considered to have long COVID.  
NOTE Confidence: 0.9212751833333333

00:24:18.440 --> 00:24:20.918 And so the status of recovery was  
NOTE Confidence: 0.9212751833333333

00:24:20.918 --> 00:24:22.764 something that was brought forth  
NOTE Confidence: 0.9212751833333333

00:24:22.764 --> 00:24:25.184 by NHIS as a follow up to those  
NOTE Confidence: 0.9212751833333333

00:24:25.184 --> 00:24:26.320 who reported long COVID.  
NOTE Confidence: 0.9212751833333333

00:24:26.320 --> 00:24:28.264 They asked them if they had  
NOTE Confidence: 0.9212751833333333

00:24:28.264 --> 00:24:29.236 symptoms right now.  
NOTE Confidence: 0.9212751833333333

00:24:29.240 --> 00:24:30.251 If they did,  
NOTE Confidence: 0.9212751833333333

00:24:30.251 --> 00:24:32.273 they were defined as not recovered.  
NOTE Confidence: 0.9212751833333333

00:24:32.280 --> 00:24:33.810 And if they didn't have  
NOTE Confidence: 0.9212751833333333

00:24:33.810 --> 00:24:35.034 symptoms at the moment,  
NOTE Confidence: 0.9212751833333333

00:24:35.040 --> 00:24:38.598 they were defined as being recovered.  
NOTE Confidence: 0.9212751833333333

00:24:38.600 --> 00:24:40.586 This also reminds me of another

NOTE Confidence: 0.9212751833333333  
00:24:40.586 --> 00:24:42.541 limitation that we thought of about  
NOTE Confidence: 0.9212751833333333  
00:24:42.541 --> 00:24:44.705 the studies that long COVID is  
NOTE Confidence: 0.9212751833333333  
00:24:44.705 --> 00:24:46.880 not necessarily a condition that,  
NOTE Confidence: 0.9212751833333333  
00:24:46.880 --> 00:24:49.680 you know, can is, is static in time.  
NOTE Confidence: 0.9212751833333333  
00:24:49.680 --> 00:24:51.414 And so individuals at this moment  
NOTE Confidence: 0.9212751833333333  
00:24:51.414 --> 00:24:53.232 in time when they were participating  
NOTE Confidence: 0.9212751833333333  
00:24:53.232 --> 00:24:55.332 in the survey may have not may  
NOTE Confidence: 0.9212751833333333  
00:24:55.332 --> 00:24:56.718 not have had symptoms,  
NOTE Confidence: 0.9212751833333333  
00:24:56.720 --> 00:24:58.320 but it's possible that they  
NOTE Confidence: 0.9212751833333333  
00:24:58.320 --> 00:24:59.600 may have relapsed and,  
NOTE Confidence: 0.9212751833333333  
00:24:59.600 --> 00:25:00.320 you know,  
NOTE Confidence: 0.9212751833333333  
00:25:00.320 --> 00:25:02.480 experienced long COVID symptoms later on.  
NOTE Confidence: 0.9212751833333333  
00:25:02.480 --> 00:25:03.760 That's also another important  
NOTE Confidence: 0.9212751833333333  
00:25:03.760 --> 00:25:05.680 limitation that we want to consider.  
NOTE Confidence: 0.8143170425  
00:25:08.840 --> 00:25:12.840 Yep. And we also have a question on  
NOTE Confidence: 0.8143170425

00:25:12.840 --> 00:25:15.030 did the people who recovered have  
NOTE Confidence: 0.8143170425

00:25:15.030 --> 00:25:17.320 less or severity if long COVID?  
NOTE Confidence: 0.957912894285714

00:25:18.240 --> 00:25:21.754 Yeah. So what we found was that  
NOTE Confidence: 0.957912894285714

00:25:21.760 --> 00:25:24.496 individuals that reported severe  
NOTE Confidence: 0.957912894285714

00:25:24.496 --> 00:25:27.916 symptoms during acute COVID-19 were  
NOTE Confidence: 0.957912894285714

00:25:27.916 --> 00:25:30.432 significantly less likely to recover.  
NOTE Confidence: 0.957912894285714

00:25:30.432 --> 00:25:32.264 Individuals that were reported  
NOTE Confidence: 0.957912894285714

00:25:32.264 --> 00:25:35.066 mild or moderate symptoms during  
NOTE Confidence: 0.957912894285714

00:25:35.066 --> 00:25:37.300 acute COVID-19 infection were  
NOTE Confidence: 0.957912894285714

00:25:37.300 --> 00:25:39.400 likely more likely to recover,  
NOTE Confidence: 0.957912894285714

00:25:39.400 --> 00:25:42.118 but it wasn't a significant result.  
NOTE Confidence: 0.957912894285714

00:25:42.120 --> 00:25:44.520 The only significant result among COVID-19  
NOTE Confidence: 0.957912894285714

00:25:44.520 --> 00:25:47.478 severity was if you had severe symptoms,  
NOTE Confidence: 0.957912894285714

00:25:47.480 --> 00:25:49.706 those individuals were  
NOTE Confidence: 0.957912894285714

00:25:49.706 --> 00:25:52.800 less likely to recover. And  
NOTE Confidence: 0.873953312608696

00:25:52.800 --> 00:25:54.188 just to clarify, we,

NOTE Confidence: 0.873953312608696  
00:25:54.188 --> 00:25:56.749 we do not have details on what  
NOTE Confidence: 0.873953312608696  
00:25:56.749 --> 00:25:59.549 kind of symptoms they had as long  
NOTE Confidence: 0.873953312608696  
00:25:59.549 --> 00:26:01.558 COVID symptoms in this survey,  
NOTE Confidence: 0.873953312608696  
00:26:01.560 --> 00:26:03.480 correct? Right. We see.  
NOTE Confidence: 0.873953312608696  
00:26:03.480 --> 00:26:06.240 So we didn't have detailed information  
NOTE Confidence: 0.873953312608696  
00:26:06.240 --> 00:26:09.173 on what the participants identified  
NOTE Confidence: 0.873953312608696  
00:26:09.173 --> 00:26:11.438 as their long term symptoms,  
NOTE Confidence: 0.808430768333333  
00:26:12.320 --> 00:26:14.993 right. So we didn't have a clear and all  
NOTE Confidence: 0.808430768333333  
00:26:14.993 --> 00:26:17.914 we had was a question in the survey was,  
NOTE Confidence: 0.808430768333333  
00:26:17.920 --> 00:26:19.762 was how, how would you rank  
NOTE Confidence: 0.808430768333333  
00:26:19.762 --> 00:26:21.580 the severity of your symptoms  
NOTE Confidence: 0.808430768333333  
00:26:21.580 --> 00:26:23.676 during acute COVID-19 infection.  
NOTE Confidence: 0.808430768333333  
00:26:23.680 --> 00:26:25.055 And so they were participants  
NOTE Confidence: 0.808430768333333  
00:26:25.055 --> 00:26:26.155 were given three options,  
NOTE Confidence: 0.808430768333333  
00:26:26.160 --> 00:26:27.492 mild, moderate or severe.  
NOTE Confidence: 0.808430768333333

00:26:27.492 --> 00:26:30.236 But it is great news that in the  
NOTE Confidence: 0.8084307683333333

00:26:30.236 --> 00:26:31.916 next iteration of the survey,  
NOTE Confidence: 0.8084307683333333

00:26:31.920 --> 00:26:34.015 NHS will be asking questions  
NOTE Confidence: 0.8084307683333333

00:26:34.015 --> 00:26:36.640 about symptoms like loss of smell,  
NOTE Confidence: 0.8084307683333333

00:26:36.640 --> 00:26:38.200 brain fog, things like that.  
NOTE Confidence: 0.8084307683333333

00:26:38.200 --> 00:26:40.588 So hopefully next time around we'll  
NOTE Confidence: 0.8084307683333333

00:26:40.588 --> 00:26:42.560 have more information about that.  
NOTE Confidence: 0.8084307683333333

00:26:42.560 --> 00:26:44.702 There's a question about our comorbidities  
NOTE Confidence: 0.8084307683333333

00:26:44.702 --> 00:26:47.039 like Potts accounted for in the research.  
NOTE Confidence: 0.8084307683333333

00:26:47.040 --> 00:26:48.510 This is actually a really good  
NOTE Confidence: 0.8084307683333333

00:26:48.510 --> 00:26:49.783 question because this is something  
NOTE Confidence: 0.8084307683333333

00:26:49.783 --> 00:26:51.783 that we were considering as well,  
NOTE Confidence: 0.8084307683333333

00:26:51.783 --> 00:26:54.309 but we wanted to include variables  
NOTE Confidence: 0.8084307683333333

00:26:54.309 --> 00:26:56.900 that would maybe it would not be  
NOTE Confidence: 0.8084307683333333

00:26:56.900 --> 00:26:59.080 affected by a COVID-19 diagnosis.  
NOTE Confidence: 0.8084307683333333

00:26:59.080 --> 00:27:02.471 And so some people may have gotten

NOTE Confidence: 0.808430768333333  
00:27:02.471 --> 00:27:04.928 a condition like POTS as a result  
NOTE Confidence: 0.808430768333333  
00:27:04.928 --> 00:27:07.158 of as a byproduct of long COVID.  
NOTE Confidence: 0.808430768333333  
00:27:07.160 --> 00:27:08.931 And so because we don't have timing  
NOTE Confidence: 0.808430768333333  
00:27:08.931 --> 00:27:11.070 of when a person developed their  
NOTE Confidence: 0.808430768333333  
00:27:11.070 --> 00:27:12.834 comorbidities within the survey,  
NOTE Confidence: 0.808430768333333  
00:27:12.840 --> 00:27:14.056 we weren't able to.  
NOTE Confidence: 0.808430768333333  
00:27:14.056 --> 00:27:16.269 We decided it would be best to  
NOTE Confidence: 0.808430768333333  
00:27:16.269 --> 00:27:18.398 not include those in the analysis.  
NOTE Confidence: 0.54773575  
00:27:24.510 --> 00:27:24.870 Great.  
NOTE Confidence: 0.940084918888889  
00:27:30.510 --> 00:27:34.110 I'm just trying to go through the chat box,  
NOTE Confidence: 0.940084918888889  
00:27:34.110 --> 00:27:37.198 Rishi, so if you identify anything you can  
NOTE Confidence: 0.940084918888889  
00:27:37.198 --> 00:27:40.640 answer right away, that'd be great. Yeah,  
NOTE Confidence: 0.769398765  
00:27:40.960 --> 00:27:41.920 I'm looking through them.  
NOTE Confidence: 0.914163731818182  
00:27:50.760 --> 00:27:51.988 So there's a question.  
NOTE Confidence: 0.914163731818182  
00:27:51.988 --> 00:27:54.320 Did you consider looking at longer periods,  
NOTE Confidence: 0.914163731818182

00:27:54.320 --> 00:27:57.290 such as those recovering after  
NOTE Confidence: 0.914163731818182

00:27:57.290 --> 00:27:59.317 12 months, 24 months? Yeah.  
NOTE Confidence: 0.914163731818182

00:27:59.317 --> 00:28:01.631 So this is a great question and one  
NOTE Confidence: 0.914163731818182

00:28:01.631 --> 00:28:03.717 that we definitely want to look into.  
NOTE Confidence: 0.914163731818182

00:28:03.720 --> 00:28:05.967 The issue that we had with the  
NOTE Confidence: 0.914163731818182

00:28:05.967 --> 00:28:07.555 National Health Interview Survey was  
NOTE Confidence: 0.914163731818182

00:28:07.555 --> 00:28:09.522 that the question was framed as if  
NOTE Confidence: 0.914163731818182

00:28:09.522 --> 00:28:11.755 you it was more of a binary response.  
NOTE Confidence: 0.914163731818182

00:28:11.760 --> 00:28:13.804 So either people were defined as having  
NOTE Confidence: 0.914163731818182

00:28:13.804 --> 00:28:15.960 long COVID or not having long COVID.  
NOTE Confidence: 0.914163731818182

00:28:15.960 --> 00:28:18.880 We didn't really get data about how long  
NOTE Confidence: 0.914163731818182

00:28:18.880 --> 00:28:21.435 they have been suffering from long COVID.  
NOTE Confidence: 0.914163731818182

00:28:21.440 --> 00:28:23.872 And so that would be kind of provided  
NOTE Confidence: 0.914163731818182

00:28:23.872 --> 00:28:25.520 with initial infection dates.  
NOTE Confidence: 0.914163731818182

00:28:25.520 --> 00:28:27.360 And so with that information,  
NOTE Confidence: 0.914163731818182

00:28:27.360 --> 00:28:28.835 that's definitely a question that

NOTE Confidence: 0.914163731818182  
00:28:28.835 --> 00:28:31.006 we want to answer and we want to  
NOTE Confidence: 0.914163731818182  
00:28:31.006 --> 00:28:32.504 look at the effect of time on  
NOTE Confidence: 0.914163731818182  
00:28:32.563 --> 00:28:34.278 the long COVID recovery process,  
NOTE Confidence: 0.89763241  
00:28:48.080 --> 00:28:51.480 right? All of this data is self reported.  
NOTE Confidence: 0.89763241  
00:28:51.480 --> 00:28:56.480 And so this is every participant might,  
NOTE Confidence: 0.89763241  
00:28:56.480 --> 00:28:58.180 you know, perceive and report  
NOTE Confidence: 0.89763241  
00:28:58.180 --> 00:28:59.880 their symptoms in different ways.  
NOTE Confidence: 0.89763241  
00:28:59.880 --> 00:29:01.255 And that's just the limitation  
NOTE Confidence: 0.89763241  
00:29:01.255 --> 00:29:02.355 of the survey data.  
NOTE Confidence: 0.759611767142857  
00:29:04.400 --> 00:29:06.044 This was also, yeah,  
NOTE Confidence: 0.759611767142857  
00:29:06.044 --> 00:29:07.277 high educational attainment.  
NOTE Confidence: 0.759611767142857  
00:29:07.280 --> 00:29:08.960 Why would that impair recovery?  
NOTE Confidence: 0.759611767142857  
00:29:08.960 --> 00:29:11.840 That's also an interesting result.  
NOTE Confidence: 0.759611767142857  
00:29:11.840 --> 00:29:14.306 This can also just be due  
NOTE Confidence: 0.759611767142857  
00:29:14.306 --> 00:29:16.720 to biases in self report.  
NOTE Confidence: 0.759611767142857

00:29:16.720 --> 00:29:18.435 It can be possible that you know,  
NOTE Confidence: 0.759611767142857

00:29:18.440 --> 00:29:19.936 among different educational attainment  
NOTE Confidence: 0.759611767142857

00:29:19.936 --> 00:29:21.806 groups people are perceiving and  
NOTE Confidence: 0.759611767142857

00:29:21.806 --> 00:29:23.480 reporting their symptoms differently.  
NOTE Confidence: 0.961830092

00:29:36.090 --> 00:29:38.630 I do see comments on how vaccination  
NOTE Confidence: 0.961830092

00:29:38.630 --> 00:29:40.850 can affect the long COVID symptoms.  
NOTE Confidence: 0.961830092

00:29:40.850 --> 00:29:45.235 And while this survey itself cannot  
NOTE Confidence: 0.961830092

00:29:45.235 --> 00:29:49.085 answer that, we do have one paper  
NOTE Confidence: 0.961830092

00:29:49.085 --> 00:29:52.244 that we looked into on how vaccination  
NOTE Confidence: 0.961830092

00:29:52.244 --> 00:29:54.280 effects on COVID symptoms on.  
NOTE Confidence: 0.961830092

00:29:54.280 --> 00:29:56.956 I believe it was 16 participants.  
NOTE Confidence: 0.961830092

00:29:56.960 --> 00:30:02.120 And that paper should be available  
NOTE Confidence: 0.961830092

00:30:02.120 --> 00:30:05.080 within maybe next few months,  
NOTE Confidence: 0.961830092

00:30:05.080 --> 00:30:06.560 few weeks or few months.  
NOTE Confidence: 0.961830092

00:30:06.560 --> 00:30:14.120 Hopefully we ornally are you able to like  
NOTE Confidence: 0.961830092

00:30:14.120 --> 00:30:16.680 briefly explain about this study? Yes.

NOTE Confidence: 0.810322407272727  
00:30:16.680 --> 00:30:20.136 So we did try to have a run a  
NOTE Confidence: 0.810322407272727  
00:30:20.136 --> 00:30:22.885 longitudinal study, but we did not have  
NOTE Confidence: 0.810322407272727  
00:30:22.885 --> 00:30:24.610 much participants because most people  
NOTE Confidence: 0.810322407272727  
00:30:24.676 --> 00:30:26.797 got vaccinated by the time we had  
NOTE Confidence: 0.810322407272727  
00:30:26.797 --> 00:30:28.920 you know started and it was ongoing.  
NOTE Confidence: 0.810322407272727  
00:30:28.920 --> 00:30:32.248 But we do have data on 16 participants  
NOTE Confidence: 0.810322407272727  
00:30:32.248 --> 00:30:35.398 and we do see some improvement.  
NOTE Confidence: 0.810322407272727  
00:30:35.400 --> 00:30:36.640 That's what we are observing.  
NOTE Confidence: 0.810322407272727  
00:30:36.640 --> 00:30:39.544 And also there are some immunophenotypes  
NOTE Confidence: 0.810322407272727  
00:30:39.544 --> 00:30:43.040 which seem to go along with the improvement.  
NOTE Confidence: 0.810322407272727  
00:30:43.040 --> 00:30:45.994 So it shouldn't take much more time.  
NOTE Confidence: 0.810322407272727  
00:30:46.000 --> 00:30:48.037 It should. We need to submit a  
NOTE Confidence: 0.810322407272727  
00:30:48.037 --> 00:30:49.639 revision and once it goes in,  
NOTE Confidence: 0.810322407272727  
00:30:49.640 --> 00:30:51.716 it should be available to everybody  
NOTE Confidence: 0.810322407272727  
00:30:51.716 --> 00:30:53.326 once it's accepted, of course.  
NOTE Confidence: 0.810322407272727

00:30:53.326 --> 00:30:55.307 So it has to go through another  
NOTE Confidence: 0.810322407272727

00:30:55.307 --> 00:30:56.240 round of review.  
NOTE Confidence: 0.810322407272727

00:30:56.240 --> 00:30:58.074 So it will be soon that you'll  
NOTE Confidence: 0.810322407272727

00:30:58.074 --> 00:30:59.864 be able to see the paper.  
NOTE Confidence: 0.810322407272727

00:30:59.864 --> 00:31:00.608 But definitely,  
NOTE Confidence: 0.810322407272727

00:31:00.608 --> 00:31:02.840 we see that some of the  
NOTE Confidence: 0.810322407272727

00:31:02.840 --> 00:31:04.200 participants have reported that,  
NOTE Confidence: 0.810322407272727

00:31:04.200 --> 00:31:04.880 you know,  
NOTE Confidence: 0.810322407272727

00:31:04.880 --> 00:31:07.316 symptoms got better and we do see  
NOTE Confidence: 0.810322407272727

00:31:07.320 --> 00:31:09.425 certain immuno phenotyping results which  
NOTE Confidence: 0.810322407272727

00:31:09.425 --> 00:31:12.400 seem to align with the improvement.  
NOTE Confidence: 0.810322407272727

00:31:12.400 --> 00:31:12.560 Thank  
NOTE Confidence: 0.785755402941177

00:31:12.680 --> 00:31:15.024 you. And hopefully, we can do a cafe  
NOTE Confidence: 0.785755402941177

00:31:15.024 --> 00:31:18.034 or a town hall when that paper is out.  
NOTE Confidence: 0.863391045454545

00:31:22.120 --> 00:31:24.544 Rishi, any other questions that you  
NOTE Confidence: 0.863391045454545

00:31:24.544 --> 00:31:27.320 wouldn't be able to answer this moment?

NOTE Confidence: 0.81016704125

00:31:30.240 --> 00:31:31.465 I need to see if I covered

NOTE Confidence: 0.81016704125

00:31:31.465 --> 00:31:32.558 everything. If I didn't,

NOTE Confidence: 0.9705458

00:31:35.280 --> 00:31:37.037 I think I got most of them.

NOTE Confidence: 0.9705458

00:31:37.040 --> 00:31:38.734 If you if you have a question

NOTE Confidence: 0.9705458

00:31:38.734 --> 00:31:40.000 that didn't get answered,

NOTE Confidence: 0.9705458

00:31:40.000 --> 00:31:41.680 if you wouldn't mind pasting it in

NOTE Confidence: 0.9705458

00:31:41.680 --> 00:31:43.240 the chat again, we'd appreciate it.

NOTE Confidence: 0.45732918

00:31:46.160 --> 00:31:50.652 Yep, I know I haven't able to. I wasn't

NOTE Confidence: 0.45732918

00:31:50.652 --> 00:31:53.520 able to cover every question because

NOTE Confidence: 0.8566982

00:31:55.920 --> 00:31:57.800 and I apologize for that.

NOTE Confidence: 0.8566982

00:31:57.800 --> 00:31:59.956 Maybe I, Richie, if you can identify

NOTE Confidence: 0.8566982

00:31:59.956 --> 00:32:01.891 one or two, that'll be good.

NOTE Confidence: 0.8566982

00:32:01.891 --> 00:32:04.770 But maybe I can just do a brief

NOTE Confidence: 0.8566982

00:32:04.770 --> 00:32:07.320 announcement on the LISTEN study itself.

NOTE Confidence: 0.8566982

00:32:07.320 --> 00:32:11.610 So I'm just going to do maybe quickly

NOTE Confidence: 0.8566982

00:32:11.610 --> 00:32:13.635 do a brief introduction myself.

NOTE Confidence: 0.8566982

00:32:13.640 --> 00:32:15.340 So I'm Mitsu Sawano,

NOTE Confidence: 0.8566982

00:32:15.340 --> 00:32:17.848 I'm one of the physician scientists

NOTE Confidence: 0.8566982

00:32:17.848 --> 00:32:20.676 working on the LISTEN study and I've

NOTE Confidence: 0.8566982

00:32:20.676 --> 00:32:22.562 been working with Doctor Kumholtz

NOTE Confidence: 0.8566982

00:32:22.562 --> 00:32:26.386 and the team for the past two years.

NOTE Confidence: 0.8566982

00:32:26.386 --> 00:32:29.100 And and I've been learning a lot

NOTE Confidence: 0.8566982

00:32:29.100 --> 00:32:31.359 about long COVID and this community.

NOTE Confidence: 0.8566982

00:32:31.360 --> 00:32:35.080 And so, you know, we are,

NOTE Confidence: 0.8566982

00:32:35.080 --> 00:32:36.888 I think Harlan already mentioned

NOTE Confidence: 0.8566982

00:32:36.888 --> 00:32:39.856 this in the opening remarks,

NOTE Confidence: 0.8566982

00:32:39.856 --> 00:32:44.952 but we are interested in, you know,

NOTE Confidence: 0.8566982

00:32:44.952 --> 00:32:48.984 capturing more newer aspects of how you

NOTE Confidence: 0.8566982

00:32:48.984 --> 00:32:52.836 are experiencing long COVID over the years.

NOTE Confidence: 0.8566982

00:32:52.840 --> 00:32:56.160 And it's also related to this long COVID

NOTE Confidence: 0.8566982

00:32:56.160 --> 00:32:59.038 recovery paper that Rishi just presented.

NOTE Confidence: 0.8566982

00:32:59.040 --> 00:33:02.281 So we are interested in conducting what

NOTE Confidence: 0.8566982

00:33:02.281 --> 00:33:06.031 we call a follow up survey on everyone

NOTE Confidence: 0.8566982

00:33:06.031 --> 00:33:08.857 who had responded to the baseline

NOTE Confidence: 0.8566982

00:33:08.857 --> 00:33:11.797 questionnaires that we had in Hugo Kindred.

NOTE Confidence: 0.8566982

00:33:11.800 --> 00:33:14.554 I know some of you haven't responded to it,

NOTE Confidence: 0.8566982

00:33:14.560 --> 00:33:16.480 some of you may not have,

NOTE Confidence: 0.8566982

00:33:16.480 --> 00:33:17.767 but that's OK.

NOTE Confidence: 0.8566982

00:33:17.767 --> 00:33:19.912 So anyone who has responded

NOTE Confidence: 0.8566982

00:33:19.912 --> 00:33:22.440 to the previous question,

NOTE Confidence: 0.8566982

00:33:22.440 --> 00:33:25.163 we hope to send you an invitation

NOTE Confidence: 0.8566982

00:33:25.163 --> 00:33:28.174 on how you're doing in terms of

NOTE Confidence: 0.8566982

00:33:28.174 --> 00:33:30.808 your general health status and also

NOTE Confidence: 0.8566982

00:33:30.893 --> 00:33:33.425 how your long COVID symptoms have

NOTE Confidence: 0.8566982

00:33:33.425 --> 00:33:36.376 changed or has if it has not changed.

NOTE Confidence: 0.8566982

00:33:36.376 --> 00:33:38.640 And you know you should respond that,

NOTE Confidence: 0.8566982

00:33:38.640 --> 00:33:41.744 but we are interested in how you are  
NOTE Confidence: 0.8566982

00:33:41.744 --> 00:33:44.676 doing over the last one or two years  
NOTE Confidence: 0.8566982

00:33:44.680 --> 00:33:48.439 after you have joined this listen study.  
NOTE Confidence: 0.8566982

00:33:48.440 --> 00:33:52.787 And we hope to launch that long COVID follow  
NOTE Confidence: 0.8566982

00:33:52.787 --> 00:33:58.600 up study within the maybe next few weeks,  
NOTE Confidence: 0.8566982

00:33:58.600 --> 00:34:01.720 perhaps in maybe August.  
NOTE Confidence: 0.8566982

00:34:01.720 --> 00:34:05.077 We just have to go through the IRB approval.  
NOTE Confidence: 0.8566982

00:34:05.080 --> 00:34:07.640 But once that's done then we  
NOTE Confidence: 0.8566982

00:34:07.640 --> 00:34:09.320 hope to launch that very soon.  
NOTE Confidence: 0.8566982

00:34:09.320 --> 00:34:12.670 And if you can respond to it and answer  
NOTE Confidence: 0.8566982

00:34:12.670 --> 00:34:15.400 the set of questionnaires that we have,  
NOTE Confidence: 0.8566982

00:34:15.400 --> 00:34:17.902 it's basically going to be something  
NOTE Confidence: 0.8566982

00:34:17.902 --> 00:34:20.238 similar that you have responded  
NOTE Confidence: 0.8566982

00:34:20.238 --> 00:34:22.598 and the baseline questionnaire,  
NOTE Confidence: 0.8566982

00:34:22.600 --> 00:34:25.176 but it's going to be a little bit  
NOTE Confidence: 0.8566982

00:34:25.176 --> 00:34:27.359 shorter so that everybody would

NOTE Confidence: 0.8566982

00:34:27.360 --> 00:34:31.800 not feel too overly overwhelmed.

NOTE Confidence: 0.8566982

00:34:31.800 --> 00:34:32.580 Because you know,

NOTE Confidence: 0.8566982

00:34:32.580 --> 00:34:34.140 I know that that these questionnaires

NOTE Confidence: 0.8566982

00:34:34.140 --> 00:34:34.799 can be long,

NOTE Confidence: 0.8566982

00:34:34.800 --> 00:34:37.888 but we try to keep it short so

NOTE Confidence: 0.8566982

00:34:37.888 --> 00:34:40.424 that everyone will be able to

NOTE Confidence: 0.8566982

00:34:40.424 --> 00:34:42.519 respond in like 1 sequence.

NOTE Confidence: 0.8566982

00:34:42.520 --> 00:34:45.838 So hopefully we can have that ready.

NOTE Confidence: 0.8566982

00:34:45.840 --> 00:34:49.660 And once that is all prepared,

NOTE Confidence: 0.8566982

00:34:49.660 --> 00:34:52.120 then we will make an

NOTE Confidence: 0.8566982

00:34:52.120 --> 00:34:53.880 announcement via e-mail again.

NOTE Confidence: 0.8566982

00:34:53.880 --> 00:34:56.920 So that's on the horizon.

NOTE Confidence: 0.8566982

00:34:56.920 --> 00:34:59.400 So I just wanted to make that announcement.

NOTE Confidence: 0.8566982

00:34:59.400 --> 00:34:59.928 And Rishi,

NOTE Confidence: 0.8566982

00:34:59.928 --> 00:35:01.512 is there anything else that you

NOTE Confidence: 0.8566982

00:35:01.512 --> 00:35:03.238 would like to cover it right here?

NOTE Confidence: 0.921708421

00:35:04.200 --> 00:35:06.440 No, but I do just want to clarify one thing.

NOTE Confidence: 0.921708421

00:35:06.440 --> 00:35:08.400 I apologize for not doing the strange slides.

NOTE Confidence: 0.921708421

00:35:08.400 --> 00:35:11.320 But so acute COVID-19 infection,

NOTE Confidence: 0.921708421

00:35:11.320 --> 00:35:13.240 it's basically your initial,

NOTE Confidence: 0.921708421

00:35:13.240 --> 00:35:16.120 your COVID-19 infection with the virus.

NOTE Confidence: 0.921708421

00:35:16.120 --> 00:35:18.502 So some individuals had were infected

NOTE Confidence: 0.921708421

00:35:18.502 --> 00:35:20.505 with COVID-19 and recovered and

NOTE Confidence: 0.921708421

00:35:20.505 --> 00:35:22.235 did not experience long COVID.

NOTE Confidence: 0.921708421

00:35:22.240 --> 00:35:25.315 And so the distinction is between

NOTE Confidence: 0.921708421

00:35:25.315 --> 00:35:27.290 those that have acute COVID-19

NOTE Confidence: 0.921708421

00:35:27.290 --> 00:35:29.196 symptoms and then transition to

NOTE Confidence: 0.921708421

00:35:29.196 --> 00:35:31.344 having long COVID if those symptoms

NOTE Confidence: 0.921708421

00:35:31.344 --> 00:35:33.479 persist for three months or longer.

NOTE Confidence: 0.921708421

00:35:33.480 --> 00:35:35.615 And so the question of severity that

NOTE Confidence: 0.921708421

00:35:35.615 --> 00:35:38.439 was asked in the survey was in relation

NOTE Confidence: 0.921708421

00:35:38.439 --> 00:35:40.279 to the acute COVID-19 infection,

NOTE Confidence: 0.921708421

00:35:40.280 --> 00:35:43.160 not with in regards to the long COVID.

NOTE Confidence: 0.921708421

00:35:43.160 --> 00:35:44.976 And I do agree that it would be

NOTE Confidence: 0.921708421

00:35:44.976 --> 00:35:46.637 helpful if they also asked about

NOTE Confidence: 0.921708421

00:35:46.637 --> 00:35:48.376 the severity of long COVID so that

NOTE Confidence: 0.921708421

00:35:48.376 --> 00:35:49.760 we would be able to, you know,

NOTE Confidence: 0.921708421

00:35:49.760 --> 00:35:51.360 glean insights from that too.

NOTE Confidence: 0.75476499

00:35:53.880 --> 00:35:56.280 Great, Thank you, Rishi.

NOTE Confidence: 0.75476499

00:35:56.280 --> 00:35:59.920 And before I close, I just wanted

NOTE Confidence: 0.75476499

00:35:59.920 --> 00:36:02.048 to introduce everybody to Jay,

NOTE Confidence: 0.75476499

00:36:02.048 --> 00:36:04.352 who is a new member on our team.

NOTE Confidence: 0.75476499

00:36:04.360 --> 00:36:08.800 So Jay, maybe you can introduce yourself.

NOTE Confidence: 0.75476499

00:36:08.800 --> 00:36:10.560 Hello, everyone. As Mitsu said,

NOTE Confidence: 0.845722743076923

00:36:10.560 --> 00:36:12.536 my name is Jay. I'm a medical student

NOTE Confidence: 0.845722743076923

00:36:12.536 --> 00:36:13.879 working with the Listen team.

NOTE Confidence: 0.845722743076923

00:36:13.880 --> 00:36:15.440 Thank you again for your participation.

NOTE Confidence: 0.845722743076923

00:36:15.440 --> 00:36:17.500 And we're really looking forward to to

NOTE Confidence: 0.845722743076923

00:36:17.500 --> 00:36:18.760 getting these results and getting it back

NOTE Confidence: 0.972613953333333

00:36:18.760 --> 00:36:21.720 to you guys. Thank you, Jay

NOTE Confidence: 0.677271325714286

00:36:24.600 --> 00:36:26.600 and I, I'll hand it to you, Carla

NOTE Confidence: 0.713689445

00:36:27.320 --> 00:36:28.664 or I don't know if I just

NOTE Confidence: 0.713689445

00:36:28.664 --> 00:36:29.879 give a chance for Bernali.

NOTE Confidence: 0.713689445

00:36:29.880 --> 00:36:31.826 I know she wasn't planning on speaking

NOTE Confidence: 0.713689445

00:36:31.826 --> 00:36:33.438 today and she's all messed up.

NOTE Confidence: 0.713689445

00:36:33.440 --> 00:36:36.552 But Bernali, I know if you just

NOTE Confidence: 0.713689445

00:36:36.552 --> 00:36:37.703 wanted to say a few words about

NOTE Confidence: 0.713689445

00:36:37.703 --> 00:36:38.886 the experience in the lab or how

NOTE Confidence: 0.713689445

00:36:38.930 --> 00:36:39.920 things are going in the lab,

NOTE Confidence: 0.713689445

00:36:39.920 --> 00:36:41.390 just folks because it's such an

NOTE Confidence: 0.713689445

00:36:41.390 --> 00:36:42.960 important part of what we're doing.

NOTE Confidence: 0.915733770434782

00:36:43.840 --> 00:36:46.122 So we are currently focusing on the

NOTE Confidence: 0.915733770434782  
00:36:46.122 --> 00:36:48.666 PBS cohort and we are hopeful that we  
NOTE Confidence: 0.915733770434782  
00:36:48.666 --> 00:36:51.078 will be able to collate all the data.  
NOTE Confidence: 0.915733770434782  
00:36:51.080 --> 00:36:53.192 So we are in the process of collating  
NOTE Confidence: 0.915733770434782  
00:36:53.192 --> 00:36:55.769 the data and organizing the write up and  
NOTE Confidence: 0.915733770434782  
00:36:55.769 --> 00:36:58.108 everything and also keenly looking at what  
NOTE Confidence: 0.915733770434782  
00:36:58.108 --> 00:37:00.313 kind of signatures that we are getting.  
NOTE Confidence: 0.915733770434782  
00:37:00.320 --> 00:37:02.798 We are using machine learning to also  
NOTE Confidence: 0.915733770434782  
00:37:02.798 --> 00:37:04.917 look for biomarkers if they are any,  
NOTE Confidence: 0.915733770434782  
00:37:04.920 --> 00:37:07.488 so that we can distinguish between  
NOTE Confidence: 0.915733770434782  
00:37:07.488 --> 00:37:09.200 controls and PVS participants.  
NOTE Confidence: 0.915733770434782  
00:37:09.200 --> 00:37:11.276 So that's where we are at.  
NOTE Confidence: 0.915733770434782  
00:37:11.280 --> 00:37:14.097 We should be able to get something out at  
NOTE Confidence: 0.915733770434782  
00:37:14.097 --> 00:37:17.264 least the preprint within two months or so.  
NOTE Confidence: 0.915733770434782  
00:37:17.264 --> 00:37:18.440 That's the hope.  
NOTE Confidence: 0.915733770434782  
00:37:18.440 --> 00:37:20.608 We are still waiting for some of the  
NOTE Confidence: 0.915733770434782

00:37:20.608 --> 00:37:22.400 results and some of the analysis.  
NOTE Confidence: 0.915733770434782

00:37:22.400 --> 00:37:24.416 So that's where we are AT and also  
NOTE Confidence: 0.915733770434782

00:37:24.416 --> 00:37:26.237 validating some of the results that have,  
NOTE Confidence: 0.915733770434782

00:37:26.240 --> 00:37:29.039 we have used some of the assays and found.  
NOTE Confidence: 0.915733770434782

00:37:29.040 --> 00:37:31.128 So we want to validate and be double  
NOTE Confidence: 0.915733770434782

00:37:31.128 --> 00:37:32.799 sure before we publish anything.  
NOTE Confidence: 0.915733770434782

00:37:32.800 --> 00:37:35.040 So that's where we are at with  
NOTE Confidence: 0.915733770434782

00:37:35.040 --> 00:37:36.208 the PBS manuscript.  
NOTE Confidence: 0.915733770434782

00:37:36.208 --> 00:37:38.320 And other than that,  
NOTE Confidence: 0.915733770434782

00:37:38.320 --> 00:37:41.120 we're also working on the trial samples.  
NOTE Confidence: 0.915733770434782

00:37:41.120 --> 00:37:43.199 So we are busy doing that too.  
NOTE Confidence: 0.915733770434782

00:37:43.200 --> 00:37:45.048 So they will be unwinding as  
NOTE Confidence: 0.915733770434782

00:37:45.048 --> 00:37:46.640 Harlan has mentioned in July,  
NOTE Confidence: 0.915733770434782

00:37:46.640 --> 00:37:47.158 I believe.  
NOTE Confidence: 0.915733770434782

00:37:47.158 --> 00:37:48.712 And after that we should be  
NOTE Confidence: 0.915733770434782

00:37:48.712 --> 00:37:50.728 able to analyse the data and see

NOTE Confidence: 0.915733770434782  
00:37:50.728 --> 00:37:51.880 how the results look.  
NOTE Confidence: 0.915733770434782  
00:37:51.880 --> 00:37:55.040 So that's where the Iwasaki lab is at.  
NOTE Confidence: 0.915733770434782  
00:37:55.040 --> 00:37:55.572 Thank you,  
NOTE Confidence: 0.915733770434782  
00:37:55.572 --> 00:37:55.838 Harlan  
NOTE Confidence: 0.833834726  
00:37:56.200 --> 00:37:58.248 and and just to note that every time  
NOTE Confidence: 0.833834726  
00:37:58.248 --> 00:38:01.640 I hear your lab, you know, talk you,  
NOTE Confidence: 0.833834726  
00:38:01.640 --> 00:38:03.840 you guys are involved with a lot of  
NOTE Confidence: 0.833834726  
00:38:03.840 --> 00:38:05.400 other collaborations around long COVID  
NOTE Confidence: 0.833834726  
00:38:05.400 --> 00:38:06.995 and post vaccination syndrome and,  
NOTE Confidence: 0.833834726  
00:38:07.000 --> 00:38:09.702 and both with Petrino and the Sinai  
NOTE Confidence: 0.833834726  
00:38:09.702 --> 00:38:11.320 group and and all around the world.  
NOTE Confidence: 0.833834726  
00:38:11.320 --> 00:38:13.679 Anyway, I just want sometimes I think,  
NOTE Confidence: 0.833834726  
00:38:13.680 --> 00:38:15.608 you know, when you're you're out there and  
NOTE Confidence: 0.833834726  
00:38:15.608 --> 00:38:17.590 you're facing this and you wonder, you know,  
NOTE Confidence: 0.833834726  
00:38:17.590 --> 00:38:19.655 is, is at least anyone paying attention  
NOTE Confidence: 0.833834726

00:38:19.655 --> 00:38:22.115 or people still trying to make progress?  
NOTE Confidence: 0.833834726

00:38:22.120 --> 00:38:24.880 You know that there's Akiko in the lab.  
NOTE Confidence: 0.833834726

00:38:24.880 --> 00:38:27.316 You know, there's a lot going on.  
NOTE Confidence: 0.833834726

00:38:27.320 --> 00:38:29.480 Some of it has to do with listen,  
NOTE Confidence: 0.833834726

00:38:29.480 --> 00:38:30.677 some of it has to do with other things.  
NOTE Confidence: 0.833834726

00:38:30.680 --> 00:38:32.928 Anyway, I just wanted to highlight that that  
NOTE Confidence: 0.833834726

00:38:32.928 --> 00:38:35.358 there is still a lot of efforts being made.  
NOTE Confidence: 0.833834726

00:38:35.360 --> 00:38:37.194 Always wish that there could be more,  
NOTE Confidence: 0.833834726

00:38:37.200 --> 00:38:41.155 but but the group still pushing forward.  
NOTE Confidence: 0.833834726

00:38:41.160 --> 00:38:42.280 I had a nice conversation  
NOTE Confidence: 0.833834726

00:38:42.280 --> 00:38:43.400 with Lisa Sanders this week.  
NOTE Confidence: 0.833834726

00:38:43.400 --> 00:38:44.760 Lisa, you know, may know,  
NOTE Confidence: 0.833834726

00:38:44.760 --> 00:38:48.288 like writes this column in the New York Times  
NOTE Confidence: 0.833834726

00:38:48.288 --> 00:38:50.514 around she kind of was involved in that,  
NOTE Confidence: 0.833834726

00:38:50.520 --> 00:38:52.088 that TV series House.  
NOTE Confidence: 0.833834726

00:38:52.088 --> 00:38:53.130 And, you know,

NOTE Confidence: 0.833834726

00:38:53.130 --> 00:38:55.080 she like writes about medical mysteries,

NOTE Confidence: 0.833834726

00:38:55.080 --> 00:38:56.400 but she started a long

NOTE Confidence: 0.833834726

00:38:56.400 --> 00:38:57.720 COVID clinic at at Yale.

NOTE Confidence: 0.833834726

00:38:57.720 --> 00:38:58.973 And we're also talking to her about

NOTE Confidence: 0.833834726

00:38:58.973 --> 00:39:00.599 how we can work more closely with her.

NOTE Confidence: 0.833834726

00:39:00.600 --> 00:39:01.440 And of course,

NOTE Confidence: 0.833834726

00:39:01.440 --> 00:39:02.840 they're booked out till December.

NOTE Confidence: 0.833834726

00:39:02.840 --> 00:39:03.536 It's crowded.

NOTE Confidence: 0.833834726

00:39:03.536 --> 00:39:06.771 And so she's working to see if she can

NOTE Confidence: 0.833834726

00:39:06.771 --> 00:39:08.976 attract more people to to help expand

NOTE Confidence: 0.833834726

00:39:08.976 --> 00:39:11.000 the clinic and and help meet the demand.

NOTE Confidence: 0.833834726

00:39:11.000 --> 00:39:11.288 Even,

NOTE Confidence: 0.833834726

00:39:11.288 --> 00:39:11.864 you know,

NOTE Confidence: 0.833834726

00:39:11.864 --> 00:39:12.440 locally here.

NOTE Confidence: 0.918471818888889

00:39:15.440 --> 00:39:17.304 We're happy to end,

NOTE Confidence: 0.918471818888889

00:39:17.304 --> 00:39:19.634 but we're also happy to,  
NOTE Confidence: 0.918471818888889

00:39:19.640 --> 00:39:21.008 you know, I always think it's  
NOTE Confidence: 0.918471818888889

00:39:21.008 --> 00:39:22.319 better when Akiko's on with me,  
NOTE Confidence: 0.918471818888889

00:39:22.320 --> 00:39:23.848 although I have Bernal.  
NOTE Confidence: 0.918471818888889

00:39:23.848 --> 00:39:24.994 It was amazing.  
NOTE Confidence: 0.918471818888889

00:39:25.000 --> 00:39:26.440 But because most of your questions  
NOTE Confidence: 0.918471818888889

00:39:26.440 --> 00:39:28.119 actually have to do with Mechazone,  
NOTE Confidence: 0.918471818888889

00:39:28.120 --> 00:39:29.256 just a simple cardiologist,  
NOTE Confidence: 0.918471818888889

00:39:29.256 --> 00:39:30.960 but I'm lucky enough to work  
NOTE Confidence: 0.918471818888889

00:39:30.960 --> 00:39:32.591 with Akiko and some of the other  
NOTE Confidence: 0.918471818888889

00:39:32.591 --> 00:39:34.201 people who have been studying post  
NOTE Confidence: 0.918471818888889

00:39:34.201 --> 00:39:35.917 infectious things for a long time.  
NOTE Confidence: 0.918471818888889

00:39:35.920 --> 00:39:37.832 I got and I got drawn into this  
NOTE Confidence: 0.918471818888889

00:39:37.832 --> 00:39:39.427 because just wanted to see if  
NOTE Confidence: 0.918471818888889

00:39:39.427 --> 00:39:40.752 we can make a contribution.  
NOTE Confidence: 0.918471818888889

00:39:40.760 --> 00:39:41.978 But if there are things that

NOTE Confidence: 0.918471818888889  
00:39:41.978 --> 00:39:43.159 you guys want to ask us,  
NOTE Confidence: 0.918471818888889  
00:39:43.160 --> 00:39:44.520 we could just take a few minutes now.  
NOTE Confidence: 0.918471818888889  
00:39:44.520 --> 00:39:46.396 Otherwise we can we can close up  
NOTE Confidence: 0.71819891125  
00:39:52.640 --> 00:39:54.000 like we're now. You might want to see  
NOTE Confidence: 0.64225614  
00:39:56.520 --> 00:39:59.028 those, those last two. Yeah,  
NOTE Confidence: 0.64225614  
00:39:59.028 --> 00:40:00.682 you can stand in for Akiko and see  
NOTE Confidence: 0.64225614  
00:40:00.682 --> 00:40:01.956 if you can answer any of those  
NOTE Confidence: 0.3401357  
00:40:04.080 --> 00:40:05.346 about the nasal vaccines.  
NOTE Confidence: 0.3401357  
00:40:05.346 --> 00:40:07.720 We are currently working on some  
NOTE Confidence: 0.916478616  
00:40:07.720 --> 00:40:09.240 nasal vaccines like, you know,  
NOTE Confidence: 0.916478616  
00:40:09.240 --> 00:40:11.679 we Akiko had a nice design and some of  
NOTE Confidence: 0.916478616  
00:40:11.679 --> 00:40:14.159 the results have been very promising.  
NOTE Confidence: 0.916478616  
00:40:14.160 --> 00:40:15.672 So, but we'll have to wait  
NOTE Confidence: 0.916478616  
00:40:15.672 --> 00:40:16.680 for some more experiments,  
NOTE Confidence: 0.916478616  
00:40:16.680 --> 00:40:18.396 you know, before we think about.  
NOTE Confidence: 0.916478616

00:40:18.400 --> 00:40:19.621 Clinical trials, right.  
NOTE Confidence: 0.916478616

00:40:19.621 --> 00:40:23.461 So we are on a journey so and we  
NOTE Confidence: 0.916478616

00:40:23.461 --> 00:40:25.716 hope to achieve something soon.  
NOTE Confidence: 0.916478616

00:40:25.720 --> 00:40:28.840 We are working on influenza,  
NOTE Confidence: 0.916478616

00:40:28.840 --> 00:40:31.520 we have worked on other viruses as well.  
NOTE Confidence: 0.916478616

00:40:31.520 --> 00:40:33.764 So hopefully we will be able  
NOTE Confidence: 0.916478616

00:40:33.764 --> 00:40:35.720 to get something out soon.  
NOTE Confidence: 0.752021029411765

00:40:39.760 --> 00:40:41.615 And I think there was one about  
NOTE Confidence: 0.752021029411765

00:40:41.615 --> 00:40:43.039 someone was asking about auto  
NOTE Confidence: 0.752021029411765

00:40:43.039 --> 00:40:44.760 antibodies in the post vax. Yeah.  
NOTE Confidence: 0.752021029411765

00:40:44.760 --> 00:40:46.676 So that's part of your asset, that's part  
NOTE Confidence: 0.5481935725

00:40:46.680 --> 00:40:47.840 of your yes. So  
NOTE Confidence: 0.827401177142857

00:40:47.840 --> 00:40:50.955 we are definitely looking at auto antibodies,  
NOTE Confidence: 0.827401177142857

00:40:50.960 --> 00:40:53.084 some of the known auto antibodies  
NOTE Confidence: 0.827401177142857

00:40:53.084 --> 00:40:55.839 actually and we are analyzing the data.  
NOTE Confidence: 0.827401177142857

00:40:55.840 --> 00:40:57.625 So we will be validating them before

NOTE Confidence: 0.827401177142857  
00:40:57.625 --> 00:40:59.560 we put it into the manuscript.  
NOTE Confidence: 0.827401177142857  
00:40:59.560 --> 00:41:01.546 We want to be very, very sure before  
NOTE Confidence: 0.827401177142857  
00:41:01.546 --> 00:41:03.358 we put anything into the manuscript.  
NOTE Confidence: 0.827401177142857  
00:41:03.360 --> 00:41:05.680 So yes, we are looking at auto antibodies.  
NOTE Confidence: 0.845760192142857  
00:41:16.760 --> 00:41:18.657 Is there any effort to manufacture a  
NOTE Confidence: 0.845760192142857  
00:41:18.657 --> 00:41:20.478 COVID vaccine that's not an mRNA vaccine?  
NOTE Confidence: 0.845760192142857  
00:41:20.480 --> 00:41:22.030 There are non mRNA vaccines  
NOTE Confidence: 0.845760192142857  
00:41:22.030 --> 00:41:23.518 right for now. I mean they're  
NOTE Confidence: 0.780130354285714  
00:41:24.000 --> 00:41:26.800 yes, subunit vaccines are there of course,  
NOTE Confidence: 0.780130354285714  
00:41:26.800 --> 00:41:30.240 so but not as efficacious. We should see that  
NOTE Confidence: 0.794133326  
00:41:31.800 --> 00:41:33.520 like Novavax somebody put up.  
NOTE Confidence: 0.794133326  
00:41:33.520 --> 00:41:34.720 Yes, yes, correct.  
NOTE Confidence: 0.964138218888889  
00:41:36.840 --> 00:41:38.150 You guys are such good  
NOTE Confidence: 0.964138218888889  
00:41:38.150 --> 00:41:39.198 resources to each other.  
NOTE Confidence: 0.964138218888889  
00:41:39.200 --> 00:41:40.706 You know, it's sort of like  
NOTE Confidence: 0.964138218888889

00:41:40.706 --> 00:41:42.186 the amount of knowledge in this  
NOTE Confidence: 0.964138218888889

00:41:42.186 --> 00:41:43.508 group always impresses me, Like,  
NOTE Confidence: 0.964138218888889

00:41:43.508 --> 00:41:46.478 we all have so much to learn from all of you.  
NOTE Confidence: 0.964138218888889

00:41:46.480 --> 00:41:48.520 You all are helping each other.  
NOTE Confidence: 0.964138218888889

00:41:48.520 --> 00:41:49.519 It's really amazing.  
NOTE Confidence: 0.714537255555555

00:41:49.920 --> 00:41:51.990 Yeah. It looks like Carolyn has  
NOTE Confidence: 0.714537255555555

00:41:51.990 --> 00:41:54.189 already read the news foreign study  
NOTE Confidence: 0.714537255555555

00:41:54.189 --> 00:41:56.433 that was published from our lab.  
NOTE Confidence: 0.714537255555555

00:41:56.440 --> 00:41:58.512 Yes, it does. We are also looking  
NOTE Confidence: 0.714537255555555

00:41:58.512 --> 00:42:00.800 at mechanisms at this point and at  
NOTE Confidence: 0.714537255555555

00:42:00.800 --> 00:42:02.475 the same time studying Neosporin.  
NOTE Confidence: 0.714537255555555

00:42:02.480 --> 00:42:04.451 So I think it will be an effort to  
NOTE Confidence: 0.714537255555555

00:42:04.451 --> 00:42:06.200 also move on to higher animals.  
NOTE Confidence: 0.714537255555555

00:42:06.200 --> 00:42:08.810 Like you have to look at mammals first in  
NOTE Confidence: 0.714537255555555

00:42:08.810 --> 00:42:11.513 order to reach next step is to reach humans.  
NOTE Confidence: 0.714537255555555

00:42:11.520 --> 00:42:13.416 So that's why those will be the step

NOTE Confidence: 0.714537255555555  
00:42:13.416 --> 00:42:15.038 wise progress on the Neosporin study.  
NOTE Confidence: 0.714537255555555  
00:42:15.040 --> 00:42:16.580 And definitely we learn more  
NOTE Confidence: 0.714537255555555  
00:42:16.580 --> 00:42:18.120 each time we run experiments.  
NOTE Confidence: 0.714537255555555  
00:42:18.120 --> 00:42:20.640 We do learn more about the immune system.  
NOTE Confidence: 0.714537255555555  
00:42:20.640 --> 00:42:21.588 It's me coastal immunity.  
NOTE Confidence: 0.714537255555555  
00:42:21.588 --> 00:42:23.520 And we are very much interested in the lab.  
NOTE Confidence: 0.714537255555555  
00:42:23.520 --> 00:42:24.432 It's Akiko's favorite.  
NOTE Confidence: 0.714537255555555  
00:42:24.432 --> 00:42:25.040 So, yeah,  
NOTE Confidence: 0.836712147272727  
00:42:26.040 --> 00:42:28.929 by the way, we we have put together a  
NOTE Confidence: 0.836712147272727  
00:42:28.929 --> 00:42:30.806 piece on in the small group of people  
NOTE Confidence: 0.836712147272727  
00:42:30.806 --> 00:42:32.778 that we were able to look at vaccination  
NOTE Confidence: 0.836712147272727  
00:42:32.778 --> 00:42:34.726 from with long COVID before and after  
NOTE Confidence: 0.836712147272727  
00:42:34.726 --> 00:42:36.392 vaccination and what the results are.  
NOTE Confidence: 0.836712147272727  
00:42:36.392 --> 00:42:37.632 Maybe on the next one,  
NOTE Confidence: 0.836712147272727  
00:42:37.640 --> 00:42:39.480 we should present that information.  
NOTE Confidence: 0.836712147272727

00:42:39.480 --> 00:42:41.720 It's only on 16 people,  
NOTE Confidence: 0.836712147272727

00:42:41.720 --> 00:42:44.496 but we we're just finishing up with very  
NOTE Confidence: 0.836712147272727

00:42:44.496 --> 00:42:47.030 detailed lab data from Akiko's lab as  
NOTE Confidence: 0.836712147272727

00:42:47.030 --> 00:42:49.070 well as what people reported. Actually,  
NOTE Confidence: 0.836712147272727

00:42:49.070 --> 00:42:50.960 we absolutely should do that next time.  
NOTE Confidence: 0.836712147272727

00:42:50.960 --> 00:42:52.264 Well, because we, we'll,  
NOTE Confidence: 0.836712147272727

00:42:52.264 --> 00:42:54.860 we're just sort of finishing up that analysis  
NOTE Confidence: 0.836712147272727

00:42:54.860 --> 00:42:57.480 and we'll be glad to share that with you.  
NOTE Confidence: 0.836712147272727

00:42:57.480 --> 00:42:57.796 Meanwhile,  
NOTE Confidence: 0.836712147272727

00:42:57.796 --> 00:43:00.640 when it gets posted and we'll send you notes.  
NOTE Confidence: 0.836712147272727

00:43:00.640 --> 00:43:01.990 So even before you won't have  
NOTE Confidence: 0.836712147272727

00:43:01.990 --> 00:43:03.400 to wait for one of these,  
NOTE Confidence: 0.836712147272727

00:43:03.400 --> 00:43:05.160 we can discuss it on one of these,  
NOTE Confidence: 0.836712147272727

00:43:05.160 --> 00:43:06.679 but, but we'll let you know as  
NOTE Confidence: 0.836712147272727

00:43:06.679 --> 00:43:08.262 soon as that comes out because  
NOTE Confidence: 0.836712147272727

00:43:08.262 --> 00:43:09.717 that might also be relevant.

NOTE Confidence: 0.836712147272727  
00:43:09.720 --> 00:43:12.680 The Symphony Cynthia is asking,  
NOTE Confidence: 0.836712147272727  
00:43:12.680 --> 00:43:13.304 I think,  
NOTE Confidence: 0.836712147272727  
00:43:13.304 --> 00:43:14.864 a very important and interesting  
NOTE Confidence: 0.836712147272727  
00:43:14.864 --> 00:43:16.542 question about she's asking about  
NOTE Confidence: 0.836712147272727  
00:43:16.542 --> 00:43:17.918 the cardiology community and  
NOTE Confidence: 0.836712147272727  
00:43:17.920 --> 00:43:20.140 the degree to which people are  
NOTE Confidence: 0.836712147272727  
00:43:20.140 --> 00:43:21.990 being educated and sensitized to  
NOTE Confidence: 0.836712147272727  
00:43:21.990 --> 00:43:23.838 the needs of of this population.  
NOTE Confidence: 0.836712147272727  
00:43:23.840 --> 00:43:25.733 You know, I think the sad news, Cynthia,  
NOTE Confidence: 0.836712147272727  
00:43:25.733 --> 00:43:28.234 is that just like the rest of the world,  
NOTE Confidence: 0.836712147272727  
00:43:28.240 --> 00:43:29.584 like people want to pretend like  
NOTE Confidence: 0.836712147272727  
00:43:29.584 --> 00:43:30.480 the pandemic never occurred,  
NOTE Confidence: 0.836712147272727  
00:43:30.480 --> 00:43:32.640 like they can't get far enough away from it.  
NOTE Confidence: 0.836712147272727  
00:43:32.640 --> 00:43:34.228 You know, it's almost like it,  
NOTE Confidence: 0.836712147272727  
00:43:34.228 --> 00:43:35.836 it's a buzzkill to raise it.  
NOTE Confidence: 0.836712147272727

00:43:35.840 --> 00:43:36.292 You know,  
NOTE Confidence: 0.836712147272727

00:43:36.292 --> 00:43:37.874 just I'm talking about the pandemic general.  
NOTE Confidence: 0.836712147272727

00:43:37.880 --> 00:43:40.142 So now imagine you're talking about  
NOTE Confidence: 0.836712147272727

00:43:40.142 --> 00:43:42.291 long COVID and you know, like,  
NOTE Confidence: 0.836712147272727

00:43:42.291 --> 00:43:44.313 of course I'm talking about it,  
NOTE Confidence: 0.836712147272727

00:43:44.320 --> 00:43:44.834 but like,  
NOTE Confidence: 0.836712147272727

00:43:44.834 --> 00:43:46.633 I'm almost like alone talking about it.  
NOTE Confidence: 0.836712147272727

00:43:46.640 --> 00:43:47.840 You know, in cardiology,  
NOTE Confidence: 0.836712147272727

00:43:47.840 --> 00:43:48.440 you know,  
NOTE Confidence: 0.836712147272727

00:43:48.440 --> 00:43:50.897 it's just not you don't see articles  
NOTE Confidence: 0.836712147272727

00:43:50.897 --> 00:43:52.680 being published about it anymore.  
NOTE Confidence: 0.836712147272727

00:43:52.680 --> 00:43:54.720 You don't see people attacking to to it.  
NOTE Confidence: 0.836712147272727

00:43:54.720 --> 00:43:55.008 Meanwhile,  
NOTE Confidence: 0.836712147272727

00:43:55.008 --> 00:43:56.448 there's a large population of  
NOTE Confidence: 0.836712147272727

00:43:56.448 --> 00:43:58.417 people who are still suffering and  
NOTE Confidence: 0.836712147272727

00:43:58.417 --> 00:44:00.439 for whom we don't have answers.

NOTE Confidence: 0.836712147272727  
00:44:00.440 --> 00:44:03.956 And I think it's a it's one of the  
NOTE Confidence: 0.836712147272727  
00:44:03.956 --> 00:44:05.517 reasons why I still think even the  
NOTE Confidence: 0.836712147272727  
00:44:05.517 --> 00:44:06.797 descriptive papers are important.  
NOTE Confidence: 0.836712147272727  
00:44:06.800 --> 00:44:08.599 You know, it, If you're a patient,  
NOTE Confidence: 0.836712147272727  
00:44:08.600 --> 00:44:10.052 you said the damn it, You know,  
NOTE Confidence: 0.836712147272727  
00:44:10.052 --> 00:44:11.420 we don't really want scripted,  
NOTE Confidence: 0.836712147272727  
00:44:11.420 --> 00:44:13.320 we want action, you know,  
NOTE Confidence: 0.836712147272727  
00:44:13.320 --> 00:44:14.320 and I, I get that,  
NOTE Confidence: 0.836712147272727  
00:44:14.320 --> 00:44:16.868 but I'm also trying to raise awareness  
NOTE Confidence: 0.836712147272727  
00:44:16.868 --> 00:44:19.000 still that that you know, again,  
NOTE Confidence: 0.836712147272727  
00:44:19.000 --> 00:44:21.008 when they see people for people,  
NOTE Confidence: 0.836712147272727  
00:44:21.008 --> 00:44:21.920 they're not alone.  
NOTE Confidence: 0.836712147272727  
00:44:21.920 --> 00:44:23.600 They can read that there are other  
NOTE Confidence: 0.836712147272727  
00:44:23.600 --> 00:44:25.399 people like me and went for doctors.  
NOTE Confidence: 0.836712147272727  
00:44:25.400 --> 00:44:26.564 They can at least have something  
NOTE Confidence: 0.836712147272727

00:44:26.564 --> 00:44:27.680 in the literature to look to,  
NOTE Confidence: 0.836712147272727

00:44:27.680 --> 00:44:29.636 to see this is being described.  
NOTE Confidence: 0.836712147272727

00:44:29.640 --> 00:44:30.888 There is something,  
NOTE Confidence: 0.836712147272727

00:44:30.888 --> 00:44:31.720 it's real,  
NOTE Confidence: 0.836712147272727

00:44:31.720 --> 00:44:32.492 you know,  
NOTE Confidence: 0.836712147272727

00:44:32.492 --> 00:44:34.808 and it's something we don't understand  
NOTE Confidence: 0.836712147272727

00:44:34.808 --> 00:44:37.237 necessarily in terms of underlying cause.  
NOTE Confidence: 0.836712147272727

00:44:37.240 --> 00:44:39.088 But it it doesn't make it any less  
NOTE Confidence: 0.836712147272727

00:44:39.088 --> 00:44:40.393 important that there are people  
NOTE Confidence: 0.836712147272727

00:44:40.393 --> 00:44:41.718 out there who are suffering.  
NOTE Confidence: 0.836712147272727

00:44:41.720 --> 00:44:42.200 And so,  
NOTE Confidence: 0.86577681

00:44:44.360 --> 00:44:47.040 you know, somehow we got to get there.  
NOTE Confidence: 0.86577681

00:44:47.040 --> 00:44:50.120 Is this moment in time right now?  
NOTE Confidence: 0.86577681

00:44:50.120 --> 00:44:52.066 Yeah, I think you're right, Emily.  
NOTE Confidence: 0.86577681

00:44:52.066 --> 00:44:53.610 Like we haven't grieved  
NOTE Confidence: 0.86577681

00:44:53.610 --> 00:44:55.154 millions of people lost.

NOTE Confidence: 0.86577681

00:44:55.160 --> 00:44:57.572 You know, it's almost like, you know,

NOTE Confidence: 0.86577681

00:44:57.572 --> 00:45:00.398 it's a it's a third rail to even talk about,

NOTE Confidence: 0.86577681

00:45:00.400 --> 00:45:02.479 you know, and you go to the medical meetings.

NOTE Confidence: 0.86577681

00:45:02.480 --> 00:45:04.839 I just went to the cardiology meetings.

NOTE Confidence: 0.86577681

00:45:04.840 --> 00:45:06.136 There's nothing, you know,

NOTE Confidence: 0.86577681

00:45:06.136 --> 00:45:07.756 nothing going on about it.

NOTE Confidence: 0.86577681

00:45:07.760 --> 00:45:08.744 And like you again,

NOTE Confidence: 0.86577681

00:45:08.744 --> 00:45:10.610 try to get into the journals like

NOTE Confidence: 0.86577681

00:45:10.610 --> 00:45:12.275 they're not as interested anymore.

NOTE Confidence: 0.86577681

00:45:12.280 --> 00:45:14.842 You know, there was a in 2020-2021,

NOTE Confidence: 0.86577681

00:45:14.842 --> 00:45:16.294 like there were a million papers

NOTE Confidence: 0.86577681

00:45:16.294 --> 00:45:17.719 on the pandemic being published.

NOTE Confidence: 0.86577681

00:45:17.720 --> 00:45:19.358 If you just put pandemic in your

NOTE Confidence: 0.86577681

00:45:19.358 --> 00:45:20.760 article and people would take it,

NOTE Confidence: 0.86577681

00:45:20.760 --> 00:45:21.840 you never wanted it.

NOTE Confidence: 0.86577681

00:45:21.840 --> 00:45:23.190 And it's almost like the  
NOTE Confidence: 0.86577681

00:45:23.190 --> 00:45:24.519 exact opposite right now.  
NOTE Confidence: 0.86577681

00:45:24.520 --> 00:45:26.620 You know that there's negative interest  
NOTE Confidence: 0.86577681

00:45:26.620 --> 00:45:29.519 in this and it's something we've got to,  
NOTE Confidence: 0.86577681

00:45:29.520 --> 00:45:32.450 you know, combat because it's  
NOTE Confidence: 0.86577681

00:45:32.450 --> 00:45:34.794 an impediment to progress.  
NOTE Confidence: 0.86577681

00:45:34.800 --> 00:45:36.697 And it also means that when people  
NOTE Confidence: 0.86577681

00:45:36.697 --> 00:45:38.599 show up at doctor's offices,  
NOTE Confidence: 0.86577681

00:45:38.600 --> 00:45:40.922 they're not tuned into this and  
NOTE Confidence: 0.86577681

00:45:40.922 --> 00:45:43.560 that those are all still issues.  
NOTE Confidence: 0.86577681

00:45:43.560 --> 00:45:45.492 And So what I'm hoping is that  
NOTE Confidence: 0.86577681

00:45:45.492 --> 00:45:47.680 some of this work within the lab,  
NOTE Confidence: 0.86577681

00:45:47.680 --> 00:45:48.200 you know,  
NOTE Confidence: 0.86577681

00:45:48.200 --> 00:45:50.280 just because that's the way the field works,  
NOTE Confidence: 0.86577681

00:45:50.280 --> 00:45:51.575 the faster we can get to be  
NOTE Confidence: 0.86577681

00:45:51.575 --> 00:45:52.640 able to show objective.

NOTE Confidence: 0.86577681

00:45:52.640 --> 00:45:54.320 I don't want to say objective

NOTE Confidence: 0.86577681

00:45:54.320 --> 00:45:55.545 because people's report how

NOTE Confidence: 0.86577681

00:45:55.545 --> 00:45:57.120 they feel is objective too.

NOTE Confidence: 0.86577681

00:45:57.120 --> 00:45:58.080 But but you know,

NOTE Confidence: 0.86577681

00:45:58.080 --> 00:46:00.344 when we can bring that together with

NOTE Confidence: 0.86577681

00:46:00.344 --> 00:46:03.060 with findings in the lab and I think

NOTE Confidence: 0.86577681

00:46:03.060 --> 00:46:04.880 it's going to lead to faster acceptance.

NOTE Confidence: 0.86577681

00:46:04.880 --> 00:46:06.256 And so that's it,

NOTE Confidence: 0.86577681

00:46:06.256 --> 00:46:08.320 let alone progress in terms of

NOTE Confidence: 0.86577681

00:46:08.398 --> 00:46:10.480 diagnostics and therapeutics.

NOTE Confidence: 0.86577681

00:46:10.480 --> 00:46:12.718 But I'm very much interested in

NOTE Confidence: 0.86577681

00:46:12.720 --> 00:46:14.646 in just the acknowledgement of the

NOTE Confidence: 0.86577681

00:46:14.646 --> 00:46:16.288 medical profession of the reality

NOTE Confidence: 0.86577681

00:46:16.288 --> 00:46:18.076 of what people are living with.

NOTE Confidence: 0.86577681

00:46:18.080 --> 00:46:20.555 And so I think that's also an important step.

NOTE Confidence: 0.86577681

00:46:20.560 --> 00:46:21.136 So anyway,  
NOTE Confidence: 0.86577681

00:46:21.136 --> 00:46:22.000 that this is  
NOTE Confidence: 0.857049954

00:46:24.640 --> 00:46:25.960 what we're trying to do  
NOTE Confidence: 0.620350702

00:46:30.680 --> 00:46:32.816 And and Terry asked him about  
NOTE Confidence: 0.620350702

00:46:32.816 --> 00:46:34.240 credible suggestions for resources.  
NOTE Confidence: 0.620350702

00:46:34.240 --> 00:46:36.040 You know, I, I point you to react 19.  
NOTE Confidence: 0.620350702

00:46:36.040 --> 00:46:37.104 I mean, I think in some of the  
NOTE Confidence: 0.620350702

00:46:37.104 --> 00:46:37.959 people who are on the phone,  
NOTE Confidence: 0.87487728

00:46:40.480 --> 00:46:43.760 Denise, for example, I saw you were here.  
NOTE Confidence: 0.87487728

00:46:43.760 --> 00:46:45.433 You know, they've done a great job  
NOTE Confidence: 0.87487728

00:46:45.433 --> 00:46:47.160 pulling to the resource. It, it,  
NOTE Confidence: 0.87487728

00:46:47.160 --> 00:46:49.240 if it's bad for people with long COVID,  
NOTE Confidence: 0.87487728

00:46:49.240 --> 00:46:51.445 it's even worse for people with post  
NOTE Confidence: 0.87487728

00:46:51.445 --> 00:46:53.324 vaccination syndrome in the sense of,  
NOTE Confidence: 0.87487728

00:46:53.324 --> 00:46:55.748 of society not wanting to listen  
NOTE Confidence: 0.87487728

00:46:55.748 --> 00:46:58.024 or even accept it to talk about it.

NOTE Confidence: 0.87487728

00:46:58.024 --> 00:46:59.680 You know, CDC at least has a,

NOTE Confidence: 0.87487728

00:46:59.680 --> 00:47:01.480 you know, it's been talking about

NOTE Confidence: 0.87487728

00:47:01.480 --> 00:47:03.148 the National Health interview survey,

NOTE Confidence: 0.87487728

00:47:03.148 --> 00:47:05.640 at least entered some questions about it.

NOTE Confidence: 0.87487728

00:47:05.640 --> 00:47:08.776 You know, these people aren't even

NOTE Confidence: 0.87487728

00:47:08.776 --> 00:47:10.196 being acknowledged as like that.

NOTE Confidence: 0.87487728

00:47:10.200 --> 00:47:14.952 It's, it's real and there are a lot of

NOTE Confidence: 0.87487728

00:47:14.952 --> 00:47:15.840 people don't believe in long COVID,

NOTE Confidence: 0.87487728

00:47:15.840 --> 00:47:18.488 but there's people aren't even

NOTE Confidence: 0.87487728

00:47:18.488 --> 00:47:20.392 saying the saying what, you know,

NOTE Confidence: 0.87487728

00:47:20.392 --> 00:47:22.360 what these other people are facing.

NOTE Confidence: 0.87487728

00:47:22.360 --> 00:47:27.160 So it's also a tragic circumstance.

NOTE Confidence: 0.87487728

00:47:27.160 --> 00:47:28.680 And in terms of resources,

NOTE Confidence: 0.87487728

00:47:28.680 --> 00:47:29.796 I really point you to them.

NOTE Confidence: 0.87487728

00:47:29.800 --> 00:47:30.640 They're doing a great job.

NOTE Confidence: 0.87487728

00:47:30.640 --> 00:47:32.596 They've got a great survey up.  
NOTE Confidence: 0.87487728

00:47:32.600 --> 00:47:33.839 They're collecting information.  
NOTE Confidence: 0.87487728

00:47:33.839 --> 00:47:36.144 I, you know, I want to endorse,  
NOTE Confidence: 0.87487728

00:47:36.144 --> 00:47:36.676 you know,  
NOTE Confidence: 0.87487728

00:47:36.680 --> 00:47:38.997 their efforts to try to help understand  
NOTE Confidence: 0.87487728

00:47:38.997 --> 00:47:40.600 what their community is facing.  
NOTE Confidence: 0.87487728

00:47:40.600 --> 00:47:42.436 And we want to be as supportive as possible.  
NOTE Confidence: 0.9651920933333333

00:47:46.640 --> 00:47:48.080 We don't believe this is political.  
NOTE Confidence: 0.9651920933333333

00:47:48.080 --> 00:47:49.753 We believe this is about illness and  
NOTE Confidence: 0.9651920933333333

00:47:49.753 --> 00:47:51.177 what people are facing and that's  
NOTE Confidence: 0.9651920933333333

00:47:51.177 --> 00:47:53.000 we're trying to move it out of that.  
NOTE Confidence: 0.9651920933333333

00:47:53.000 --> 00:47:54.596 We're trying to move it towards science.  
NOTE Confidence: 0.9651920933333333

00:47:54.600 --> 00:47:56.640 Same thing long COVID saying like,  
NOTE Confidence: 0.9651920933333333

00:47:56.640 --> 00:47:59.069 let's just chase the science on this  
NOTE Confidence: 0.9651920933333333

00:47:59.069 --> 00:48:00.760 because they're people suffering.  
NOTE Confidence: 0.9651920933333333

00:48:00.760 --> 00:48:02.600 And so we need to chase the science.

NOTE Confidence: 0.687422361818182  
00:48:07.400 --> 00:48:08.792 Saw I saw that movie The Martian last  
NOTE Confidence: 0.687422361818182  
00:48:08.792 --> 00:48:10.301 night was on while I was working on  
NOTE Confidence: 0.687422361818182  
00:48:10.301 --> 00:48:11.640 sometimes have movies on the background.  
NOTE Confidence: 0.687422361818182  
00:48:11.640 --> 00:48:12.720 You know, it's like whatever  
NOTE Confidence: 0.687422361818182  
00:48:12.720 --> 00:48:13.800 they were saying that movie,  
NOTE Confidence: 0.687422361818182  
00:48:13.800 --> 00:48:14.840 you know, like, you know,  
NOTE Confidence: 0.687422361818182  
00:48:14.840 --> 00:48:16.597 people science the heck out of this,  
NOTE Confidence: 0.687422361818182  
00:48:16.600 --> 00:48:19.240 like let's solve the problem.  
NOTE Confidence: 0.687422361818182  
00:48:19.240 --> 00:48:21.120 You know that that's what we need. I  
NOTE Confidence: 0.9327502  
00:48:29.820 --> 00:48:32.444 appreciate all these comments  
NOTE Confidence: 0.9327502  
00:48:32.444 --> 00:48:34.180 and we I agree it can,  
NOTE Confidence: 0.9327502  
00:48:34.180 --> 00:48:35.416 I know it can feel isolating.  
NOTE Confidence: 0.9327502  
00:48:35.420 --> 00:48:36.172 That's what we're trying  
NOTE Confidence: 0.9327502  
00:48:36.172 --> 00:48:37.100 to tell people. They're not  
NOTE Confidence: 0.743983874444444  
00:48:40.180 --> 00:48:41.000 alone. We're now like there's  
NOTE Confidence: 0.743983874444444

00:48:41.000 --> 00:48:42.044 some things on here. You know,  
NOTE Confidence: 0.743983874444444

00:48:42.044 --> 00:48:44.072 what I think is we can look at a lot  
NOTE Confidence: 0.743983874444444

00:48:44.072 --> 00:48:45.741 of these comments and try to provide  
NOTE Confidence: 0.743983874444444

00:48:45.741 --> 00:48:47.343 some responses and just send them  
NOTE Confidence: 0.743983874444444

00:48:47.343 --> 00:48:48.973 out to the community because they're  
NOTE Confidence: 0.743983874444444

00:48:48.973 --> 00:48:51.259 just a lot come by and we're at time,  
NOTE Confidence: 0.743983874444444

00:48:51.260 --> 00:48:53.340 but feel free to put stuff up and,  
NOTE Confidence: 0.743983874444444

00:48:53.340 --> 00:48:55.308 and we can take a look and see  
NOTE Confidence: 0.743983874444444

00:48:55.308 --> 00:48:57.493 what we can answer and then send  
NOTE Confidence: 0.743983874444444

00:48:57.493 --> 00:48:59.113 out notes to to everyone,  
NOTE Confidence: 0.743983874444444

00:48:59.120 --> 00:49:01.520 even those who couldn't be here.  
NOTE Confidence: 0.743983874444444

00:49:01.520 --> 00:49:03.718 You know, they they can see it.  
NOTE Confidence: 0.743983874444444

00:49:03.720 --> 00:49:04.600 But but again, you know,  
NOTE Confidence: 0.743983874444444

00:49:04.600 --> 00:49:06.518 we're really grateful to all of you.  
NOTE Confidence: 0.743983874444444

00:49:06.520 --> 00:49:08.512 Some of this is exploring new  
NOTE Confidence: 0.743983874444444

00:49:08.512 --> 00:49:10.540 ways to do research, you know,

NOTE Confidence: 0.743983874444444

00:49:10.540 --> 00:49:12.990 trying to be good partners and doing

NOTE Confidence: 0.743983874444444

00:49:12.990 --> 00:49:15.255 it hand in hand and especially in

NOTE Confidence: 0.743983874444444

00:49:15.255 --> 00:49:17.992 an area that we're all kind of Co

NOTE Confidence: 0.743983874444444

00:49:17.992 --> 00:49:20.314 producing how best to learn together.

NOTE Confidence: 0.743983874444444

00:49:20.320 --> 00:49:22.720 And we're always open to your

NOTE Confidence: 0.743983874444444

00:49:22.720 --> 00:49:23.920 suggestions and comments.

NOTE Confidence: 0.891817236666667

00:49:28.960 --> 00:49:30.796 So for me, I just want

NOTE Confidence: 0.891817236666667

00:49:30.796 --> 00:49:31.714 to express appreciation.

NOTE Confidence: 0.891817236666667

00:49:31.720 --> 00:49:32.920 I think we should just,

NOTE Confidence: 0.891817236666667

00:49:32.920 --> 00:49:34.078 I keep seeing people put up.

NOTE Confidence: 0.891817236666667

00:49:34.080 --> 00:49:36.160 So I think we should go all the way for

NOTE Confidence: 0.891817236666667

00:49:36.213 --> 00:49:38.224 the next 3 minutes and let well for.

NOTE Confidence: 0.891817236666667

00:49:38.224 --> 00:49:39.160 OK, Thanks, Ellen.

NOTE Confidence: 0.891817236666667

00:49:39.160 --> 00:49:40.580 That was very nice.

NOTE Confidence: 0.891817236666667

00:49:40.580 --> 00:49:42.000 But not for compliments,

NOTE Confidence: 0.891817236666667

00:49:42.000 --> 00:49:43.960 but for any comments first.

NOTE Confidence: 0.891817236666667

00:49:43.960 --> 00:49:44.761 I appreciate compliments,

NOTE Confidence: 0.891817236666667

00:49:44.761 --> 00:49:46.363 but it's mostly like just want

NOTE Confidence: 0.891817236666667

00:49:46.363 --> 00:49:47.690 to make sure we're getting

NOTE Confidence: 0.891817236666667

00:49:47.690 --> 00:49:48.955 all questions or things you

NOTE Confidence: 0.891817236666667

00:49:48.955 --> 00:49:50.119 guys want us to address.

NOTE Confidence: 0.789273157692308

00:49:53.240 --> 00:49:55.200 And some of them I see Bornelli even

NOTE Confidence: 0.789273157692308

00:49:55.200 --> 00:49:56.360 answered questions along the way.

NOTE Confidence: 0.789273157692308

00:49:56.360 --> 00:49:57.236 Thank you. I know, I know,

NOTE Confidence: 0.789273157692308

00:49:57.240 --> 00:49:58.356 Mitzi, you have two and others.

NOTE Confidence: 0.87202669

00:50:04.010 --> 00:50:05.498 And we're looking at a ton of auto

NOTE Confidence: 0.87202669

00:50:05.498 --> 00:50:06.682 antibodies, but there still could

NOTE Confidence: 0.87202669

00:50:06.682 --> 00:50:07.922 be auto antibodies were missing.

NOTE Confidence: 0.87202669

00:50:07.930 --> 00:50:08.970 I mean, this is some of the issue,

NOTE Confidence: 0.87202669

00:50:08.970 --> 00:50:10.440 which is at least look at the

NOTE Confidence: 0.87202669

00:50:10.440 --> 00:50:11.610 things that we're looking at.

NOTE Confidence: 0.87202669

00:50:11.610 --> 00:50:13.138 There's studies of reactivation.

NOTE Confidence: 0.87202669

00:50:13.138 --> 00:50:15.430 Is this about reactivation of other

NOTE Confidence: 0.87202669

00:50:15.489 --> 00:50:17.848 viruses that some of what's being studied,

NOTE Confidence: 0.87202669

00:50:17.850 --> 00:50:19.130 some what's being studied are,

NOTE Confidence: 0.87202669

00:50:19.130 --> 00:50:22.324 are T cell receptors and, and,

NOTE Confidence: 0.87202669

00:50:22.324 --> 00:50:25.085 and some of them are around things

NOTE Confidence: 0.87202669

00:50:25.085 --> 00:50:28.200 like hormones and, and you know,

NOTE Confidence: 0.87202669

00:50:28.200 --> 00:50:29.500 whether it's cortisol or

NOTE Confidence: 0.87202669

00:50:29.500 --> 00:50:30.800 testosterone and other things,

NOTE Confidence: 0.87202669

00:50:30.800 --> 00:50:31.880 you know how they're associated.

NOTE Confidence: 0.9540926

00:50:35.680 --> 00:50:37.168 So I think we'll just, we'll just

NOTE Confidence: 0.9540926

00:50:37.168 --> 00:50:38.960 end up you guys can always find us.

NOTE Confidence: 0.9540926

00:50:38.960 --> 00:50:42.236 Let me just ask Heidi and Talia,

NOTE Confidence: 0.9540926

00:50:42.240 --> 00:50:43.120 people send us notes.

NOTE Confidence: 0.9540926

00:50:43.120 --> 00:50:44.000 It's just that listen,

NOTE Confidence: 0.9540926

00:50:44.000 --> 00:50:45.200 study at yale.edu, right.  
NOTE Confidence: 0.9540926

00:50:45.200 --> 00:50:47.240 That's how best to get to us,  
NOTE Confidence: 0.9540926

00:50:47.240 --> 00:50:48.894 correct yes Yep.  
NOTE Confidence: 0.9540926

00:50:48.894 --> 00:50:50.392 So you guys can always know how  
NOTE Confidence: 0.9540926

00:50:50.392 --> 00:50:51.957 to reach us and we're always doing  
NOTE Confidence: 0.9540926

00:50:51.957 --> 00:50:53.720 our best to get back to folks and,  
NOTE Confidence: 0.9540926

00:50:53.720 --> 00:50:54.812 and we'll try to take a look  
NOTE Confidence: 0.9540926

00:50:54.812 --> 00:50:56.120 at all the stuff and thank you,  
NOTE Confidence: 0.9540926

00:50:56.120 --> 00:50:58.706 Molly and Talia,  
NOTE Confidence: 0.9540926

00:50:58.706 --> 00:51:02.834 and we'll try to get back  
NOTE Confidence: 0.9540926

00:51:02.834 --> 00:51:04.519 about some of these questions.  
NOTE Confidence: 0.9540926

00:51:04.520 --> 00:51:05.880 So thank you all.  
NOTE Confidence: 0.9540926

00:51:05.880 --> 00:51:06.560 Much appreciated.  
NOTE Confidence: 0.9436971525

00:51:08.960 --> 00:51:11.600 Wishing you all good health in the future.  
NOTE Confidence: 0.9436971525

00:51:11.600 --> 00:51:15.156 Hoping for healthy surprises in the future.  
NOTE Confidence: 0.969518565

00:51:18.520 --> 00:51:19.000 Thank you.

NOTE Confidence: 0.748721336666667  
00:51:57.480 --> 00:51:58.992 Just to say like it's just  
NOTE Confidence: 0.748721336666667  
00:51:58.992 --> 00:52:00.000 so remarkable beyond with  
NOTE Confidence: 0.748721336666667  
00:52:00.050 --> 00:52:01.360 with people from our study.  
NOTE Confidence: 0.748721336666667  
00:52:01.360 --> 00:52:02.656 I it's just like it never  
NOTE Confidence: 0.748721336666667  
00:52:02.656 --> 00:52:03.520 gets done like that.  
NOTE Confidence: 0.748721336666667  
00:52:03.520 --> 00:52:05.152 Nobody does studies where  
NOTE Confidence: 0.748721336666667  
00:52:05.152 --> 00:52:06.340 they they pull together  
NOTE Confidence: 0.748721336666667  
00:52:06.340 --> 00:52:07.640 people and invite them on.  
NOTE Confidence: 0.748721336666667  
00:52:07.640 --> 00:52:08.399 It's just amazing.  
NOTE Confidence: 0.853811106666667  
00:52:10.600 --> 00:52:12.412 We're we're advocating for all investigators  
NOTE Confidence: 0.853811106666667  
00:52:12.412 --> 00:52:15.218 to do stuff like this now, like, you know,  
NOTE Confidence: 0.853811106666667  
00:52:15.218 --> 00:52:18.520 talk to people who are in the studies.  
NOTE Confidence: 0.829013796  
00:52:26.360 --> 00:52:27.280 All right, thank you all.  
NOTE Confidence: 0.9495487825  
00:52:35.970 --> 00:52:39.850 I am going to end the meeting. So if you have  
NOTE Confidence: 0.97022394  
00:52:39.850 --> 00:52:42.640 any other questions, please send it  
NOTE Confidence: 0.97022394

00:52:42.640 --> 00:52:45.990 over to listen study at yale.edu.

NOTE Confidence: 0.97022394

00:52:45.990 --> 00:52:48.570 Thank you so much everyone.