## WEBVTT

NOTE duration: "01:14:32.3520000"

NOTE language:en-us

NOTE Confidence: 0.840011499999999

00:00:00.000 --> 00:00:03.227 And send my regards to Mark Mark's

NOTE Confidence: 0.840011499999999

 $00{:}00{:}03.227 \dashrightarrow 00{:}00{:}07.684$  Mark and I met on the interview trail

NOTE Confidence: 0.840011499999999

 $00:00:07.684 \longrightarrow 00:00:10.654$  for residency and were resident

NOTE Confidence: 0.840011499999999

 $00{:}00{:}10.759 \dashrightarrow 00{:}00{:}14.700$  class mates here at Yale and have been

NOTE Confidence: 0.840011499999999

 $00:00:14.700 \longrightarrow 00:00:18.080$  good friends ever since that time.

NOTE Confidence: 0.840011499999999

 $00:00:18.080 \longrightarrow 00:00:20.220$  So it's really wonderful.

NOTE Confidence: 0.840011499999999

00:00:20.220 --> 00:00:23.958 Plus, as everybody on the call knows,

NOTE Confidence: 0.840011499999999

 $00:00:23.960 \longrightarrow 00:00:26.640$  his major contribution to the

NOTE Confidence: 0.840011499999999

 $00{:}00{:}26.640 \dashrightarrow 00{:}00{:}30.390$  field of psychiatry is parenting.

NOTE Confidence: 0.840011499999999

 $00:00:30.390 \longrightarrow 00:00:33.159$  Emily are wonderful.

NOTE Confidence: 0.8189158

00:00:35.740 --> 00:00:38.146 Trainee here at Yale Emily Austin,

NOTE Confidence: 0.8189158

 $00:00:38.150 \longrightarrow 00:00:40.160$  who's who's been a wonderful

NOTE Confidence: 0.8189158

 $00:00:40.160 \longrightarrow 00:00:42.572$  addition to our Department as well,

NOTE Confidence: 0.8189158

00:00:42.572 --> 00:00:46.594 but I did want to share some very good news,

 $00:00:46.594 \longrightarrow 00:00:48.198$  which is that U.S.

NOTE Confidence: 0.8189158

 $00:00:48.200 \longrightarrow 00:00:51.553$  news and World Report issued their rankings

NOTE Confidence: 0.8189158

 $00:00:51.553 \longrightarrow 00:00:55.108$  of medical school departments of psychiatry.

NOTE Confidence: 0.8189158

 $00:00:55.110 \longrightarrow 00:00:59.808$  Which in which Yale Place #1.

NOTE Confidence: 0.8189158

 $00:00:59.810 \longrightarrow 00:01:05.090$  So. You know, these polls are

NOTE Confidence: 0.8189158

 $00:01:05.090 \longrightarrow 00:01:08.760$  always of of somewhat uncertain.

NOTE Confidence: 0.8189158

00:01:08.760 --> 00:01:10.086 Meaning and value,

NOTE Confidence: 0.8189158

00:01:10.086 --> 00:01:13.188 but it's always nice to be #1

NOTE Confidence: 0.8189158

 $00:01:13.188 \longrightarrow 00:01:14.956$  and so congratulations everyone.

NOTE Confidence: 0.8189158

 $00:01:14.960 \longrightarrow 00:01:18.411$  This is obviously an achievement of a

NOTE Confidence: 0.8189158

 $00{:}01{:}18.411 \dashrightarrow 00{:}01{:}21.706$  community and and a mark of of really

NOTE Confidence: 0.8189158

 $00:01:21.706 \longrightarrow 00:01:24.712$  the incredible work that's going on here.

NOTE Confidence: 0.8189158

 $00{:}01{:}24.712 \dashrightarrow 00{:}01{:}27.370$  So congratulations to every body and Bob,

NOTE Confidence: 0.8189158

 $00:01:27.370 \longrightarrow 00:01:31.348$  I'll pass it to you to introduce Mark today.

NOTE Confidence: 0.8638281

 $00:01:31.350 \longrightarrow 00:01:33.985$  OK, so it's a pleasure

 $00:01:33.985 \longrightarrow 00:01:36.093$  to introduce Mark Olson.

NOTE Confidence: 0.8638281

 $00{:}01{:}36.100 \dashrightarrow 00{:}01{:}38.452$  Who is Elizabeth K Dollard professor

NOTE Confidence: 0.8638281

00:01:38.452 --> 00:01:40.535 of psychiatry at Columbia and

NOTE Confidence: 0.8638281

00:01:40.535 --> 00:01:42.307 among his many accomplishments,

NOTE Confidence: 0.8638281

 $00:01:42.310 \longrightarrow 00:01:46.278$  he's listed as one of the most important

NOTE Confidence: 0.8638281

 $00:01:46.278 \longrightarrow 00:01:48.428$  scientific contributors in the world

NOTE Confidence: 0.8638281

 $00:01:48.428 \longrightarrow 00:01:50.927$  by some award system an I thought

NOTE Confidence: 0.8638281

 $00:01:51.006 \longrightarrow 00:01:53.484$  I'd say a little bit about Mark.

NOTE Confidence: 0.8638281

 $00{:}01{:}53.490 \dashrightarrow 00{:}01{:}55.278$  He came from Chicago.

NOTE Confidence: 0.8638281

00:01:55.278 --> 00:01:58.740 And then traveled West to Reed College,

NOTE Confidence: 0.8638281

 $00:01:58.740 \longrightarrow 00:02:02.610$  where he missed Steve Jobs by a few years.

NOTE Confidence: 0.8638281

 $00:02:02.610 \longrightarrow 00:02:05.620$  He was a little after Steve Jobs,

NOTE Confidence: 0.8638281

00:02:05.620 --> 00:02:09.295 but he was just telling us how

NOTE Confidence: 0.8638281

 $00:02:09.295 \longrightarrow 00:02:11.961$  there was shenanigans going on

NOTE Confidence: 0.8638281

00:02:11.961 --> 00:02:15.412 near his room from the job's orbit.

NOTE Confidence: 0.8638281

 $00:02:15.420 \longrightarrow 00:02:17.130$  Steve Jobs, as you know,

00:02:17.130 --> 00:02:19.230 when East after after staying it

NOTE Confidence: 0.8638281

 $00:02:19.230 \longrightarrow 00:02:21.615$  read for six months when East to

NOTE Confidence: 0.8638281

00:02:21.615 --> 00:02:23.624 India to have his Guru experience.

NOTE Confidence: 0.8638281

00:02:23.624 --> 00:02:26.018 Mark also went E 1st to Chicago,

NOTE Confidence: 0.8638281

 $00:02:26.020 \longrightarrow 00:02:28.048$  stopping off briefly to get an

NOTE Confidence: 0.8638281

 $00:02:28.048 \longrightarrow 00:02:30.148$  MD and then finally arrived at

NOTE Confidence: 0.8638281

 $00:02:30.148 \longrightarrow 00:02:32.176$  Yale where he was a resident.

NOTE Confidence: 0.8638281

 $00:02:32.180 \longrightarrow 00:02:36.708$  One of our best residents at the time.

NOTE Confidence: 0.8638281

 $00:02:36.710 \longrightarrow 00:02:40.230$  And then he embarked on a remarkable journey

NOTE Confidence: 0.8638281

00:02:40.230 --> 00:02:43.778 where he went to Columbia to get an MPH,

NOTE Confidence: 0.8638281

 $00:02:43.780 \longrightarrow 00:02:45.860$  and then a postdoc with

NOTE Confidence: 0.8638281

 $00{:}02{:}45.860 \dashrightarrow 00{:}02{:}47.524$  David Mechanic at Rutgers.

NOTE Confidence: 0.8638281

 $00{:}02{:}47.530 \dashrightarrow 00{:}02{:}50.830$  And I would say he is now the leading mental

NOTE Confidence: 0.8638281

 $00:02:50.913 \longrightarrow 00:02:53.768$  health services researcher in America.

NOTE Confidence: 0.8638281

 $00:02:53.770 \longrightarrow 00:02:55.850$  And I would also say,

00:02:55.850 --> 00:02:56.680 I think,

NOTE Confidence: 0.8638281

 $00{:}02{:}56.680 \dashrightarrow 00{:}02{:}58.340$  with not much exaggeration,

NOTE Confidence: 0.8638281

 $00:02:58.340 \longrightarrow 00:03:01.742$  that he knows more about mental health

NOTE Confidence: 0.8638281

 $00:03:01.742 \longrightarrow 00:03:04.828$  care in America than anyone else.

NOTE Confidence: 0.8638281

00:03:04.830 --> 00:03:07.686 And I would say both substantively,

NOTE Confidence: 0.8638281

 $00:03:07.690 \longrightarrow 00:03:10.570$  he has contributed to so many

NOTE Confidence: 0.8638281

 $00{:}03{:}10.570 \dashrightarrow 00{:}03{:}12.490$  areas documenting the expansion

NOTE Confidence: 0.8638281

 $00:03:12.568 \longrightarrow 00:03:14.848$  of the use of antipsychotics.

NOTE Confidence: 0.8638281

 $00:03:14.850 \longrightarrow 00:03:17.230$  The limited use of ECT.

NOTE Confidence: 0.8638281

00:03:17.230 --> 00:03:19.660 He's followed the impact of insurance

NOTE Confidence: 0.8638281

 $00{:}03{:}19.660 \dashrightarrow 00{:}03{:}22.480$  on the use of bup renorphine.

NOTE Confidence: 0.8638281

00:03:22.480 --> 00:03:24.344 He studied suicide nationwide,

NOTE Confidence: 0.8638281

 $00:03:24.344 \longrightarrow 00:03:27.140$  showing its limited use studied the

NOTE Confidence: 0.8638281

00:03:27.213 --> 00:03:30.105 impact of discharge planning on outcomes,

NOTE Confidence: 0.8638281

 $00:03:30.110 \longrightarrow 00:03:32.290$  the Association of Psychiatric

NOTE Confidence: 0.8638281

 $00:03:32.290 \longrightarrow 00:03:35.015$  diagnosis with deaths from Covid.

 $00:03:35.020 \longrightarrow 00:03:36.892$  And those are just his papers

NOTE Confidence: 0.8638281

 $00:03:36.892 \longrightarrow 00:03:38.140$  that are in press.

NOTE Confidence: 0.8638281

 $00:03:38.140 \longrightarrow 00:03:40.226$  Let alone the other 500 that are

NOTE Confidence: 0.8638281

00:03:40.226 --> 00:03:42.079 that have already been published,

NOTE Confidence: 0.8638281

 $00:03:42.080 \longrightarrow 00:03:44.290$  and that those who read.

NOTE Confidence: 0.8638281

00:03:44.290 --> 00:03:47.098 Of what's now called JAMA Psychiatry.

NOTE Confidence: 0.8638281

 $00:03:47.100 \longrightarrow 00:03:52.446$  Get to see what he's doing every every month.

NOTE Confidence: 0.8638281

 $00:03:52.450 \longrightarrow 00:03:55.460$  I just want to use this as a teachable

NOTE Confidence: 0.8638281

 $00{:}03{:}55.460 \to 00{:}03{:}57.280$  moment to say something about.

NOTE Confidence: 0.8638281

 $00:03:57.280 \longrightarrow 00:03:59.304$  Mental health services research,

NOTE Confidence: 0.8638281

 $00:03:59.304 \longrightarrow 00:04:02.340$  which is the study of how

NOTE Confidence: 0.8638281

 $00:04:02.434 \longrightarrow 00:04:05.230$  services are actually delivered.

NOTE Confidence: 0.8638281

00:04:05.230 --> 00:04:08.070 It's a merger of psychiatry,

NOTE Confidence: 0.8638281

 $00:04:08.070 \longrightarrow 00:04:10.314$  mental health and Epidemiology.

NOTE Confidence: 0.8638281

 $00:04:10.314 \longrightarrow 00:04:13.680$  Anne relies on a 30,000 foot

 $00:04:13.774 \longrightarrow 00:04:16.859$  perspective of the whole country.

NOTE Confidence: 0.8638281

 $00{:}04{:}16.860 \dashrightarrow 00{:}04{:}20.038$  And Mark has mastered this an I

NOTE Confidence: 0.8638281

 $00:04:20.038 \longrightarrow 00:04:23.580$  think is the leader in this area.

NOTE Confidence: 0.8638281

00:04:23.580 --> 00:04:24.812 And without further ado,

NOTE Confidence: 0.8638281

 $00:04:24.812 \longrightarrow 00:04:28.128$  I pass it on to him to talk about

NOTE Confidence: 0.8638281

 $00:04:28.128 \longrightarrow 00:04:29.992$  socioeconomic adversity and depths

NOTE Confidence: 0.8638281

00:04:29.992 --> 00:04:32.482 of despair. Take it away, Mark.

NOTE Confidence: 0.8638281

00:04:32.482 --> 00:04:32.870 Well,

NOTE Confidence: 0.8638281

 $00:04:32.870 \longrightarrow 00:04:33.260$  thank

NOTE Confidence: 0.85012317

 $00:04:33.260 \longrightarrow 00:04:36.530$  you Bob for that exceedingly generous.

NOTE Confidence: 0.85012317

 $00{:}04{:}36.530 \dashrightarrow 00{:}04{:}38.230$  Introduction I mean, I'm tempted

NOTE Confidence: 0.85012317

 $00:04:38.230 \longrightarrow 00:04:40.549$  even not to talk after that one,

NOTE Confidence: 0.85012317

 $00:04:40.550 \longrightarrow 00:04:42.230$  but just like I said,

NOTE Confidence: 0.85012317

 $00:04:42.230 \longrightarrow 00:04:44.989$  but thank you so much, Bob and John.

NOTE Confidence: 0.85012317

 $00:04:44.989 \longrightarrow 00:04:47.167$  Congratulations on the number one ranking

NOTE Confidence: 0.85012317

00:04:47.167 --> 00:04:49.598 in in the US News and World Report.

00:04:49.600 --> 00:04:50.936 Psychiatry. That's that's really

NOTE Confidence: 0.85012317

00:04:50.936 --> 00:04:51.938 an impressive accomplishment,

NOTE Confidence: 0.85012317

 $00:04:51.940 \longrightarrow 00:04:53.620$  but not a surprising one.

NOTE Confidence: 0.85012317

 $00:04:53.620 \longrightarrow 00:04:55.958$  Given the many strengths of your Department.

NOTE Confidence: 0.85012317

 $00:04:55.960 \longrightarrow 00:04:58.011$  So it's, you know it's very nice

NOTE Confidence: 0.85012317

 $00:04:58.011 \longrightarrow 00:05:00.318$  to be here with everyone.

NOTE Confidence: 0.85012317

 $00:05:00.320 \longrightarrow 00:05:01.656$  And as Bob mentioned,

NOTE Confidence: 0.85012317

 $00:05:01.656 \longrightarrow 00:05:04.004$  many years ago, I was a resident.

NOTE Confidence: 0.85012317

 $00:05:04.004 \longrightarrow 00:05:06.398$  Yeah, I had the really good fortune

NOTE Confidence: 0.85012317

 $00:05:06.398 \longrightarrow 00:05:08.140$  to receive great mentoring then.

NOTE Confidence: 0.85012317

 $00:05:08.140 \longrightarrow 00:05:10.359$  And it it gave me the confidence

NOTE Confidence: 0.85012317

 $00:05:10.359 \longrightarrow 00:05:12.412$  to pursue my developing interests

NOTE Confidence: 0.85012317

 $00:05:12.412 \longrightarrow 00:05:14.476$  in in medical services,

NOTE Confidence: 0.85012317

 $00:05:14.480 \longrightarrow 00:05:17.007$  research and so now many years

NOTE Confidence: 0.85012317

 $00:05:17.007 \longrightarrow 00:05:19.230$  later is John has mentioned,

00:05:19.230 --> 00:05:21.600 you know, I my daughter Emily.

NOTE Confidence: 0.85012317

 $00{:}05{:}21.600 \dashrightarrow 00{:}05{:}23.470$  I've had the gratifying vicarious

NOTE Confidence: 0.85012317

 $00{:}05{:}23.470 \dashrightarrow 00{:}05{:}25.340$  experience through her of as

NOTE Confidence: 0.85012317

 $00:05:25.403 \longrightarrow 00:05:27.019$  she's received really wonderful

NOTE Confidence: 0.85012317

 $00:05:27.019 \longrightarrow 00:05:29.443$  mentoring from Tom Fernandez in for

NOTE Confidence: 0.85012317

00:05:29.508 --> 00:05:31.498 Michael Black from Larry Vigilon,

NOTE Confidence: 0.85012317

 $00:05:31.500 \longrightarrow 00:05:34.279$  Owen and many others within your Department.

NOTE Confidence: 0.85012317

 $00:05:34.280 \longrightarrow 00:05:37.542$  So I know that that old tradition

NOTE Confidence: 0.85012317

00:05:37.542 --> 00:05:38.940 of supportive mentoring.

NOTE Confidence: 0.85012317

 $00:05:38.940 \longrightarrow 00:05:41.308$  Is you know he's alive and well at.

NOTE Confidence: 0.85012317

00:05:41.310 --> 00:05:42.168 You know psychiatry.

NOTE Confidence: 0.85012317

00:05:42.168 --> 00:05:44.560 And actually before I get to my truck,

NOTE Confidence: 0.85012317

 $00{:}05{:}44.560 \dashrightarrow 00{:}05{:}46.520$  I wanted to dress for a moment on

NOTE Confidence: 0.85012317

 $00:05:46.520 \longrightarrow 00:05:47.976$  this theme of mentoring because

NOTE Confidence: 0.85012317

 $00:05:47.976 \longrightarrow 00:05:50.083$  I've entered a stage of my career

NOTE Confidence: 0.85012317

 $00{:}05{:}50.145 \dashrightarrow 00{:}05{:}51.790$  where measuring it really has

00:05:51.790 --> 00:05:53.435 become quite important to me.

NOTE Confidence: 0.81499577

 $00:05:55.570 \longrightarrow 00:05:58.234$  Those of you may have learned in about the

NOTE Confidence: 0.81499577

 $00:05:58.234 \longrightarrow 00:06:00.550$  ancient Greeks in high school or college.

NOTE Confidence: 0.81499577

 $00:06:00.550 \longrightarrow 00:06:02.105$  You may remember the word

NOTE Confidence: 0.81499577

00:06:02.105 --> 00:06:03.349 mentor descends to us.

NOTE Confidence: 0.81499577

00:06:03.350 --> 00:06:05.210 Actually from the Odyssey when Odysseus,

NOTE Confidence: 0.81499577

00:06:05.210 --> 00:06:07.254 the King of Ithaca, was preparing to

NOTE Confidence: 0.81499577

00:06:07.254 --> 00:06:09.568 set sail and joining the Trojan War,

NOTE Confidence: 0.81499577

00:06:09.570 --> 00:06:11.738 and he knew it would take him away

NOTE Confidence: 0.81499577

 $00:06:11.738 \longrightarrow 00:06:13.920$  from his family for several years.

NOTE Confidence: 0.81499577

 $00:06:13.920 \longrightarrow 00:06:16.488$  He turned to his old friend mentor and

NOTE Confidence: 0.81499577

 $00:06:16.488 \longrightarrow 00:06:19.210$  you trust him to care for his young son.

NOTE Confidence: 0.81499577

 $00{:}06{:}19.210 \dashrightarrow 00{:}06{:}20.690$  Telemachus. Now in the Odyssey

NOTE Confidence: 0.81499577

 $00:06:20.690 \longrightarrow 00:06:22.630$  there's a Greek word called napeo's,

NOTE Confidence: 0.81499577

 $00:06:22.630 \longrightarrow 00:06:23.584$  which means disconnected,

 $00:06:23.584 \longrightarrow 00:06:25.174$  that is used to describe.

NOTE Confidence: 0.81499577

 $00{:}06{:}25.180 \dashrightarrow 00{:}06{:}27.244$  Telemachus, and it turns out it

NOTE Confidence: 0.81499577

 $00:06:27.244 \longrightarrow 00:06:29.095$  turns out that Telemachus was

NOTE Confidence: 0.81499577

00:06:29.095 --> 00:06:31.155 disconnected from his ancestral past,

NOTE Confidence: 0.81499577

 $00:06:31.160 \longrightarrow 00:06:33.582$  so when in his father's absence the

NOTE Confidence: 0.81499577

 $00:06:33.582 \longrightarrow 00:06:36.028$  suitors started to pillage their estate,

NOTE Confidence: 0.81499577

00:06:36.030 --> 00:06:38.295 and so his mother, Queen, Penelope's,

NOTE Confidence: 0.81499577

 $00:06:38.295 \longrightarrow 00:06:40.665$  hand in marriage to him because

NOTE Confidence: 0.81499577

 $00{:}06{:}40.665 --> 00{:}06{:}42.379$ he didn't really get it.

NOTE Confidence: 0.81499577

 $00:06:42.380 \longrightarrow 00:06:44.624$  He didn't really appreciate the gravity

NOTE Confidence: 0.81499577

00:06:44.624 --> 00:06:46.498 of this threat, but Fortunately,

NOTE Confidence: 0.81499577

00:06:46.498 --> 00:06:48.368 mentor, actually it's it's Athena,

NOTE Confidence: 0.81499577

 $00:06:48.370 \longrightarrow 00:06:50.240$  in the guise of mentor.

NOTE Confidence: 0.81499577

00:06:50.240 --> 00:06:52.478 Appears to Telemachus Anna part imparts

NOTE Confidence: 0.81499577

 $00:06:52.478 \longrightarrow 00:06:55.550$  to him that great Greek virtue of menace.

NOTE Confidence: 0.81499577

 $00:06:55.550 \longrightarrow 00:06:55.831$  Meanness,

 $00:06:55.831 \longrightarrow 00:06:57.517$  which means putting wisdom into action.

NOTE Confidence: 0.81499577

 $00:06:57.520 \longrightarrow 00:06:58.624$  Now I'm not gonna,

NOTE Confidence: 0.81499577

00:06:58.624 --> 00:07:01.188 I'm not gonna ruin the rest of this story.

NOTE Confidence: 0.81499577

00:07:01.190 --> 00:07:03.382 For those of you who haven't read the

NOTE Confidence: 0.81499577

 $00:07:03.382 \longrightarrow 00:07:05.697$  Odyssey or haven't read it in many years.

NOTE Confidence: 0.81499577

00:07:05.700 --> 00:07:07.674 But my point is the great mentoring,

NOTE Confidence: 0.81499577 00:07:07.680 --> 00:07:07.984 then,

NOTE Confidence: 0.81499577

00:07:07.984 --> 00:07:09.504 is now involves giving people

NOTE Confidence: 0.81499577

 $00:07:09.504 \longrightarrow 00:07:11.125$  the wisdom to become effectively

NOTE Confidence: 0.81499577

 $00:07:11.125 \longrightarrow 00:07:13.219$  engaged in the world around them.

NOTE Confidence: 0.81499577

 $00:07:13.220 \longrightarrow 00:07:15.416$  And so after all these years,

NOTE Confidence: 0.81499577

 $00:07:15.420 \longrightarrow 00:07:17.610$  and it's been quite a few,

NOTE Confidence: 0.81499577

 $00{:}07{:}17.610 \dashrightarrow 00{:}07{:}19.860$  I'm still grateful for the mentoring

NOTE Confidence: 0.81499577

 $00{:}07{:}19.860 \dashrightarrow 00{:}07{:}22.475$  that I received as a resident yell

NOTE Confidence: 0.81499577

 $00:07:22.475 \longrightarrow 00:07:24.563$  from Bob and from many others.

 $00:07:24.570 \longrightarrow 00:07:27.125$  So please, except for me a very,

NOTE Confidence: 0.81499577

00:07:27.130 --> 00:07:29.685 very belated thank you Now this morning,

NOTE Confidence: 0.81499577

 $00:07:29.690 \longrightarrow 00:07:32.618$  as you see from my title slide here,

NOTE Confidence: 0.81499577

 $00:07:32.620 \longrightarrow 00:07:35.416$  I'm going to be discussing connections

NOTE Confidence: 0.81499577

 $00:07:35.416 \longrightarrow 00:07:36.814$  between socioeconomic adversity.

NOTE Confidence: 0.81499577

 $00:07:36.820 \longrightarrow 00:07:39.228$  On the one hand, in deaths of despair,

NOTE Confidence: 0.81499577

 $00:07:39.230 \longrightarrow 00:07:40.730$  by which I mean suicide,

NOTE Confidence: 0.81499577

00:07:40.730 --> 00:07:42.536 drug overdose in chronic liver disease,

NOTE Confidence: 0.81499577

 $00:07:42.540 \longrightarrow 00:07:43.359$  on the other,

NOTE Confidence: 0.81499577

 $00:07:43.359 \longrightarrow 00:07:44.724$  because of my interest in

NOTE Confidence: 0.81499577

00:07:44.724 --> 00:07:46.149 Epidemiology and medical services,

NOTE Confidence: 0.81499577

00:07:46.150 --> 00:07:48.257 I'm going to be showing you many,

NOTE Confidence: 0.81499577

00:07:48.260 --> 00:07:50.060 many numbers this morning, but no,

NOTE Confidence: 0.81499577

 $00{:}07{:}50.060 \dashrightarrow 00{:}07{:}53.938$  but I want you to know this.

NOTE Confidence: 0.81499577

 $00:07:53.940 \longrightarrow 00:07:56.164$  These numbers can tell us what it feels

NOTE Confidence: 0.81499577

 $00:07:56.164 \longrightarrow 00:07:58.438$  like to be poor or to be unemployed.

 $00:07:58.440 \longrightarrow 00:08:00.260$  They can't tell us what it feels

NOTE Confidence: 0.81499577

 $00:08:00.260 \longrightarrow 00:08:02.368$  like to be in a suicidal crisis,

NOTE Confidence: 0.81499577

 $00:08:02.370 \longrightarrow 00:08:05.628$  or to lose a loved one to drug overdose.

NOTE Confidence: 0.81499577

00:08:05.630 --> 00:08:06.886 At at past I,

NOTE Confidence: 0.81499577

 $00:08:06.886 \longrightarrow 00:08:08.770$  I hope that my presentation and

NOTE Confidence: 0.81499577

 $00{:}08{:}08.844 \dashrightarrow 00{:}08{:}11.916$  will give you a sense and may be a

NOTE Confidence: 0.81499577

00:08:11.916 --> 00:08:13.867 quantitative sentence only of how

NOTE Confidence: 0.81499577

 $00{:}08{:}13.867 \dashrightarrow 00{:}08{:}16.087$  important it is to consider the

NOTE Confidence: 0.81499577

 $00:08:16.087 \longrightarrow 00:08:17.554$  difficult socioeconomic circumstances.

NOTE Confidence: 0.81499577

 $00:08:17.554 \longrightarrow 00:08:20.836$  Under which many of our patients

NOTE Confidence: 0.81499577

 $00:08:20.836 \longrightarrow 00:08:25.608$  live out their lives. So here is.

NOTE Confidence: 0.81499577

 $00:08:25.610 \longrightarrow 00:08:29.040$  Here's a list of my potential conflicts.

NOTE Confidence: 0.81499577

 $00{:}08{:}29.040 \dashrightarrow 00{:}08{:}31.692$  These are organizations, Play stations,

NOTE Confidence: 0.81499577

00:08:31.692 --> 00:08:35.007 from which I've received income

NOTE Confidence: 0.81499577

 $00:08:35.007 \longrightarrow 00:08:37.800$  over the past few years now.

 $00:08:37.800 \longrightarrow 00:08:40.038$  I will consider for related themes

NOTE Confidence: 0.81499577

 $00:08:40.038 \longrightarrow 00:08:42.808$  that you see on this slide here.

NOTE Confidence: 0.81499577

00:08:42.810 --> 00:08:43.193 First,

NOTE Confidence: 0.81499577

 $00:08:43.193 \longrightarrow 00:08:45.108$  I'll briefly provide some historical

NOTE Confidence: 0.81499577

00:08:45.108 --> 00:08:47.040 context for the general topic.

NOTE Confidence: 0.81499577

 $00:08:47.040 \longrightarrow 00:08:49.356$  Then I'll review some recent analysis

NOTE Confidence: 0.81499577

 $00:08:49.356 \longrightarrow 00:08:51.339$  of associations between markers of

NOTE Confidence: 0.81499577

 $00{:}08{:}51.339 \dashrightarrow 00{:}08{:}52.859$  socioeconomic adversity and risks

NOTE Confidence: 0.81499577

 $00{:}08{:}52.859 \dashrightarrow 00{:}08{:}54.759$  of death from suicide poisoning

NOTE Confidence: 0.81499577

 $00{:}08{:}54.822 \dashrightarrow 00{:}08{:}56.667$  and chronic liver disease course.

NOTE Confidence: 0.8421623

 $00{:}08{:}56.670 \dashrightarrow 00{:}08{:}58.860$  Most of those chronic liver disease

NOTE Confidence: 0.8421623

 $00:08:58.860 \longrightarrow 00:09:00.900$  deaths involved alcohol use disorder,

NOTE Confidence: 0.8421623

 $00:09:00.900 \longrightarrow 00:09:02.760$  and then I'm going to consider

NOTE Confidence: 0.8421623

 $00:09:02.760 \longrightarrow 00:09:04.566$  the extent to which overdoses

NOTE Confidence: 0.8421623

 $00:09:04.566 \longrightarrow 00:09:06.578$  overdose deaths involving opioids

NOTE Confidence: 0.8421623

 $00{:}09{:}06.578 \dashrightarrow 00{:}09{:}08.590$  are actually suicidal intent.

00:09:08.590 --> 00:09:11.012 And finally, I'm going to close with

NOTE Confidence: 0.8421623

 $00:09:11.012 \longrightarrow 00:09:13.538$  a few words about some work that

NOTE Confidence: 0.8421623

 $00{:}09{:}13.538 \to 00{:}09{:}16.123$  I'm hoping to carry out over the

NOTE Confidence: 0.8421623

00:09:16.123 --> 00:09:18.457 next several years now in awareness

NOTE Confidence: 0.8421623

 $00:09:18.457 \longrightarrow 00:09:20.734$  that health is intimately linked to

NOTE Confidence: 0.8421623

 $00:09:20.734 \longrightarrow 00:09:22.206$  social and economic circumstances.

NOTE Confidence: 0.8421623

 $00:09:22.210 \longrightarrow 00:09:24.238$  It wasn't introduced by Anne Case

NOTE Confidence: 0.8421623

00:09:24.238 --> 00:09:26.450 and Angus Deaton and their well

NOTE Confidence: 0.8421623

 $00:09:26.450 \longrightarrow 00:09:28.425$  known article in the Proceedings

NOTE Confidence: 0.8421623

 $00{:}09{:}28.425 {\: -->\:} 00{:}09{:}30.389$  of National Academy of Sciences

NOTE Confidence: 0.8421623

00:09:30.389 --> 00:09:32.531 Back in 2015 on rising mortality

NOTE Confidence: 0.8421623

 $00:09:32.531 \longrightarrow 00:09:34.399$  among middle aged white Americans.

NOTE Confidence: 0.8421623

 $00{:}09{:}34.399 \dashrightarrow 00{:}09{:}37.080$  Many of the concepts undergirding when I

NOTE Confidence: 0.8421623

 $00:09:37.146 \longrightarrow 00:09:39.618$  call their deaths of despair hypothesis.

NOTE Confidence: 0.8421623

 $00:09:39.620 \longrightarrow 00:09:42.092$  Have deep historical roots and sociological

 $00:09:42.092 \longrightarrow 00:09:44.108$  sociological research and have even

NOTE Confidence: 0.8421623

 $00{:}09{:}44.108 \dashrightarrow 00{:}09{:}45.944$  found their way into popular culture

NOTE Confidence: 0.8421623

 $00:09:45.944 \longrightarrow 00:09:48.038$  over the past couple of centuries.

NOTE Confidence: 0.8421623

00:09:48.040 --> 00:09:51.656 In Europe and here in the United States.

NOTE Confidence: 0.8421623

 $00:09:51.660 \longrightarrow 00:09:53.920$  So let's begin with the

NOTE Confidence: 0.8421623

 $00:09:53.920 \longrightarrow 00:09:56.180$  consideration of this man here,

NOTE Confidence: 0.8421623

 $00:09:56.180 \longrightarrow 00:09:56.970$  Rudolf workout.

NOTE Confidence: 0.8421623

 $00:09:56.970 \longrightarrow 00:10:00.130$  Now he was he was a German physician.

NOTE Confidence: 0.8421623

 $00{:}10{:}00.130 \longrightarrow 00{:}10{:}02.714$  And there's a part he was a pathologist,

NOTE Confidence: 0.8421623

 $00:10:02.720 \longrightarrow 00:10:04.340$  a politician, a public health

NOTE Confidence: 0.8421623

 $00{:}10{:}04.340 \mathrel{--}{>} 00{:}10{:}05.960$  reformer and a social activist,

NOTE Confidence: 0.8421623

 $00:10:05.960 \longrightarrow 00:10:07.488$  and he had very.

NOTE Confidence: 0.8421623

 $00:10:07.488 \longrightarrow 00:10:10.520$  He's also an outspoken advocate for the poor.

NOTE Confidence: 0.8421623

 $00:10:10.520 \longrightarrow 00:10:12.055$  His writings are filled with

NOTE Confidence: 0.8421623

 $00:10:12.055 \longrightarrow 00:10:13.590$  recommendations on how to improve

NOTE Confidence: 0.8421623

 $00{:}10{:}13.646 \to 00{:}10{:}15.601$  people's health by improving their

 $00:10:15.601 \longrightarrow 00:10:17.165$  economic and material circumstances.

NOTE Confidence: 0.8421623

 $00{:}10{:}17.170 \dashrightarrow 00{:}10{:}18.885$  He advocated things like rationalizing

NOTE Confidence: 0.8421623

 $00:10:18.885 \longrightarrow 00:10:20.257$  the food distribution and

NOTE Confidence: 0.8421623

 $00:10:20.257 \longrightarrow 00:10:21.720$  reforming the educational system.

NOTE Confidence: 0.8421623

 $00:10:21.720 \longrightarrow 00:10:24.060$  He wrote about expanding the political

NOTE Confidence: 0.8421623

 $00:10:24.060 \longrightarrow 00:10:25.620$  enfranchisement and reducing military

NOTE Confidence: 0.8421623

00:10:25.679 --> 00:10:27.075 expenditures which irritated the

NOTE Confidence: 0.8421623

 $00{:}10{:}27.075 \dashrightarrow 00{:}10{:}28.820$  heck out of Chancellor Bismarck

NOTE Confidence: 0.8421623

 $00:10:28.820 \longrightarrow 00:10:30.816$  and actually lead almost to a dual.

NOTE Confidence: 0.8421623

 $00:10:30.820 \longrightarrow 00:10:32.530$  There's a funny story about

NOTE Confidence: 0.8421623

 $00:10:32.530 \longrightarrow 00:10:34.670$  that that if we have time,

NOTE Confidence: 0.8421623

 $00:10:34.670 \longrightarrow 00:10:35.672$  I'll tell you,

NOTE Confidence: 0.8421623

 $00{:}10{:}35.672 \dashrightarrow 00{:}10{:}38.010$  and also a variety of other changes

NOTE Confidence: 0.8421623

00:10:38.082 --> 00:10:39.219 in social policy,

NOTE Confidence: 0.8421623

 $00:10:39.220 \longrightarrow 00:10:42.510$  all in the name of improving health.

00:10:42.510 --> 00:10:45.210 And behind Virchows thinking was this

NOTE Confidence: 0.8421623

 $00:10:45.210 \longrightarrow 00:10:47.820$  concept that adverse economic conditions.

NOTE Confidence: 0.8421623

 $00{:}10{:}47.820 \dashrightarrow 00{:}10{:}49.878$  Are the first or fundamental cause

NOTE Confidence: 0.8421623

00:10:49.878 --> 00:10:52.113 of many of the medical diseases

NOTE Confidence: 0.8421623

00:10:52.113 --> 00:10:54.477 that he saw in his practice,

NOTE Confidence: 0.8421623

 $00:10:54.480 \longrightarrow 00:10:56.904$  and therefore the practice of medicine

NOTE Confidence: 0.8421623

 $00:10:56.904 \longrightarrow 00:10:59.386$  involves seeking to improve the social

NOTE Confidence: 0.8421623

 $00:10:59.386 \longrightarrow 00:11:01.774$  and economic realities of patients lives.

NOTE Confidence: 0.8421623

00:11:01.780 --> 00:11:02.472 So here,

NOTE Confidence: 0.8421623

 $00:11:02.472 \longrightarrow 00:11:03.856$  here are some quotes,

NOTE Confidence: 0.8421623

00:11:03.860 --> 00:11:06.028 a couple of quotes that give you a

NOTE Confidence: 0.8421623

00:11:06.028 --> 00:11:08.350 sense of his visionary aspiration's.

NOTE Confidence: 0.8421623

00:11:08.350 --> 00:11:10.426 He said once he met Medicine,

NOTE Confidence: 0.8421623

 $00:11:10.430 \longrightarrow 00:11:12.265$  established this anthropology and once

NOTE Confidence: 0.8421623

 $00:11:12.265 \longrightarrow 00:11:14.781$  the interests of the privilege no longer

NOTE Confidence: 0.8421623

 $00:11:14.781 \longrightarrow 00:11:16.653$  determine the course of basic events,

 $00:11:16.660 \longrightarrow 00:11:18.310$  then the physiologist and practitioner

NOTE Confidence: 0.8421623

 $00{:}11{:}18.310 \dashrightarrow 00{:}11{:}20.735$  will be counted among the elder states man

NOTE Confidence: 0.8421623

 $00:11:20.735 \longrightarrow 00:11:22.540$  who support the social structure.

NOTE Confidence: 0.8421623

 $00:11:22.540 \longrightarrow 00:11:24.175$  Medicine is a social science

NOTE Confidence: 0.8421623

00:11:24.175 --> 00:11:26.350 in its very bone and marrow,

NOTE Confidence: 0.8421623

 $00:11:26.350 \longrightarrow 00:11:28.598$  and he goes on in this same essay

NOTE Confidence: 0.8421623

 $00:11:28.598 \longrightarrow 00:11:30.965$  with the famous lines that are

NOTE Confidence: 0.8421623

 $00:11:30.965 \longrightarrow 00:11:33.125$  often repeated associated with them.

NOTE Confidence: 0.8421623

 $00:11:33.130 \longrightarrow 00:11:35.325$  Positions are the natural attorneys

NOTE Confidence: 0.8421623

 $00:11:35.325 \longrightarrow 00:11:38.113$  of the poor and social problems

NOTE Confidence: 0.8421623

 $00:11:38.113 \longrightarrow 00:11:40.698$  largely fall within their scope.

NOTE Confidence: 0.78195876

 $00:11:43.380 \longrightarrow 00:11:45.772$  But my point, my broader point is it

NOTE Confidence: 0.78195876

 $00:11:45.772 \longrightarrow 00:11:47.870$  wasn't just medical scientist rate.

NOTE Confidence: 0.78195876

 $00{:}11{:}47.870 \dashrightarrow 00{:}11{:}49.652$  Medical scientists like Virgo but also

NOTE Confidence: 0.78195876

00:11:49.652 --> 00:11:52.241 men and women in the arts and letters

 $00:11:52.241 \longrightarrow 00:11:53.916$  who long drawn connections between

NOTE Confidence: 0.78195876

 $00:11:53.916 \longrightarrow 00:11:56.150$  social economic circumstances and health,

NOTE Confidence: 0.78195876

00:11:56.150 --> 00:11:57.830 particularly between things like poverty

NOTE Confidence: 0.78195876

 $00:11:57.830 \longrightarrow 00:11:59.913$  and alcoholism as well as financial

NOTE Confidence: 0.78195876

 $00:11:59.913 \longrightarrow 00:12:02.007$  crises or romantic losses and suicide.

NOTE Confidence: 0.78195876

 $00:12:02.010 \longrightarrow 00:12:05.115$  One can think of like the sorrows of Werther.

NOTE Confidence: 0.78195876

 $00{:}12{:}05.120 {\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}}{\:{\circlframe}$ 

NOTE Confidence: 0.78195876

00:12:06.962 --> 00:12:09.259 from 2 great 19th century novelists,

NOTE Confidence: 0.78195876

 $00{:}12{:}09.260 \dashrightarrow 00{:}12{:}11.540$ a young Charles Dickens writes of

NOTE Confidence: 0.78195876

 $00:12:11.540 \longrightarrow 00:12:13.828$  the allure of alcohol is a bomb.

NOTE Confidence: 0.78195876

 $00{:}12{:}13.830 \dashrightarrow 00{:}12{:}16.014$  The misery of poverty rates pieces

NOTE Confidence: 0.78195876

00:12:16.014 --> 00:12:18.100 maybe actually from his sketches,

NOTE Confidence: 0.78195876

 $00:12:18.100 \longrightarrow 00:12:20.865$  opposes the first thing he published his

NOTE Confidence: 0.78195876

 $00{:}12{:}20.865 {\:\raisebox{---}{\text{---}}}> 00{:}12{:}23.846$  young man until you improve the homes of

NOTE Confidence: 0.78195876

 $00:12:23.846 \longrightarrow 00:12:26.466$  the poor or persuade 1/2 Amish stretch

NOTE Confidence: 0.78195876

 $00:12:26.466 \longrightarrow 00:12:29.329$  not to seek relief in the temporary

00:12:29.329 --> 00:12:31.680 oblivion oblivion of his own misery.

NOTE Confidence: 0.78195876

 $00{:}12{:}31.680 \dashrightarrow 00{:}12{:}34.002$  Gin shops will increase in number

NOTE Confidence: 0.78195876

 $00:12:34.002 \longrightarrow 00:12:36.332$  and splendor, and then it below.

NOTE Confidence: 0.78195876

 $00:12:36.332 \longrightarrow 00:12:38.660$  There used to quote from emails.

NOTE Confidence: 0.78195876

 $00{:}12{:}38.660 \dashrightarrow 00{:}12{:}40.600$  So let's masterpiece lesson water.

NOTE Confidence: 0.78195876

00:12:40.600 --> 00:12:41.420 And yeah,

NOTE Confidence: 0.78195876

 $00:12:41.420 \longrightarrow 00:12:44.700$  in which he portrays the fate of survey.

NOTE Confidence: 0.78195876

 $00{:}12{:}44.700 \dashrightarrow 00{:}12{:}46.686$  Alondras from working class Paris who

NOTE Confidence: 0.78195876

 $00{:}12{:}46.686 \dashrightarrow 00{:}12{:}49.200$  struggles to work her way up into the

NOTE Confidence: 0.78195876

 $00{:}12{:}49.200 \dashrightarrow 00{:}12{:}50.886$  middle class and eventually to own

NOTE Confidence: 0.78195876

00:12:50.945 --> 00:12:52.967 and operate their own small laundry,

NOTE Confidence: 0.78195876

 $00:12:52.970 \longrightarrow 00:12:54.560$  only to suffer financial crisis

NOTE Confidence: 0.78195876

 $00{:}12{:}54.560 \dashrightarrow 00{:}12{:}56.150$  when her husband is injured.

NOTE Confidence: 0.78195876

00:12:56.150 --> 00:12:58.341 Work and then both of them descend

NOTE Confidence: 0.78195876

00:12:58.341 --> 00:12:59.978 into poverty and alcoholism and

 $00:12:59.978 \longrightarrow 00:13:01.868$  near the end of the novel,

NOTE Confidence: 0.78195876

 $00{:}13{:}01.870 \dashrightarrow 00{:}13{:}03.505$  the narrator opines they never

NOTE Confidence: 0.78195876

00:13:03.505 --> 00:13:05.370 knew exactly what she died of.

NOTE Confidence: 0.78195876

00:13:05.370 --> 00:13:07.278 Some people spoke of a chill,

NOTE Confidence: 0.78195876

 $00:13:07.280 \longrightarrow 00:13:09.544$  but the truth is was that she died

NOTE Confidence: 0.78195876

 $00:13:09.544 \longrightarrow 00:13:11.570$  of poverty from the filth and

NOTE Confidence: 0.78195876

00:13:11.570 --> 00:13:13.315 wretchedness of her weary life.

NOTE Confidence: 0.78195876

 $00:13:13.320 \longrightarrow 00:13:14.588$  She rotted to death.

NOTE Confidence: 0.8286231

 $00{:}13{:}16.830 \dashrightarrow 00{:}13{:}18.925$  So these quotes from best selling

NOTE Confidence: 0.8286231

 $00:13:18.925 \longrightarrow 00:13:20.601$  novelists suggests that connections

NOTE Confidence: 0.8286231

 $00:13:20.601 \longrightarrow 00:13:22.530$  between poverty and alcoholism were

NOTE Confidence: 0.8286231

 $00:13:22.530 \longrightarrow 00:13:24.340$  part of the public's awareness.

NOTE Confidence: 0.8286231

00:13:24.340 --> 00:13:27.104 In the 19th century that case, indeed,

NOTE Confidence: 0.8286231

 $00:13:27.104 \longrightarrow 00:13:30.256$  it is all described momentarily in our day.

NOTE Confidence: 0.8286231

00:13:30.260 --> 00:13:33.025 They don't exactly argue that poverty per,

NOTE Confidence: 0.8286231

00:13:33.030 --> 00:13:34.610 say, drives alcoholism, alcoholism,

 $00:13:34.610 \longrightarrow 00:13:36.980$  and the other deaths of despair,

NOTE Confidence: 0.8286231

 $00{:}13{:}36.980 \dashrightarrow 00{:}13{:}39.528$  but rather that these threats to health

NOTE Confidence: 0.8286231

 $00:13:39.528 \longrightarrow 00:13:42.388$  are connected with its wording of an

NOTE Confidence: 0.8286231

00:13:42.388 --> 00:13:44.084 individual's needs and expectations,

NOTE Confidence: 0.8286231

 $00:13:44.090 \longrightarrow 00:13:46.150$  and that's an idea that.

NOTE Confidence: 0.8286231

 $00:13:46.150 \longrightarrow 00:13:48.274$  Was foreshadowed in the academic suicide

NOTE Confidence: 0.8286231

00:13:48.274 --> 00:13:50.798 literature and the work of Emile Durckheim,

NOTE Confidence: 0.8286231

 $00:13:50.800 \longrightarrow 00:13:52.948$  who was one of the founders

NOTE Confidence: 0.8286231

 $00:13:52.948 \longrightarrow 00:13:54.022$  of modern sociology.

NOTE Confidence: 0.8286231

 $00:13:54.030 \longrightarrow 00:13:56.070$  Durkheim wrote about the imbalance between

NOTE Confidence: 0.8286231

 $00:13:56.070 \longrightarrow 00:13:57.960$  personal needs and available resources.

NOTE Confidence: 0.8286231

00:13:57.960 --> 00:14:00.188 Here's a here's a quote, actually,

NOTE Confidence: 0.8286231

 $00{:}14{:}00.188 \dashrightarrow 00{:}14{:}04.130$  a couple of quotes from his chapter on a nomic

NOTE Confidence: 0.8286231

 $00{:}14{:}04.218 \dashrightarrow 00{:}14{:}07.487$  suicides from his famous book on Suicide.

NOTE Confidence: 0.8286231

 $00:14:07.490 \longrightarrow 00:14:08.594$  Uh, the late 1800s.

 $00:14:08.594 \longrightarrow 00:14:11.217$  He said he wrote that no living being can

NOTE Confidence: 0.8286231

 $00{:}14{:}11.217 \dashrightarrow 00{:}14{:}14.189$  be happy or even exist and less his needs

NOTE Confidence: 0.8286231

 $00:14:14.189 \longrightarrow 00:14:16.589$  are sufficiently proportion to his means.

NOTE Confidence: 0.8286231

 $00:14:16.590 \longrightarrow 00:14:17.782$  And in other words,

NOTE Confidence: 0.8286231

 $00:14:17.782 \longrightarrow 00:14:20.666$  if his needs require more than can be granted

NOTE Confidence: 0.8286231

00:14:20.666 --> 00:14:23.081 or even merely something of different sort,

NOTE Confidence: 0.8286231

 $00:14:23.090 \longrightarrow 00:14:24.715$  they'll be under continual friction

NOTE Confidence: 0.8286231

00:14:24.715 --> 00:14:26.340 and can only function painfully.

NOTE Confidence: 0.8286231

 $00:14:26.340 \longrightarrow 00:14:27.970$  And then he goes on.

NOTE Confidence: 0.8286231

00:14:27.970 --> 00:14:29.788 And here he's rebutting the idea

NOTE Confidence: 0.8286231

 $00{:}14{:}29.788 \dashrightarrow 00{:}14{:}31.408$  that we can understand suicide

NOTE Confidence: 0.8286231

 $00:14:31.408 \longrightarrow 00:14:33.490$  simply by looking at poverty levels.

NOTE Confidence: 0.8286231

 $00:14:33.490 \longrightarrow 00:14:34.790$  He says, what proof?

NOTE Confidence: 0.8286231

00:14:34.790 --> 00:14:35.765 Still more conclusively,

NOTE Confidence: 0.8286231

 $00:14:35.770 \longrightarrow 00:14:38.092$  economic distress does not have the

NOTE Confidence: 0.8286231

 $00:14:38.092 \longrightarrow 00:14:40.013$  aggravating influence often attributed to

00:14:40.013 --> 00:14:41.897 it's not saying just economic distress.

NOTE Confidence: 0.8286231

 $00{:}14{:}41.900 \dashrightarrow 00{:}14{:}44.105$  Is that very little suicide in Ireland?

NOTE Confidence: 0.8286231

00:14:44.110 --> 00:14:45.875 There's very little suicide in

NOTE Confidence: 0.8286231

00:14:45.875 --> 00:14:47.640 Ireland with the peasantry police

NOTE Confidence: 0.8286231

 $00:14:47.702 \longrightarrow 00:14:49.558$  arrest a life and it goes on to

NOTE Confidence: 0.8286231

00:14:49.558 --> 00:14:51.348 talk about collaborating in Spain,

NOTE Confidence: 0.8286231

 $00:14:51.350 \longrightarrow 00:14:53.555$  France and a variety of other places.

NOTE Confidence: 0.8286231

 $00:14:53.560 \longrightarrow 00:14:54.656$  So here's a nice.

NOTE Confidence: 0.8286231

 $00:14:54.656 \longrightarrow 00:14:56.702$  Also a nice illustration by the way

NOTE Confidence: 0.8286231

 $00{:}14{:}56.702 \dashrightarrow 00{:}14{:}58.086$  of using statistical epidemiologic

NOTE Confidence: 0.8286231

 $00{:}14{:}58.086 \dashrightarrow 00{:}15{:}00.818$  data very early to make the case that

NOTE Confidence: 0.8286231

 $00:15:00.818 \longrightarrow 00:15:02.696$  suicide rates can't be explained simply

NOTE Confidence: 0.8286231

 $00{:}15{:}02.696 \dashrightarrow 00{:}15{:}06.280$  by appealing to rates of poverty.

NOTE Confidence: 0.8286231 00:15:06.280 --> 00:15:08.110 So.

NOTE Confidence: 0.8286231

 $00{:}15{:}08.110 \dashrightarrow 00{:}15{:}10.120$  So Durckheim is arguing for focus

00:15:10.120 --> 00:15:11.822 on desires and expectations and

NOTE Confidence: 0.8286231

 $00:15:11.822 \longrightarrow 00:15:13.634$  the risks that occur when they're

NOTE Confidence: 0.8286231

 $00:15:13.634 \longrightarrow 00:15:15.040$  frustrated out of balance.

NOTE Confidence: 0.8286231

00:15:15.040 --> 00:15:16.172 And as I mentioned,

NOTE Confidence: 0.8286231

 $00:15:16.172 \longrightarrow 00:15:19.420$  we kind of hear an echo of this idea in

NOTE Confidence: 0.8286231

00:15:19.420 --> 00:15:21.634 case and Edens Dessa despair hypothesis,

NOTE Confidence: 0.8286231

 $00:15:21.640 \longrightarrow 00:15:23.565$  people despair when their material

NOTE Confidence: 0.8286231

 $00:15:23.565 \longrightarrow 00:15:25.105$  and social social circumstances

NOTE Confidence: 0.8286231

00:15:25.105 --> 00:15:26.928 are below what they expected.

NOTE Confidence: 0.8286231

00:15:26.930 --> 00:15:28.904 This despair leads people to act in

NOTE Confidence: 0.8286231

00:15:28.904 --> 00:15:30.789 ways that simply harm their health,

NOTE Confidence: 0.8286231

 $00:15:30.790 \longrightarrow 00:15:32.894$  and this may have a direct impact on

NOTE Confidence: 0.8286231

 $00:15:32.894 \longrightarrow 00:15:34.948$  death through suicide and indirect impact.

NOTE Confidence: 0.8286231

00:15:34.950 --> 00:15:37.370 Through heavy drinking smoking.

NOTE Confidence: 0.8286231

 $00:15:37.370 \longrightarrow 00:15:40.821$  And alcohol abuse and it rude is

NOTE Confidence: 0.8286231

 $00:15:40.821 \longrightarrow 00:15:43.729$  economic and social breakdown now.

00:15:45.910 --> 00:15:48.418 It's this morning, a personal expectations.

NOTE Confidence: 0.8328662

 $00:15:48.420 \longrightarrow 00:15:51.129$  The case, indeed, move you as really

NOTE Confidence: 0.8328662

 $00:15:51.129 \longrightarrow 00:15:54.269$  as as as part of the mechanism.

NOTE Confidence: 0.8328662

 $00:15:54.270 \longrightarrow 00:15:56.778$  That sort of leads to despair.

NOTE Confidence: 0.8328662

 $00:15:56.780 \longrightarrow 00:15:59.370$  The what they write about the erosion

NOTE Confidence: 0.8328662

 $00:15:59.370 \longrightarrow 00:16:01.380$  of longstanding economic opportunities.

NOTE Confidence: 0.8328662

00:16:01.380 --> 00:16:03.465 Again, the erosion of longstanding

NOTE Confidence: 0.8328662

 $00:16:03.465 \longrightarrow 00:16:04.299$  economic opportunities.

NOTE Confidence: 0.8328662

 $00:16:04.300 \longrightarrow 00:16:06.308$  People have these opportunities,

NOTE Confidence: 0.8328662

 $00:16:06.308 \longrightarrow 00:16:09.801$  and they've slipped away and that that

NOTE Confidence: 0.8328662

 $00{:}16{:}09.801 \dashrightarrow 00{:}16{:}12.573$  process plays a prominent role in their

NOTE Confidence: 0.8328662

 $00:16:12.573 \longrightarrow 00:16:15.498$  view in precipitating these deaths.

NOTE Confidence: 0.8328662

 $00{:}16{:}15.500 \dashrightarrow 00{:}16{:}16.378$  Of despair.

NOTE Confidence: 0.8328662

 $00:16:16.378 \longrightarrow 00:16:19.451$  So if we think about this this

NOTE Confidence: 0.8328662

 $00:16:19.451 \longrightarrow 00:16:21.210$  concept schematically,

 $00:16:21.210 \longrightarrow 00:16:24.876$  it might look something like this.

NOTE Confidence: 0.8328662

00:16:24.880 --> 00:16:26.810 Economic stagnation driven by globalization,

NOTE Confidence: 0.8328662

00:16:26.810 --> 00:16:28.040 rapid technological change,

NOTE Confidence: 0.8328662

 $00:16:28.040 \longrightarrow 00:16:30.500$  loss of union power that shielded

NOTE Confidence: 0.8328662

00:16:30.500 --> 00:16:32.579 workers in the US from competition,

NOTE Confidence: 0.8328662

 $00:16:32.580 \longrightarrow 00:16:35.275$  low wage labor both here and abroad,

NOTE Confidence: 0.8328662

 $00:16:35.280 \longrightarrow 00:16:37.590$  has over a period of time,

NOTE Confidence: 0.8328662

00:16:37.590 --> 00:16:39.430 narrow job prospects and accelerated

NOTE Confidence: 0.8328662

 $00:16:39.430 \longrightarrow 00:16:41.270$  declining rates of marriage that

NOTE Confidence: 0.8328662

 $00:16:41.325 \longrightarrow 00:16:43.310$  contributed to social isolation and

NOTE Confidence: 0.8328662

 $00:16:43.310 \longrightarrow 00:16:44.898$  loneliness and these processes,

NOTE Confidence: 0.8328662

00:16:44.900 --> 00:16:47.270 in turn, may contribute to something

NOTE Confidence: 0.8328662

 $00:16:47.270 \longrightarrow 00:16:49.140$  that we might think of.

NOTE Confidence: 0.8328662

 $00:16:49.140 \longrightarrow 00:16:50.625$  Diseases of despair,

NOTE Confidence: 0.8328662

 $00:16:50.625 \longrightarrow 00:16:53.595$  and ultimately to deaths of despair.

NOTE Confidence: 0.8328662

00:16:53.600 --> 00:16:54.545 And of course,

 $00:16:54.545 \longrightarrow 00:16:56.435$  over the last year or so,

NOTE Confidence: 0.8328662

 $00:16:56.440 \longrightarrow 00:16:59.239$  one would think that all of this has been

NOTE Confidence: 0.8328662

 $00:16:59.239 \longrightarrow 00:17:00.857$  exacerbated by the economic disruption

NOTE Confidence: 0.8328662

 $00:17:00.857 \longrightarrow 00:17:03.080$  and the loss of 20 million jobs.

NOTE Confidence: 0.8328662

 $00:17:03.080 \longrightarrow 00:17:04.970$  Only about 10 million of which

NOTE Confidence: 0.8328662

 $00:17:04.970 \longrightarrow 00:17:05.915$  should come backed.

NOTE Confidence: 0.8328662

00:17:05.920 --> 00:17:08.448 It's been brought on by the covid pandemic,

NOTE Confidence: 0.8328662

 $00:17:08.450 \longrightarrow 00:17:10.030$  and if we have time,

NOTE Confidence: 0.8328662

 $00:17:10.030 \longrightarrow 00:17:12.242$  we can talk about the CDC's release

NOTE Confidence: 0.8328662

00:17:12.242 --> 00:17:13.510 of numbers, preliminary numbers,

NOTE Confidence: 0.8328662

 $00{:}17{:}13.510 \dashrightarrow 00{:}17{:}15.085$  provisional numbers just last week,

NOTE Confidence: 0.8328662

 $00{:}17{:}15.090 \dashrightarrow 00{:}17{:}17.099$  showing that in fact we we didn't

NOTE Confidence: 0.8328662

 $00{:}17{:}17.099 \dashrightarrow 00{:}17{:}19.047$  in 2020 have an increase in

NOTE Confidence: 0.8328662

 $00:17:19.047 \longrightarrow 00:17:21.087$  suicide as many people had feared.

NOTE Confidence: 0.8328662 00:17:21.090 --> 00:17:21.530 But,

 $00:17:21.530 \longrightarrow 00:17:25.050$  but that's the that's sort of the general.

NOTE Confidence: 0.8328662

00:17:25.050 --> 00:17:26.373 As I say,

NOTE Confidence: 0.8328662

 $00{:}17{:}26.373 \dashrightarrow 00{:}17{:}30.310$  a schematic view of the case and Deaton.

NOTE Confidence: 0.8328662

 $00:17:30.310 \longrightarrow 00:17:30.671$  Hypothesis,

NOTE Confidence: 0.8328662

 $00:17:30.671 \longrightarrow 00:17:32.837$  and at the very center of

NOTE Confidence: 0.8328662

00:17:32.837 --> 00:17:34.620 their hypothesis is this idea,

NOTE Confidence: 0.8328662

 $00:17:34.620 \longrightarrow 00:17:36.410$  or this notion of despair.

NOTE Confidence: 0.8328662

00:17:36.410 --> 00:17:38.570 And yet nowhere in their writings.

NOTE Confidence: 0.8328662

 $00:17:38.570 \longrightarrow 00:17:40.817$  And I've read the I read their

NOTE Confidence: 0.8328662

 $00:17:40.817 \longrightarrow 00:17:42.520$  book in their articles.

NOTE Confidence: 0.8328662

 $00:17:42.520 \longrightarrow 00:17:45.026$  Do we encounter a measure of despair?

NOTE Confidence: 0.8328662

 $00{:}17{:}45.030 \dashrightarrow 00{:}17{:}47.340$  So so there's real empirical work to

NOTE Confidence: 0.8328662

 $00:17:47.340 \longrightarrow 00:17:50.058$  do if we're interested in this area,

NOTE Confidence: 0.8328662

00:17:50.060 --> 00:17:52.566 I work that I'm I'm not skilled,

NOTE Confidence: 0.8328662

 $00:17:52.570 \longrightarrow 00:17:55.076$  I have the skill set to pursue,

NOTE Confidence: 0.8328662

 $00:17:55.080 \longrightarrow 00:17:57.944$  but I would encourage others to to do,

 $00:17:57.950 \longrightarrow 00:18:00.098$  and that is work that involves

NOTE Confidence: 0.8328662

 $00:18:00.098 \longrightarrow 00:18:01.172$  kind of understanding.

NOTE Confidence: 0.8328662

00:18:01.180 --> 00:18:02.880 The psychopathology one could

NOTE Confidence: 0.8328662

 $00:18:02.880 \longrightarrow 00:18:04.580$  imagine a small field.

NOTE Confidence: 0.8328662

 $00:18:04.580 \longrightarrow 00:18:05.940$  Devoted to understanding the

NOTE Confidence: 0.8328662

00:18:05.940 --> 00:18:06.960 psychological consequences of

NOTE Confidence: 0.8328662

00:18:06.960 --> 00:18:08.759 financial strain and social isolation,

NOTE Confidence: 0.8328662

 $00:18:08.760 \longrightarrow 00:18:10.704$  and that that how they those

NOTE Confidence: 0.8328662

 $00:18:10.704 \longrightarrow 00:18:12.000$  things might mediate maladaptive

NOTE Confidence: 0.8328662

 $00:18:12.062 \longrightarrow 00:18:13.977$  behaviors that drive Destin despair.

NOTE Confidence: 0.8328662

 $00:18:13.980 \longrightarrow 00:18:16.468$  And it might in fact be somewhat similar

NOTE Confidence: 0.8328662

 $00:18:16.468 \longrightarrow 00:18:18.850$  to what is already well developed.

NOTE Confidence: 0.8328662

 $00:18:18.850 \longrightarrow 00:18:21.626$  Field of depression and and in that area.

NOTE Confidence: 0.8328662

 $00:18:21.630 \longrightarrow 00:18:24.348$  Of course we think in terms of not only

NOTE Confidence: 0.8328662

 $00:18:24.348 \longrightarrow 00:18:26.159$  behavioral and cognitive emotional,

 $00:18:26.160 \longrightarrow 00:18:27.705$  but also biological.

NOTE Confidence: 0.8328662

 $00:18:27.705 \longrightarrow 00:18:31.310$  Aspects that may bear and be relevant

NOTE Confidence: 0.8328662

00:18:31.403 --> 00:18:33.603 for understanding the etiology

NOTE Confidence: 0.8328662

 $00:18:33.603 \longrightarrow 00:18:36.903$  or onset of how these financial

NOTE Confidence: 0.8328662

 $00:18:37.001 \longrightarrow 00:18:39.875$  strain is used is experienced by

NOTE Confidence: 0.8328662

 $00{:}18{:}39.875 \dashrightarrow 00{:}18{:}42.928$  people and results in putting that

NOTE Confidence: 0.8328662

 $00:18:42.928 \longrightarrow 00:18:45.748$  increased risk for these diseases

NOTE Confidence: 0.8328662

 $00:18:45.748 \longrightarrow 00:18:49.199$  that can be life threatening.

NOTE Confidence: 0.8328662

 $00{:}18{:}49.200 \dashrightarrow 00{:}18{:}51.036$  Backing up one reason that this

NOTE Confidence: 0.8328662

 $00:18:51.036 \longrightarrow 00:18:52.831$  topic is so important is that

NOTE Confidence: 0.8328662

 $00{:}18{:}52.831 \dashrightarrow 00{:}18{:}54.623$  over the past two decades or so,

NOTE Confidence: 0.8328662

00:18:54.630 --> 00:18:56.925 and I'm the last couple of years, well,

NOTE Confidence: 0.8328662

00:18:56.925 --> 00:18:59.205 you probably got to put an asterisk by,

NOTE Confidence: 0.8328662

 $00:18:59.210 \longrightarrow 00:19:01.940$  but if we step back and look it over the

NOTE Confidence: 0.8412706

00:19:02.018 --> 00:19:04.448 last, you know 20 years or so we've seen

NOTE Confidence: 0.8412706

00:19:04.448 --> 00:19:06.649 rising rates of suicide and drug overdose,

 $00:19:06.650 \longrightarrow 00:19:08.360$  especially of course opioid overdose deaths,

NOTE Confidence: 0.8412706

 $00:19:08.360 \longrightarrow 00:19:10.076$  chronic liver disease deaths, United States.

NOTE Confidence: 0.8412706

 $00:19:10.080 \longrightarrow 00:19:11.900$  There are all trending upward and that

NOTE Confidence: 0.8412706

 $00:19:11.900 \longrightarrow 00:19:14.316$  it stands in quite sharp contrast to the

NOTE Confidence: 0.8412706

 $00:19:14.316 \longrightarrow 00:19:16.223$  impressive declines that have been achieved

NOTE Confidence: 0.8412706

 $00{:}19{:}16.223 \dashrightarrow 00{:}19{:}18.653$  in many of the other leading cause to death,

NOTE Confidence: 0.8412706

 $00:19:18.660 \longrightarrow 00:19:20.655$  some of which are on the slide.

NOTE Confidence: 0.8412706

 $00{:}19{:}20.660 \dashrightarrow 00{:}19{:}23.156$  Here, things like ammonia and cancer.

NOTE Confidence: 0.8412706

 $00:19:23.160 \longrightarrow 00:19:26.720$  In HIV. So if we had a better

NOTE Confidence: 0.8412706

 $00:19:26.720 \longrightarrow 00:19:29.259$  understanding of the connections.

NOTE Confidence: 0.8412706

 $00:19:29.260 \longrightarrow 00:19:31.300$  Between the markers of social economic

NOTE Confidence: 0.8412706

 $00:19:31.300 \longrightarrow 00:19:33.889$  adversity and S to despair that might

NOTE Confidence: 0.8412706

 $00{:}19{:}33.889 \dashrightarrow 00{:}19{:}36.217$  well have implications for the broad

NOTE Confidence: 0.8412706

 $00:19:36.217 \longrightarrow 00:19:38.337$  direction of social and health policy.

NOTE Confidence: 0.8412706

 $00:19:38.340 \longrightarrow 00:19:40.874$  If we were to find strong associations,

 $00:19:40.880 \longrightarrow 00:19:43.928$  it might help make the case that upstream

NOTE Confidence: 0.8412706

 $00:19:43.928 \longrightarrow 00:19:45.752$  interventions with the sorts that

NOTE Confidence: 0.8412706

 $00{:}19{:}45.752 \dashrightarrow 00{:}19{:}48.062$  Doctor Burke I was writing about over

NOTE Confidence: 0.8412706

 $00:19:48.135 \longrightarrow 00:19:50.676$  100 years ago and advocating in Germany.

NOTE Confidence: 0.8412706

 $00:19:50.680 \longrightarrow 00:19:52.846$  And we recognize today is things

NOTE Confidence: 0.8412706

00:19:52.846 --> 00:19:54.670 like raising the minimum wage,

NOTE Confidence: 0.8412706

00:19:54.670 --> 00:19:56.848 increasing public support for job training,

NOTE Confidence: 0.8412706

00:19:56.850 --> 00:19:58.660 expanding investment in public education,

NOTE Confidence: 0.8412706

00:19:58.660 --> 00:19:59.340 loan for giveness.

NOTE Confidence: 0.8412706

 $00:19:59.340 \longrightarrow 00:20:00.360$  Increasing the veil.

NOTE Confidence: 0.8412706

00:20:00.360 --> 00:20:02.140 Health insurance for low income

NOTE Confidence: 0.8412706

 $00:20:02.140 \longrightarrow 00:20:03.564$  people subsidizing child care.

NOTE Confidence: 0.8412706

 $00:20:03.570 \longrightarrow 00:20:04.998$  You know there's a?

NOTE Confidence: 0.8412706

 $00:20:04.998 \longrightarrow 00:20:06.426$  There's a long list,

NOTE Confidence: 0.8412706

 $00:20:06.430 \longrightarrow 00:20:07.108$  in fact,

NOTE Confidence: 0.8412706

 $00:20:07.108 \longrightarrow 00:20:09.481$  some of these policies resemble those sorts

 $00:20:09.481 \longrightarrow 00:20:11.582$  of measures that were recently included

NOTE Confidence: 0.8412706

 $00{:}20{:}11.582 \to 00{:}20{:}14.640$  in the in this Big American rescue plan.

NOTE Confidence: 0.8412706

00:20:14.640 --> 00:20:16.662 Nearly \$2 trillion plan that aims

NOTE Confidence: 0.8412706

00:20:16.662 --> 00:20:18.376 to improve the financial security

NOTE Confidence: 0.8412706

 $00:20:18.376 \longrightarrow 00:20:20.490$  of millions of people who both low

NOTE Confidence: 0.8412706

 $00:20:20.490 \longrightarrow 00:20:22.416$  and even middle income individuals

NOTE Confidence: 0.8412706

00:20:22.416 --> 00:20:24.930 in United States through things like

NOTE Confidence: 0.8412706

00:20:24.930 --> 00:20:26.066 extending unemployment benefits,

NOTE Confidence: 0.8412706

00:20:26.066 --> 00:20:27.140 providing direct payments,

NOTE Confidence: 0.8412706

00:20:27.140 --> 00:20:28.564 funding emergency pay leave,

NOTE Confidence: 0.8412706

 $00:20:28.564 \longrightarrow 00:20:29.988$  and several other measures.

NOTE Confidence: 0.8412706

 $00:20:29.990 \longrightarrow 00:20:30.590$  So again.

NOTE Confidence: 0.8412706

 $00{:}20{:}30.590 \dashrightarrow 00{:}20{:}32.690$  This if you can demonstrate if one

NOTE Confidence: 0.8412706

 $00:20:32.690 \longrightarrow 00:20:35.058$  can demonstrate strong associations,

NOTE Confidence: 0.8412706

 $00:20:35.060 \longrightarrow 00:20:36.504$  it'll have important implications

 $00:20:36.504 \longrightarrow 00:20:37.587$  for social policy.

NOTE Confidence: 0.8412706

 $00:20:37.590 \longrightarrow 00:20:38.818$  On the other hand,

NOTE Confidence: 0.8412706

 $00:20:38.818 \longrightarrow 00:20:42.278$  if the week it if the linkages are weaker,

NOTE Confidence: 0.8412706

 $00:20:42.280 \longrightarrow 00:20:44.212$  it might suggest that the traditional

NOTE Confidence: 0.8412706

00:20:44.212 --> 00:20:45.938 mental health focus the narrower

NOTE Confidence: 0.8412706

00:20:45.938 --> 00:20:47.838 downstream focused on things like

NOTE Confidence: 0.8412706

 $00:20:47.838 \longrightarrow 00:20:49.358$  suicide screening and linking

NOTE Confidence: 0.8412706

00:20:49.419 --> 00:20:51.269 people to mental health services

NOTE Confidence: 0.8412706

 $00:20:51.269 \longrightarrow 00:20:52.749$  and evidence based treatments,

NOTE Confidence: 0.8412706

 $00:20:52.750 \longrightarrow 00:20:54.778$  building up and making more available

NOTE Confidence: 0.8412706

 $00{:}20{:}54.778 \dashrightarrow 00{:}20{:}56.891$  crisis lines and trying to pass

NOTE Confidence: 0.8412706

00:20:56.891 --> 00:20:58.985 firearm safety policies and try to

NOTE Confidence: 0.8412706

 $00:20:58.985 \longrightarrow 00:21:00.514$  implement counseling safety planning

NOTE Confidence: 0.8412706

 $00:21:00.514 \longrightarrow 00:21:02.429$  with an emergency departments and

NOTE Confidence: 0.8412706

 $00:21:02.429 \longrightarrow 00:21:03.946$  expanding access to Medicaid.

NOTE Confidence: 0.8412706

00:21:03.946 --> 00:21:05.044 Medication treatments like

 $00{:}21{:}05.044 \dashrightarrow 00{:}21{:}06.874$  buprenorphine for opioid use disorder,

NOTE Confidence: 0.8412706

 $00{:}21{:}06.880 \dashrightarrow 00{:}21{:}07.882$  needle exchange programs,

NOTE Confidence: 0.8412706

 $00:21:07.882 \longrightarrow 00:21:08.550$  the locks,

NOTE Confidence: 0.8412706

 $00:21:08.550 \longrightarrow 00:21:10.560$  own availability so that people can

NOTE Confidence: 0.8412706

 $00:21:10.560 \longrightarrow 00:21:12.880$  be get reversed and saved in field.

NOTE Confidence: 0.8412706

 $00:21:12.880 \longrightarrow 00:21:15.806$  You know all these more sort of

NOTE Confidence: 0.8412706

 $00:21:15.806 \longrightarrow 00:21:18.769$  what I think of as downstream.

NOTE Confidence: 0.8412706

00:21:18.770 --> 00:21:21.160 Approaches and interventions would be,

NOTE Confidence: 0.8412706

00:21:21.160 --> 00:21:21.792 you know,

NOTE Confidence: 0.8412706

 $00:21:21.792 \longrightarrow 00:21:25.064$  we play a more central role if if the

NOTE Confidence: 0.8412706

 $00:21:25.064 \longrightarrow 00:21:27.744$  weaker associations between these

NOTE Confidence: 0.8412706

 $00:21:27.744 \longrightarrow 00:21:29.754$  broader socioeconomic determinants.

NOTE Confidence: 0.8412706

 $00:21:29.760 \longrightarrow 00:21:34.176$  So anyway to examine this issue.

NOTE Confidence: 0.8412706

 $00{:}21{:}34.180 \dashrightarrow 00{:}21{:}36.868$  I worked with my friend Carlos Black.

NOTE Confidence: 0.8412706

00:21:36.870 --> 00:21:39.934 I was at night at and Melanie Wallop,

 $00:21:39.940 \longrightarrow 00:21:41.516$  Asstastic Colombian Sean Altekruse,

NOTE Confidence: 0.8412706

00:21:41.516 --> 00:21:44.719 who's at the NHL BI on a rather

NOTE Confidence: 0.8412706

 $00:21:44.719 \longrightarrow 00:21:46.624$  straightforward set of analysis and

NOTE Confidence: 0.8412706

 $00:21:46.624 \longrightarrow 00:21:49.538$  I will walk you through some of them.

NOTE Confidence: 0.8412706

 $00:21:49.540 \longrightarrow 00:21:51.645$  They're based on something called

NOTE Confidence: 0.8412706

 $00{:}21{:}51.645 \dashrightarrow 00{:}21{:}53.750$  the mortality disparities in American

NOTE Confidence: 0.8412706

 $00:21:53.814 \longrightarrow 00:21:56.068$  communities data or EM back for short.

NOTE Confidence: 0.8412706

 $00:21:56.070 \longrightarrow 00:21:56.838$  And really,

NOTE Confidence: 0.8412706

00:21:56.838 --> 00:21:57.990 all it is,

NOTE Confidence: 0.8412706

00:21:57.990 --> 00:21:59.905 is taking the American Community

NOTE Confidence: 0.8412706

 $00:21:59.905 \longrightarrow 00:22:01.437$  Survey it from 2008.

NOTE Confidence: 0.8412706

 $00:22:01.440 \longrightarrow 00:22:03.272$  Huge survey representative sample

NOTE Confidence: 0.8412706

 $00:22:03.272 \longrightarrow 00:22:04.188$  of Americans.

NOTE Confidence: 0.8412706

 $00:22:04.190 \longrightarrow 00:22:05.242 4,000,000$  which you see

NOTE Confidence: 0.8412706

 $00:22:05.242 \longrightarrow 00:22:06.820$  there and linking it to the

NOTE Confidence: 0.83943075

 $00:22:06.875 \longrightarrow 00:22:07.958$  National Death Index.

 $00:22:07.960 \longrightarrow 00:22:10.380$  It's been linked through 2015.

NOTE Confidence: 0.83943075

 $00:22:10.380 \longrightarrow 00:22:12.102$  Over 300,000 people died from that

NOTE Confidence: 0.83943075

00:22:12.102 --> 00:22:14.120 cohort of four and a half million,

NOTE Confidence: 0.83943075

00:22:14.120 --> 00:22:16.136 and in about a month or so,

NOTE Confidence: 0.83943075

 $00:22:16.140 \longrightarrow 00:22:17.580$  the Census Bureau is going

NOTE Confidence: 0.83943075

 $00:22:17.580 \longrightarrow 00:22:19.020$  to be releasing an update.

NOTE Confidence: 0.83943075

 $00:22:19.020 \longrightarrow 00:22:20.688$  So we'll be linking it through

NOTE Confidence: 0.83943075

 $00:22:20.688 \longrightarrow 00:22:22.659$  2019 an you know that will give

NOTE Confidence: 0.83943075

00:22:22.659 --> 00:22:24.521 us more power and get a chance

NOTE Confidence: 0.83943075

 $00:22:24.583 \longrightarrow 00:22:26.732$  to look at the effects as the

NOTE Confidence: 0.83943075

00:22:26.732 --> 00:22:28.236 opioid epidemic really took off.

NOTE Confidence: 0.83943075

00:22:28.236 --> 00:22:28.524 Unfortunately,

NOTE Confidence: 0.83943075

 $00:22:28.524 \longrightarrow 00:22:30.540$  during that period between 2016 and 19,

NOTE Confidence: 0.83943075

 $00:22:30.540 \longrightarrow 00:22:32.857$  so I think there are results that

NOTE Confidence: 0.83943075

00:22:32.857 --> 00:22:35.142 were about to show you may change

 $00:22:35.142 \longrightarrow 00:22:37.320$  in a couple of months a bit.

NOTE Confidence: 0.83943075

 $00:22:37.320 \longrightarrow 00:22:38.576$  But still it's a.

NOTE Confidence: 0.83943075

 $00:22:38.576 \longrightarrow 00:22:39.518$  It's a very.

NOTE Confidence: 0.83943075

00:22:39.520 --> 00:22:41.368 It's an impressively large survey and

NOTE Confidence: 0.83943075

00:22:41.368 --> 00:22:43.290 just little bit about this survey.

NOTE Confidence: 0.83943075

 $00{:}22{:}43.290 \dashrightarrow 00{:}22{:}44.538$  The American Community surveys,

NOTE Confidence: 0.83943075

 $00:22:44.538 \longrightarrow 00:22:45.474$  as I mentioned,

NOTE Confidence: 0.83943075

00:22:45.480 --> 00:22:47.050 fielded by the Census Bureau,

NOTE Confidence: 0.83943075

 $00{:}22{:}47.050 \dashrightarrow 00{:}22{:}48.620$  and because it's legally required

NOTE Confidence: 0.83943075

 $00:22:48.620 \longrightarrow 00:22:50.190$  you got in the Mail.

NOTE Confidence: 0.83943075

 $00{:}22{:}50.190 \dashrightarrow 00{:}22{:}53.694$  I happen to have got one last year.

NOTE Confidence: 0.83943075

00:22:53.700 --> 00:22:55.404 You know they've got this truly

NOTE Confidence: 0.83943075

 $00:22:55.404 \longrightarrow 00:22:56.880$  impressive response rate of 97.9%.

NOTE Confidence: 0.83943075

 $00:22:56.880 \longrightarrow 00:22:59.472$  You never see that in the literature in it.

NOTE Confidence: 0.83943075

 $00:22:59.480 \longrightarrow 00:23:00.320$  Any other context,

NOTE Confidence: 0.83943075

 $00:23:00.320 \longrightarrow 00:23:02.660$  and it sends a very broad sampling frame,

 $00:23:02.660 \longrightarrow 00:23:04.592$  so it's got people who are in

NOTE Confidence: 0.83943075

 $00{:}23{:}04.592 \dashrightarrow 00{:}23{:}06.373$  regular housing units as well as

NOTE Confidence: 0.83943075

 $00:23:06.373 \longrightarrow 00:23:07.863$  wide range of residential facilities

NOTE Confidence: 0.83943075

 $00:23:07.863 \longrightarrow 00:23:09.600$  you see listed on the slide.

NOTE Confidence: 0.83943075

 $00:23:09.600 \longrightarrow 00:23:11.664$  There is a little bit of an imperfection

NOTE Confidence: 0.83943075

00:23:11.664 --> 00:23:14.220 in the linking to the National Death Index,

NOTE Confidence: 0.83943075

 $00:23:14.220 \longrightarrow 00:23:16.117$  so we're about 9:00 or so percent

NOTE Confidence: 0.83943075

 $00:23:16.117 \longrightarrow 00:23:17.400$  that can't be linked,

NOTE Confidence: 0.83943075

 $00{:}23{:}17.400 \dashrightarrow 00{:}23{:}19.020$  and it's usually because an individual

NOTE Confidence: 0.83943075

00:23:19.020 --> 00:23:20.869 doesn't have a Social Security number,

NOTE Confidence: 0.83943075

 $00:23:20.870 \longrightarrow 00:23:22.158$  or it's these copied.

NOTE Confidence: 0.83943075

 $00:23:22.158 \longrightarrow 00:23:25.109$  Most of that occurs there and then to try to.

NOTE Confidence: 0.83943075

 $00{:}23{:}25.110 \dashrightarrow 00{:}23{:}26.374$  Correct for that imperfection,

NOTE Confidence: 0.83943075

 $00:23:26.374 \longrightarrow 00:23:27.638$  they do some waiting,

NOTE Confidence: 0.83943075

 $00:23:27.640 \longrightarrow 00:23:29.936$  but it's I think it's it's a

 $00:23:29.936 \longrightarrow 00:23:31.429$  robust survey and it is.

NOTE Confidence: 0.83943075

 $00{:}23{:}31.430 \dashrightarrow 00{:}23{:}33.958$  I think we can say with some confidence.

NOTE Confidence: 0.83943075

 $00:23:33.960 \longrightarrow 00:23:36.608$  It is truly representative.

NOTE Confidence: 0.83943075

00:23:36.610 --> 00:23:39.355 Of the country at the time of the survey,

NOTE Confidence: 0.83943075

 $00:23:39.360 \longrightarrow 00:23:41.142$  which is now of course quite

NOTE Confidence: 0.83943075

 $00:23:41.142 \longrightarrow 00:23:42.730$  some time ago in 2008.

NOTE Confidence: 0.83943075

 $00:23:42.730 \longrightarrow 00:23:45.079$  So the first thing we did is just sort

NOTE Confidence: 0.83943075

 $00:23:45.079 \longrightarrow 00:23:47.318$  of put this topic in perspective.

NOTE Confidence: 0.83943075

 $00:23:47.320 \longrightarrow 00:23:49.406$  So we looked at all the deaths

NOTE Confidence: 0.83943075

 $00:23:49.406 \longrightarrow 00:23:50.690$  from these three cars.

NOTE Confidence: 0.83943075

 $00{:}23{:}50.690 \dashrightarrow 00{:}23{:}52.914$  Is the case in deep and identify suicide

NOTE Confidence: 0.83943075

00:23:52.914 --> 00:23:54.660 poisoning and chronic liver disease,

NOTE Confidence: 0.83943075

 $00:23:54.660 \longrightarrow 00:23:56.412$  and we see the the simple

NOTE Confidence: 0.83943075

 $00:23:56.412 \longrightarrow 00:23:58.030$  results here on this slide.

NOTE Confidence: 0.83943075

 $00:23:58.030 \longrightarrow 00:23:59.941$  Around 4% so one in every 25

NOTE Confidence: 0.83943075

00:23:59.941 --> 00:24:01.699 deaths are from Dessa despair,

 $00:24:01.700 \longrightarrow 00:24:03.835$  that means 96% of course deaths alright,

NOTE Confidence: 0.83943075

 $00{:}24{:}03.840 \dashrightarrow 00{:}24{:}06.720$  and you can see that this these three causes.

NOTE Confidence: 0.83943075

 $00:24:06.720 \longrightarrow 00:24:08.784$  Make it roughly equal surprisingly equal

NOTE Confidence: 0.83943075

 $00:24:08.784 \longrightarrow 00:24:10.557$  contributions to this overall aggregate

NOTE Confidence: 0.83943075

 $00{:}24{:}10.557 \longrightarrow 00{:}24{:}12.982$  deaths of despair, and in each case,

NOTE Confidence: 0.83943075

 $00:24:12.982 \longrightarrow 00:24:15.070$  and this is not a surprise.

NOTE Confidence: 0.83943075

00:24:15.070 --> 00:24:17.995 Men are far more likely at far more prone

NOTE Confidence: 0.83943075

 $00:24:17.995 \longrightarrow 00:24:20.990$  to die of these causes than are women,

NOTE Confidence: 0.83943075

00:24:20.990 --> 00:24:23.878 so that's sort of just a basic frame

NOTE Confidence: 0.83943075

 $00:24:23.878 \longrightarrow 00:24:26.569$  to take with you into the next

NOTE Confidence: 0.83943075

 $00{:}24{:}26.569 \rightarrow 00{:}24{:}29.279$  set of slides that I'll show you.

NOTE Confidence: 0.83943075

 $00:24:29.280 \longrightarrow 00:24:32.185$  And so here in this section I

NOTE Confidence: 0.83943075

 $00{:}24{:}32.185 \dashrightarrow 00{:}24{:}35.320$  briefly want to focus on four

NOTE Confidence: 0.83943075

00:24:35.320 --> 00:24:37.117 markers up socioeconomic.

NOTE Confidence: 0.83943075

00:24:37.120 --> 00:24:38.308 A concern or adversity,

 $00:24:38.308 \longrightarrow 00:24:39.793$  but I'll talk about low

NOTE Confidence: 0.83943075

00:24:39.793 --> 00:24:40.700 educational attainment,

NOTE Confidence: 0.83943075

00:24:40.700 --> 00:24:41.025 unemployment,

NOTE Confidence: 0.83943075

 $00:24:41.025 \longrightarrow 00:24:43.300$  low income and then and marital status.

NOTE Confidence: 0.83943075

00:24:43.300 --> 00:24:43.624 Unfortunately,

NOTE Confidence: 0.83943075

 $00:24:43.624 \longrightarrow 00:24:46.216$  you know there isn't in the M deck.

NOTE Confidence: 0.83943075

00:24:46.220 --> 00:24:47.850 A good measure of wealth.

NOTE Confidence: 0.83943075

00:24:47.850 --> 00:24:49.270 They do have something which

NOTE Confidence: 0.83943075

 $00{:}24{:}49.270 {\:{\circ}{\circ}{\circ}}>00{:}24{:}50.690$  is another important aspect of

NOTE Confidence: 0.8231033

00:24:50.739 --> 00:24:51.749 socioeconomic status.

NOTE Confidence: 0.8231033

 $00:24:51.750 \longrightarrow 00:24:53.360$  They do have some things

NOTE Confidence: 0.8231033

 $00:24:53.360 \longrightarrow 00:24:55.320$  on whether you rent or own,

NOTE Confidence: 0.8231033

00:24:55.320 --> 00:24:57.270 whether you paid off your mortgage,

NOTE Confidence: 0.8231033

00:24:57.270 --> 00:24:59.709 I might dig into a little bit to try

NOTE Confidence: 0.8231033

00:24:59.709 --> 00:25:02.149 to pull something out about well,

NOTE Confidence: 0.8231033

 $00:25:02.150 \longrightarrow 00:25:04.990$  so you have that information as you'll see

 $00:25:04.990 \longrightarrow 00:25:07.687$  an income and employment on education.

NOTE Confidence: 0.8231033

 $00:25:07.690 \longrightarrow 00:25:09.778$  But so it's missing that piece.

NOTE Confidence: 0.8231033

00:25:09.780 --> 00:25:11.180 Of course. Most importantly,

NOTE Confidence: 0.8231033

 $00:25:11.180 \longrightarrow 00:25:12.930$  as a mental health person,

NOTE Confidence: 0.8231033

 $00:25:12.930 \longrightarrow 00:25:15.354$  the thing that's missing is it doesn't have

NOTE Confidence: 0.8231033

00:25:15.354 --> 00:25:17.109 information about psychiatric disorders,

NOTE Confidence: 0.8231033

 $00:25:17.110 \longrightarrow 00:25:19.030$  which really to get an understanding

NOTE Confidence: 0.8231033

 $00:25:19.030 \longrightarrow 00:25:20.950$  of these things is essential.

NOTE Confidence: 0.8231033

 $00:25:20.950 \longrightarrow 00:25:23.500$  But I maintain that there's still

NOTE Confidence: 0.8231033

 $00:25:23.500 \longrightarrow 00:25:26.136$  some things that you can learn

NOTE Confidence: 0.8231033

 $00:25:26.136 \longrightarrow 00:25:28.680$  even with that large omission so.

NOTE Confidence: 0.8231033

 $00{:}25{:}28.680 \dashrightarrow 00{:}25{:}30.444$  The next four slides are organized

NOTE Confidence: 0.8231033

 $00:25:30.444 \longrightarrow 00:25:31.620$  in the same way,

NOTE Confidence: 0.8231033

 $00:25:31.620 \longrightarrow 00:25:34.167$  so we take a moment and tell you about

NOTE Confidence: 0.8231033

00:25:34.167 --> 00:25:36.216 them so you can understand them as

 $00:25:36.216 \longrightarrow 00:25:39.258$  they go by in the top panel of the slides,

NOTE Confidence: 0.8231033

 $00{:}25{:}39.260 \dashrightarrow 00{:}25{:}40.730$  I'm showing you crude mortality

NOTE Confidence: 0.8231033

 $00:25:40.730 \longrightarrow 00:25:42.200$  rates per 100,000 person here,

NOTE Confidence: 0.8231033

 $00:25:42.200 \longrightarrow 00:25:43.964$  which is the way we present

NOTE Confidence: 0.8231033

00:25:43.964 --> 00:25:44.846 you know mortality,

NOTE Confidence: 0.8231033

 $00:25:44.850 \longrightarrow 00:25:46.614$  and this is over the period

NOTE Confidence: 0.8231033

 $00:25:46.614 \longrightarrow 00:25:47.790$  of follow up again.

NOTE Confidence: 0.8231033

 $00:25:47.790 \longrightarrow 00:25:48.422$  The classification,

NOTE Confidence: 0.8231033

 $00{:}25{:}48.422 \dashrightarrow 00{:}25{:}50.318$  and here we're looking at education

NOTE Confidence: 0.8231033

 $00:25:50.318 \longrightarrow 00:25:52.336$  is done at the time of the

NOTE Confidence: 0.8231033

00:25:52.336 --> 00:25:53.666 American Community Survey in 2008,

NOTE Confidence: 0.8231033

00:25:53.670 --> 00:25:55.170 and in the bottom you're looking

NOTE Confidence: 0.8231033

 $00{:}25{:}55.170 \dashrightarrow 00{:}25{:}56.966$  at at had results from Cox

NOTE Confidence: 0.8231033

 $00:25:56.966 \longrightarrow 00:25:58.076$  proportional hazards models.

NOTE Confidence: 0.8231033

 $00:25:58.080 \longrightarrow 00:26:00.208$  So these are hazards ratios that have

NOTE Confidence: 0.8231033

 $00:26:00.208 \longrightarrow 00:26:02.338$  been adjusted for all those things and.

 $00:26:02.340 \longrightarrow 00:26:03.104$  Fine print,

NOTE Confidence: 0.8231033

 $00:26:03.104 \longrightarrow 00:26:05.396$  which are a variety of socioeconomic

NOTE Confidence: 0.8231033

 $00:26:05.396 \longrightarrow 00:26:08.457$  measures as well as they've got a 6 item

NOTE Confidence: 0.8231033

 $00:26:08.457 \longrightarrow 00:26:10.439$  measure of functional disability now.

NOTE Confidence: 0.8231033

 $00:26:10.440 \longrightarrow 00:26:14.200$  So if we look at this at the level of

NOTE Confidence: 0.8231033

 $00:26:14.311 \longrightarrow 00:26:18.077$  education at the time of this survey.

NOTE Confidence: 0.8231033

00:26:18.080 --> 00:26:21.050 We can see that we can see these gradients,

NOTE Confidence: 0.8231033

 $00:26:21.050 \longrightarrow 00:26:22.370$  especially for poisoning and

NOTE Confidence: 0.8231033

 $00:26:22.370 \longrightarrow 00:26:23.360$  chronic liver disease,

NOTE Confidence: 0.8231033

 $00:26:23.360 \longrightarrow 00:26:24.965$  with the highest risk among

NOTE Confidence: 0.8231033

 $00{:}26{:}24.965 \dashrightarrow 00{:}26{:}26.945$  people with lowest level of formal

NOTE Confidence: 0.8231033

00:26:26.945 --> 00:26:28.835 education and below when we look

NOTE Confidence: 0.8231033

 $00{:}26{:}28.835 \dashrightarrow 00{:}26{:}30.948$  at the hazards of mortality again,

NOTE Confidence: 0.8231033

 $00:26:30.950 \longrightarrow 00:26:32.475$  adjusted problems factors we see

NOTE Confidence: 0.8231033

 $00:26:32.475 \longrightarrow 00:26:34.394$  that for suicide there's a slight

 $00:26:34.394 \longrightarrow 00:26:35.758$  increased risk associated with

NOTE Confidence: 0.8231033

 $00:26:35.758 \longrightarrow 00:26:37.880$  having less than a bachelors degree.

NOTE Confidence: 0.8231033

 $00{:}26{:}37.880 \dashrightarrow 00{:}26{:}39.845$  It's similar and somewhat stronger

NOTE Confidence: 0.8231033

 $00:26:39.845 \longrightarrow 00:26:41.810$  for chronic liver disease mortality

NOTE Confidence: 0.8231033

 $00:26:41.869 \longrightarrow 00:26:43.813$  at the most robust gradient is

NOTE Confidence: 0.8231033

 $00:26:43.813 \longrightarrow 00:26:44.785$  for poisoning deaths.

NOTE Confidence: 0.8231033

 $00:26:44.790 \longrightarrow 00:26:46.502$  Across these different levels

NOTE Confidence: 0.8231033

 $00:26:46.502 \longrightarrow 00:26:47.786$  of of education.

NOTE Confidence: 0.8231033

00:26:47.790 --> 00:26:51.112 So in a similar way, turning to employment.

NOTE Confidence: 0.8231033

 $00:26:51.112 \longrightarrow 00:26:53.476$  We similarly see an Association between

NOTE Confidence: 0.8231033

 $00{:}26{:}53.476 \dashrightarrow 00{:}26{:}55.651$  not being employed and the risk of

NOTE Confidence: 0.8231033

 $00:26:55.651 \longrightarrow 00:26:57.818$  each of these two causes of death.

NOTE Confidence: 0.8231033

 $00:26:57.820 \longrightarrow 00:26:59.044$  In the unadjusted,

NOTE Confidence: 0.8231033

 $00:26:59.044 \longrightarrow 00:27:00.268$  crude results above.

NOTE Confidence: 0.8231033

 $00:27:00.270 \longrightarrow 00:27:01.940$  And in the adjusted analysis,

NOTE Confidence: 0.8231033

 $00:27:01.940 \longrightarrow 00:27:05.188$  it's against stronger for poisoning in front

 $00:27:05.188 \longrightarrow 00:27:08.409$  of liver disease than it is for suicide.

NOTE Confidence: 0.8231033

 $00:27:08.410 \longrightarrow 00:27:10.000$  If we look at income,

NOTE Confidence: 0.8231033

 $00:27:10.000 \longrightarrow 00:27:12.460$  we see this now familiar pattern.

NOTE Confidence: 0.8231033

 $00:27:12.460 \longrightarrow 00:27:15.550$  With higher crude rates suicide.

NOTE Confidence: 0.8231033

 $00{:}27{:}15.550 \dashrightarrow 00{:}27{:}17.300$  Poisoning and chronic liver disease

NOTE Confidence: 0.8231033

 $00:27:17.300 \longrightarrow 00:27:19.050$  deaths associated with lower income,

NOTE Confidence: 0.8231033

 $00:27:19.050 \longrightarrow 00:27:21.636$  specially high rates of poisoning deaths

NOTE Confidence: 0.8231033

 $00:27:21.636 \longrightarrow 00:27:24.409$  among people with net income losses.

NOTE Confidence: 0.8231033

 $00{:}27{:}24.410 \dashrightarrow 00{:}27{:}26.726$  An in the adjusted analysis below.

NOTE Confidence: 0.8231033

 $00:27:26.730 \longrightarrow 00:27:27.885$  These associations have

NOTE Confidence: 0.8231033

 $00{:}27{:}27.885 --> 00{:}27{:}29.040 \ \mathrm{been \ largely \ absorbed},$ 

NOTE Confidence: 0.8231033

 $00:27:29.040 \longrightarrow 00:27:30.584$  perhaps because of correlations

NOTE Confidence: 0.8231033

 $00{:}27{:}30.584 \dashrightarrow 00{:}27{:}32.514$  among the social network variables.

NOTE Confidence: 0.8231033

00:27:32.520 --> 00:27:33.292 But however,

NOTE Confidence: 0.8231033

 $00:27:33.292 \longrightarrow 00:27:34.836$  even after adjusting for

 $00:27:34.836 \longrightarrow 00:27:36.380$  all of these factors,

NOTE Confidence: 0.8231033

 $00{:}27{:}36.380 \dashrightarrow 00{:}27{:}38.762$  the lowest income groups have significantly

NOTE Confidence: 0.8231033

00:27:38.762 --> 00:27:40.350 increased hazards of poisoning

NOTE Confidence: 0.8231033

00:27:40.404 --> 00:27:42.546 mortality in relation to highest groups,

NOTE Confidence: 0.8231033

 $00:27:42.550 \longrightarrow 00:27:44.920$  and finally.

NOTE Confidence: 0.8231033

 $00:27:44.920 \longrightarrow 00:27:46.306$  Considering marital status.

NOTE Confidence: 0.8231033

 $00{:}27{:}46.306 \dashrightarrow 00{:}27{:}48.616$  Adults who are separated divorced

NOTE Confidence: 0.8231033

00:27:48.616 --> 00:27:51.039 have high crude mortality rates,

NOTE Confidence: 0.8231033

 $00{:}27{:}51.040 \dashrightarrow 00{:}27{:}52.815$  higher rates than the other

NOTE Confidence: 0.8231033

00:27:52.815 --> 00:27:54.590 arrow statuses for all three

NOTE Confidence: 0.74625355

00:27:54.663 --> 00:27:56.748 causes of death, and widowed adults,

NOTE Confidence: 0.74625355

 $00:27:56.748 \longrightarrow 00:27:58.884$  likely because of their older age.

NOTE Confidence: 0.74625355

00:27:58.890 --> 00:28:02.380 I didn't mention this before, but.

NOTE Confidence: 0.74625355

 $00:28:02.380 \longrightarrow 00:28:04.750$  The chronic liver disease deaths occur

NOTE Confidence: 0.74625355

 $00:28:04.750 \longrightarrow 00:28:07.577$  at much older ages and this at most.

NOTE Confidence: 0.74625355

 $00:28:07.580 \longrightarrow 00:28:09.116$  With these reports related to alcoholism,

 $00{:}28{:}09.120 \dashrightarrow 00{:}28{:}10.918$  and it takes many years, you know,

NOTE Confidence: 0.74625355

 $00{:}28{:}10.918 \dashrightarrow 00{:}28{:}12.188$  for people that develop alcohol

NOTE Confidence: 0.74625355

 $00{:}28{:}12.188 \dashrightarrow 00{:}28{:}13.254$  related hepatitis and cirrhosis

NOTE Confidence: 0.74625355

 $00:28:13.254 \longrightarrow 00:28:14.778$  can be stretched out over decades,

NOTE Confidence: 0.74625355

 $00{:}28{:}14.780 \longrightarrow 00{:}28{:}16.642$  and so that's an older group and

NOTE Confidence: 0.74625355

 $00:28:16.642 \longrightarrow 00:28:18.628$  that's why you see that as you see,

NOTE Confidence: 0.74625355

 $00:28:18.630 \longrightarrow 00:28:22.398$  the higher rates among those who are widowed.

NOTE Confidence: 0.74625355

 $00:28:22.400 \longrightarrow 00:28:25.120$  An in below the adjusted hazards tell the

NOTE Confidence: 0.74625355

00:28:25.120 --> 00:28:27.408 similar story with the highest hazards,

NOTE Confidence: 0.74625355

 $00:28:27.410 \longrightarrow 00:28:28.709$  especially for poisoning.

NOTE Confidence: 0.74625355

 $00{:}28{:}28.709 \dashrightarrow 00{:}28{:}30.874$  Deaths were separated or sparseness

NOTE Confidence: 0.74625355

 $00{:}28{:}30.874 \dashrightarrow 00{:}28{:}32.989$  compared to married individuals.

NOTE Confidence: 0.74625355

 $00:28:32.990 \longrightarrow 00:28:35.800$  So lot of numbers price,

NOTE Confidence: 0.74625355

 $00:28:35.800 \longrightarrow 00:28:37.936$  but to summarize them.

NOTE Confidence: 0.74625355

 $00:28:37.936 \longrightarrow 00:28:41.140$  Suicide poisoning a chronic liver disease.

 $00:28:41.140 \longrightarrow 00:28:42.532$  The so called death,

NOTE Confidence: 0.74625355

00:28:42.532 --> 00:28:43.924 despair made roughly equal

NOTE Confidence: 0.74625355

 $00:28:43.924 \longrightarrow 00:28:45.220$  contributions to mortality.

NOTE Confidence: 0.74625355

00:28:45.220 --> 00:28:46.704 Men are particularly vulnerable.

NOTE Confidence: 0.74625355

 $00:28:46.704 \longrightarrow 00:28:48.930$  Accidental poisoning appears to be the

NOTE Confidence: 0.74625355

 $00:28:48.986 \longrightarrow 00:28:51.030$  most sensitive and suicide the least to

NOTE Confidence: 0.74625355

 $00:28:51.030 \longrightarrow 00:28:53.380$  these markers of socioeconomic disadvantage,

NOTE Confidence: 0.74625355

 $00:28:53.380 \longrightarrow 00:28:54.258$  and again,

NOTE Confidence: 0.74625355

 $00:28:54.258 \longrightarrow 00:28:55.136$  it's separated.

NOTE Confidence: 0.74625355

 $00:28:55.136 \longrightarrow 00:28:57.331$  Divorced adults not employed individuals

NOTE Confidence: 0.74625355

 $00:28:57.331 \longrightarrow 00:29:00.057$  are at high risk and to a lesser extent,

NOTE Confidence: 0.74625355

 $00:29:00.060 \longrightarrow 00:29:02.082$  so we're low income people and

NOTE Confidence: 0.74625355

 $00{:}29{:}02.082 \dashrightarrow 00{:}29{:}04.140$  those with less formal education.

NOTE Confidence: 0.74625355

 $00:29:04.140 \longrightarrow 00:29:06.558$  All of this.

NOTE Confidence: 0.74625355

00:29:06.560 --> 00:29:08.989 I think provides some support for the

NOTE Confidence: 0.74625355

 $00:29:08.989 \longrightarrow 00:29:11.050$  possibility and only the possibility.

 $00:29:11.050 \longrightarrow 00:29:13.786$  That that social policies that aim

NOTE Confidence: 0.74625355

 $00{:}29{:}13.786 \to 00{:}29{:}15.610$  to improve occupational opportunities

NOTE Confidence: 0.74625355

 $00{:}29{:}15.681 \dashrightarrow 00{:}29{:}18.303$  and financial security seek to improve

NOTE Confidence: 0.74625355

00:29:18.303 --> 00:29:20.488 educational attainment and try to

NOTE Confidence: 0.74625355

 $00:29:20.488 \longrightarrow 00:29:22.323$  diminish or lessen social isolation

NOTE Confidence: 0.74625355

00:29:22.323 --> 00:29:24.802 that they might and I emphasize,

NOTE Confidence: 0.74625355

00:29:24.802 --> 00:29:28.309 might have long term benefits in terms

NOTE Confidence: 0.74625355

 $00:29:28.309 \longrightarrow 00:29:31.790$  of lower risk of death to despair.

NOTE Confidence: 0.74625355

 $00:29:31.790 \longrightarrow 00:29:32.400$  Now.

NOTE Confidence: 0.830936

 $00:29:34.980 \longrightarrow 00:29:37.507$  One related issue that dig into the

NOTE Confidence: 0.830936

 $00:29:37.507 \longrightarrow 00:29:40.081$  weeds a little bit here that interests

NOTE Confidence: 0.830936

 $00{:}29{:}40.081 \dashrightarrow 00{:}29{:}43.252$  me is the extent to which Desta Dispara

NOTE Confidence: 0.830936

 $00:29:43.252 \longrightarrow 00:29:46.174$  Flamel logically related to one another.

NOTE Confidence: 0.830936

 $00:29:46.180 \longrightarrow 00:29:47.988$  Specifically, what is relationship

NOTE Confidence: 0.830936

 $00:29:47.988 \longrightarrow 00:29:50.248$  between suicide and opioid overdose

 $00:29:50.248 \longrightarrow 00:29:52.178$  deaths at the most basic level?

NOTE Confidence: 0.830936

 $00{:}29{:}52.180 \dashrightarrow 00{:}29{:}54.030$  It's conceivable that many opioid

NOTE Confidence: 0.830936

00:29:54.030 --> 00:29:55.880 overdose deaths are in fact

NOTE Confidence: 0.830936

 $00:29:55.947 \longrightarrow 00:29:58.102$  intentional suicide events and that

NOTE Confidence: 0.830936

 $00:29:58.102 \longrightarrow 00:30:00.257$  the opioid overdose crisis overlap.

NOTE Confidence: 0.830936

 $00:30:00.260 \longrightarrow 00:30:01.650$  Apps with the suicidal crisis.

NOTE Confidence: 0.830936

 $00:30:01.650 \longrightarrow 00:30:02.742$  When I say crisis,

NOTE Confidence: 0.830936

00:30:02.742 --> 00:30:04.380 I mean these gradual upward trends

NOTE Confidence: 0.830936

 $00{:}30{:}04.437 \dashrightarrow 00{:}30{:}06.131$  that I showed you in the national

NOTE Confidence: 0.830936

 $00:30:06.131 \longrightarrow 00:30:08.131$  data over the last 20 years was

NOTE Confidence: 0.830936

 $00{:}30{:}08.131 \dashrightarrow 00{:}30{:}09.347$  particularly steep for opioid

NOTE Confidence: 0.830936

 $00:30:09.347 \longrightarrow 00:30:12.408$  deaths over the last several years.

NOTE Confidence: 0.830936

 $00:30:12.410 \longrightarrow 00:30:15.028$  So people who had not fail opioid

NOTE Confidence: 0.830936

00:30:15.028 --> 00:30:17.038 overdoses might be at increased

NOTE Confidence: 0.830936

 $00{:}30{:}17.038 \dashrightarrow 00{:}30{:}19.468$  risk for suicide and vice versa.

NOTE Confidence: 0.830936

 $00:30:19.470 \longrightarrow 00:30:21.798$  And given you know there's some

 $00:30:21.798 \longrightarrow 00:30:23.810$  commonality in their social economic

NOTE Confidence: 0.830936

 $00{:}30{:}23.810 \longrightarrow 00{:}30{:}26.519$ risk factors that I've just shown you,

NOTE Confidence: 0.830936

 $00:30:26.520 \longrightarrow 00:30:28.388$  these aren't unreasonable speculations.

NOTE Confidence: 0.830936

00:30:28.388 --> 00:30:31.883 So this issue kind of caught my interest

NOTE Confidence: 0.830936

 $00:30:31.883 \longrightarrow 00:30:34.355$  went about a year and a half ago.

NOTE Confidence: 0.830936

 $00:30:34.360 \longrightarrow 00:30:36.640$  The directores event IMHO and

NOTE Confidence: 0.830936

 $00:30:36.640 \longrightarrow 00:30:38.920$  Night a issued a warning.

NOTE Confidence: 0.830936

 $00{:}30{:}38.920 \dashrightarrow 00{:}30{:}40.350$  Or not really a warning,

NOTE Confidence: 0.830936

 $00{:}30{:}40.350 \dashrightarrow 00{:}30{:}42.518$  but a message that you see here that

NOTE Confidence: 0.830936

 $00:30:42.518 \longrightarrow 00:30:44.493$  suicide deaths are a major component of

NOTE Confidence: 0.830936

 $00{:}30{:}44.493 \dashrightarrow 00{:}30{:}46.619$  the opioid crisis that must be addressed.

NOTE Confidence: 0.830936

 $00:30:46.620 \longrightarrow 00:30:49.116$  And this was a clear signal from the

NOTE Confidence: 0.830936

 $00{:}30{:}49.116 \dashrightarrow 00{:}30{:}50.759$  federal leadership that they believe

NOTE Confidence: 0.830936

 $00:30:50.759 \longrightarrow 00:30:52.985$  that there was really a tight linkage.

NOTE Confidence: 0.830936

 $00:30:52.990 \longrightarrow 00:30:54.880$  Between suicide and the opioid

 $00:30:54.880 \longrightarrow 00:30:56.770$  epidemic San space to be.

NOTE Confidence: 0.830936

00:30:56.770 --> 00:30:58.660 If you read this thing,

NOTE Confidence: 0.830936

 $00:30:58.660 \longrightarrow 00:31:00.886$  it's based primarily on the observation

NOTE Confidence: 0.830936

 $00:31:00.886 \longrightarrow 00:31:03.077$  that opioids are often involved in

NOTE Confidence: 0.830936

 $00{:}31{:}03.077 \dashrightarrow 00{:}31{:}04.692$  non fatal suicide attempts that

NOTE Confidence: 0.830936

00:31:04.692 --> 00:31:06.979 show up in emergency Department,

NOTE Confidence: 0.830936

 $00{:}31{:}06.980 \dashrightarrow 00{:}31{:}09.524$  so that isn't actually deaths but

NOTE Confidence: 0.830936

 $00:31:09.524 \longrightarrow 00:31:12.155$  non fatal events and so it led

NOTE Confidence: 0.830936

 $00:31:12.155 \longrightarrow 00:31:14.775$  me to wonder is it in fact true

NOTE Confidence: 0.830936

00:31:14.775 --> 00:31:17.570 that that suicide opioid over

NOTE Confidence: 0.830936

 $00{:}31{:}17.570 \dashrightarrow 00{:}31{:}19.247$  deaths substantially overlap?

NOTE Confidence: 0.830936

 $00{:}31{:}19.250 \dashrightarrow 00{:}31{:}21.259$  And if you look at national data

NOTE Confidence: 0.830936

 $00:31:21.259 \longrightarrow 00:31:23.824$  on that and trend data from the

NOTE Confidence: 0.830936

00:31:23.824 --> 00:31:25.456 perspective of suicide deaths,

NOTE Confidence: 0.830936

 $00:31:25.460 \longrightarrow 00:31:28.910$  you can see on this graph that is really an.

NOTE Confidence: 0.830936

 $00:31:28.910 \longrightarrow 00:31:30.980$  These are certified deaths and of

 $00:31:30.980 \longrightarrow 00:31:32.360$  course can be misclassification,

NOTE Confidence: 0.830936

 $00{:}31{:}32.360 \to 00{:}31{:}35.426$  but there's really very little evidence.

NOTE Confidence: 0.830936

 $00:31:35.430 \longrightarrow 00:31:37.712$  That opioids are involved in a significant

NOTE Confidence: 0.830936

 $00:31:37.712 \longrightarrow 00:31:39.688$  or increasing share of suicide deaths.

NOTE Confidence: 0.830936

 $00:31:39.690 \longrightarrow 00:31:40.683$  In United States.

NOTE Confidence: 0.830936

 $00:31:40.683 \longrightarrow 00:31:43.701$  It's that thin orange line you see at the

NOTE Confidence: 0.830936

 $00:31:43.701 \longrightarrow 00:31:45.927$  bottom of the graphs actually have to.

NOTE Confidence: 0.830936

 $00:31:45.930 \longrightarrow 00:31:47.570$  Although it's an increasing number,

NOTE Confidence: 0.830936

 $00:31:47.570 \longrightarrow 00:31:48.914$  it's a declining proportion

NOTE Confidence: 0.830936

00:31:48.914 --> 00:31:50.930 because it's if you think about

NOTE Confidence: 0.830936

00:31:50.987 --> 00:31:52.805 the rising base rate of suicide,

NOTE Confidence: 0.830936

 $00:31:52.810 \longrightarrow 00:31:55.762$  and if you flip this around as we did,

NOTE Confidence: 0.830936

 $00{:}31{:}55.770 \dashrightarrow 00{:}31{:}57.898$ you can see that it's also true

NOTE Confidence: 0.830936

 $00{:}31{:}57.898 \dashrightarrow 00{:}31{:}59.551$  that suicide represents a small

NOTE Confidence: 0.830936

00:31:59.551 --> 00:32:01.241 and declining proportion of opioid

 $00:32:01.241 \longrightarrow 00:32:03.308$  overdose deaths in the United States.

NOTE Confidence: 0.830936

 $00:32:03.310 \longrightarrow 00:32:05.578$  So even if we were to.

NOTE Confidence: 0.830936

 $00:32:05.580 \longrightarrow 00:32:08.107$  Include all of the deaths in which

NOTE Confidence: 0.830936

00:32:08.107 --> 00:32:10.054 it's not possible to determine

NOTE Confidence: 0.830936

 $00:32:10.054 \longrightarrow 00:32:12.034$  the intent of the overdose,

NOTE Confidence: 0.830936

 $00:32:12.040 \longrightarrow 00:32:15.080$  and these are what are referred to therein.

NOTE Confidence: 0.830936

 $00:32:15.080 \dashrightarrow 00:32:17.342$  The Gray line is the Undetermined

NOTE Confidence: 0.830936

00:32:17.342 --> 00:32:19.639 desk unit you would still see.

NOTE Confidence: 0.830936

 $00:32:19.640 \dashrightarrow 00:32:22.680$  It's still the case that a great majority,

NOTE Confidence: 0.830936

 $00:32:22.680 \longrightarrow 00:32:24.960$  an increasing majority of these deaths.

NOTE Confidence: 0.830936

 $00{:}32{:}24.960 \dashrightarrow 00{:}32{:}27.485$  Opioid overdose deaths would be

NOTE Confidence: 0.830936

 $00:32:27.485 \longrightarrow 00:32:29.505$  accidental or unintentional intent.

NOTE Confidence: 0.830936

00:32:29.510 --> 00:32:30.216 Now, Interestingly,

NOTE Confidence: 0.830936

 $00:32:30.216 \longrightarrow 00:32:33.779$  what I kind of went too far there now.

NOTE Confidence: 0.830936

 $00:32:33.780 \longrightarrow 00:32:35.204$  Interesting when we stratified

NOTE Confidence: 0.830936

 $00:32:35.204 \longrightarrow 00:32:37.340$  by age group that last slide,

 $00:32:37.340 \longrightarrow 00:32:39.458$  we see that suicide deaths do

NOTE Confidence: 0.830936

 $00{:}32{:}39.458 {\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}} 00{:}32{:}40.870$  represent a larger proportion

NOTE Confidence: 0.81552655

 $00:32:40.934 \longrightarrow 00:32:42.694$  of the female than male

NOTE Confidence: 0.81552655

 $00:32:42.694 \longrightarrow 00:32:43.750$  opioid overdose deaths.

NOTE Confidence: 0.81552655

 $00:32:43.750 \longrightarrow 00:32:45.822$  You see that there on the left

NOTE Confidence: 0.81552655

 $00:32:45.822 \longrightarrow 00:32:48.100$  hand side of the slide and a

NOTE Confidence: 0.81552655

 $00:32:48.100 \longrightarrow 00:32:50.080$  larger portion of the older than

NOTE Confidence: 0.81552655

 $00:32:50.155 \longrightarrow 00:32:52.287$  younger opiate overdose deaths,

NOTE Confidence: 0.81552655

 $00:32:52.290 \longrightarrow 00:32:54.426$  and this may be because females,

NOTE Confidence: 0.81552655

 $00:32:54.430 \longrightarrow 00:32:56.566$  as compared with master side S,

NOTE Confidence: 0.81552655

 $00{:}32{:}56.570 \dashrightarrow 00{:}32{:}57.785$  generally involve ingestion's

NOTE Confidence: 0.81552655

 $00{:}32{:}57.785 \dashrightarrow 00{:}32{:}59.810$  and less often involve firearms.

NOTE Confidence: 0.81552655

 $00:32:59.810 \longrightarrow 00:33:01.745$  And because suicide deaths among

NOTE Confidence: 0.81552655

 $00:33:01.745 \longrightarrow 00:33:04.550$  older people more often occur in the

NOTE Confidence: 0.81552655

 $00:33:04.550 \longrightarrow 00:33:06.555$  setting of chronic medical conditions,

 $00:33:06.560 \longrightarrow 00:33:09.234$  many of which are painful and therefore

NOTE Confidence: 0.81552655

 $00{:}33{:}09.234 \dashrightarrow 00{:}33{:}11.320$  are often treated with opioids.

NOTE Confidence: 0.81552655

 $00:33:11.320 \longrightarrow 00:33:14.057$  So it's not surprising to see opioids

NOTE Confidence: 0.81552655

00:33:14.057 --> 00:33:17.276 show up in urine or blood of older,

NOTE Confidence: 0.81552655

00:33:17.280 --> 00:33:20.008 older suicide decedents now.

NOTE Confidence: 0.81552655

 $00:33:20.010 \longrightarrow 00:33:20.970$  Now just come.

NOTE Confidence: 0.81552655

 $00:33:20.970 \longrightarrow 00:33:22.890$  Just because most opioid overdose deaths

NOTE Confidence: 0.81552655

 $00:33:22.890 \longrightarrow 00:33:24.743$  are intentional doesn't mean that

NOTE Confidence: 0.81552655

 $00{:}33{:}24.743 \dashrightarrow 00{:}33{:}26.957$  suicide and opioid overdose deaths are

NOTE Confidence: 0.81552655

00:33:27.012 --> 00:33:29.020 entirely distinct clinical phenomena.

NOTE Confidence: 0.81552655

 $00:33:29.020 \longrightarrow 00:33:29.740$  In fact,

NOTE Confidence: 0.81552655

 $00:33:29.740 \longrightarrow 00:33:31.540$  there's some evidence that these

NOTE Confidence: 0.81552655

 $00:33:31.540 \longrightarrow 00:33:33.484$  are related processes in the sense

NOTE Confidence: 0.81552655

 $00:33:33.484 \longrightarrow 00:33:35.092$  that they Co occur more often

NOTE Confidence: 0.81552655

 $00:33:35.092 \longrightarrow 00:33:36.966$  than one would expect by chance.

NOTE Confidence: 0.81552655

 $00:33:36.970 \longrightarrow 00:33:38.836$  So here results from an analysis

 $00:33:38.836 \longrightarrow 00:33:40.470$  of the nice arc data,

NOTE Confidence: 0.81552655

 $00{:}33{:}40.470 \longrightarrow 00{:}33{:}42.350$  and that's a large nationally

NOTE Confidence: 0.81552655

 $00:33:42.350 \longrightarrow 00:33:43.102$  representative household

NOTE Confidence: 0.81552655

00:33:43.102 --> 00:33:44.599 epidemiological survey that was

NOTE Confidence: 0.81552655

 $00:33:44.599 \longrightarrow 00:33:46.169$  performed by Julian Santiago Tenorio.

NOTE Confidence: 0.81552655

 $00:33:46.170 \longrightarrow 00:33:47.766$  He was at Columbia.

NOTE Confidence: 0.81552655

00:33:47.766 --> 00:33:50.750 And it reveals in this first slide.

NOTE Confidence: 0.81552655

 $00{:}33{:}50.750 \dashrightarrow 00{:}33{:}53.036$  Here we're looking at the lifetime

NOTE Confidence: 0.81552655

 $00:33:53.036 \longrightarrow 00:33:54.560$  rates of suicide ideations

NOTE Confidence: 0.81552655

 $00{:}33{:}54.625 \to 00{:}33{:}56.500$  and attempts among two groups,

NOTE Confidence: 0.81552655

 $00{:}33{:}56.500 \dashrightarrow 00{:}33{:}58.786$  those with and without past year.

NOTE Confidence: 0.81552655

 $00:33:58.790 \longrightarrow 00:34:00.322$  Prescription opioid use disorder,

NOTE Confidence: 0.81552655

 $00{:}34{:}00.322 \dashrightarrow 00{:}34{:}03.437$  and you see that they have those with

NOTE Confidence: 0.81552655

 $00:34:03.437 \longrightarrow 00:34:05.687$  the prescription abuse or have much,

NOTE Confidence: 0.81552655

 $00:34:05.690 \longrightarrow 00:34:07.850$  much higher lifetime rates of of

 $00:34:07.850 \longrightarrow 00:34:09.900$  reporting suicidal ideations and reporting.

NOTE Confidence: 0.81552655

00:34:09.900 --> 00:34:11.892 Having made an attempt,

NOTE Confidence: 0.81552655

00:34:11.892 --> 00:34:14.382 this is becomes more interesting

NOTE Confidence: 0.81552655

 $00:34:14.382 \longrightarrow 00:34:16.733$  when you look prospectively one

NOTE Confidence: 0.81552655

 $00:34:16.733 \longrightarrow 00:34:19.630$  of the things about the 1st 2.

NOTE Confidence: 0.81552655

 $00:34:19.630 \longrightarrow 00:34:20.850$  Sir, nice are surveys.

NOTE Confidence: 0.81552655

 $00:34:20.850 \longrightarrow 00:34:21.765$  Is there link?

NOTE Confidence: 0.81552655

 $00:34:21.770 \longrightarrow 00:34:24.074$  There are two waves of 1 sample three

NOTE Confidence: 0.81552655

 $00:34:24.074 \longrightarrow 00:34:26.512$  years apart and what we found here is

NOTE Confidence: 0.81552655

 $00:34:26.512 \longrightarrow 00:34:28.089$  that even after extensive adjustment

NOTE Confidence: 0.81552655

 $00:34:28.089 \longrightarrow 00:34:30.308$  for a wide range of factors that

NOTE Confidence: 0.81552655

 $00{:}34{:}30.308 \dashrightarrow 00{:}34{:}33.290$  are listed below there you can see.

NOTE Confidence: 0.81552655

 $00:34:33.290 \longrightarrow 00:34:35.190$  That that as compared to

NOTE Confidence: 0.81552655

 $00:34:35.190 \longrightarrow 00:34:36.330$  those without pasture,

NOTE Confidence: 0.81552655

 $00:34:36.330 \longrightarrow 00:34:38.766$  non medical opioid use or disorder at

NOTE Confidence: 0.81552655

 $00:34:38.766 \longrightarrow 00:34:41.544$  wave one those with the non medical

 $00:34:41.544 \longrightarrow 00:34:43.619$  opioid use were significantly more

NOTE Confidence: 0.81552655

 $00:34:43.619 \longrightarrow 00:34:45.919$  likely to develop to develop suicidal

NOTE Confidence: 0.81552655

 $00:34:45.919 \longrightarrow 00:34:48.716$  ideations as you see on this slide

NOTE Confidence: 0.81552655

 $00:34:48.716 \longrightarrow 00:34:51.674$  here over the ensuing three years.

NOTE Confidence: 0.81552655

 $00{:}34{:}51.680 \dashrightarrow 00{:}34{:}54.236$  Now we also looked at a suicide attempt here,

NOTE Confidence: 0.81552655

 $00:34:54.240 \longrightarrow 00:34:56.504$  and as you can see on the right,

NOTE Confidence: 0.81552655

 $00:34:56.510 \longrightarrow 00:34:57.930$  we didn't find a signal.

NOTE Confidence: 0.81552655

 $00{:}34{:}57.930 \dashrightarrow 00{:}34{:}59.470$  But you can also see that they

NOTE Confidence: 0.81552655

 $00:34:59.470 \longrightarrow 00:35:00.800$  are very wide confidence intervals

NOTE Confidence: 0.81552655

 $00{:}35{:}00.800 \dashrightarrow 00{:}35{:}02.970$  and it's my own sense that these

NOTE Confidence: 0.81552655

 $00:35:02.970 \longrightarrow 00:35:04.180$  analysis are underpowered,

NOTE Confidence: 0.81552655

 $00:35:04.180 \dashrightarrow 00:35:06.292$  but I showed them to you so that

NOTE Confidence: 0.81552655

 $00{:}35{:}06.292 --> 00{:}35{:}08.149$ you can make what you make,

NOTE Confidence: 0.81552655

 $00:35:08.150 \longrightarrow 00:35:10.740$  what you will of them in a.

NOTE Confidence: 0.81552655

 $00:35:10.740 \longrightarrow 00:35:12.440$  I'm on a related topic.

 $00:35:14.750 \longrightarrow 00:35:18.035$  And this is an analysis of the nested data.

NOTE Confidence: 0.8027417

 $00:35:18.040 \longrightarrow 00:35:19.860$  It's another large epidemiologic survey.

NOTE Confidence: 0.8027417

 $00:35:19.860 \longrightarrow 00:35:21.685$  It's of the civilian non

NOTE Confidence: 0.8027417

 $00:35:21.685 \longrightarrow 00:35:22.415$  institutionalized population.

NOTE Confidence: 0.8027417

 $00:35:22.420 \longrightarrow 00:35:24.570$  Hillary samples.

NOTE Confidence: 0.8027417

 $00:35:24.570 \longrightarrow 00:35:27.114$  This is a post actually is now an

NOTE Confidence: 0.8027417

 $00{:}35{:}27.114 \dashrightarrow 00{:}35{:}28.480$  assistant professor at Rutgers.

NOTE Confidence: 0.8027417

 $00:35:28.480 \longrightarrow 00:35:30.496$  I'm pleased to say she similarly

NOTE Confidence: 0.8027417

 $00:35:30.496 \longrightarrow 00:35:32.719$  found that if you look at her,

NOTE Confidence: 0.8027417

 $00:35:32.720 \longrightarrow 00:35:34.230$  she's doing a propensity score

NOTE Confidence: 0.8027417

 $00{:}35{:}34.230 {\:{\circ}{\circ}{\circ}}>00{:}35{:}36.172$  weighting based on a wide range

NOTE Confidence: 0.8027417

00:35:36.172 --> 00:35:38.032 of clinical variables and social

NOTE Confidence: 0.8027417

 $00{:}35{:}38.032 \dashrightarrow 00{:}35{:}39.520$  economic variables that a dults

NOTE Confidence: 0.8027417

 $00:35:39.582 \longrightarrow 00:35:41.328$  with past year opioid misuse which

NOTE Confidence: 0.8027417

 $00:35:41.328 \longrightarrow 00:35:43.228$  I'm showing here on the right,

NOTE Confidence: 0.8027417

 $00{:}35{:}43.228 \operatorname{--}{>} 00{:}35{:}45.412$  were more likely to report suicidal

 $00:35:45.412 \longrightarrow 00:35:47.981$  ideations in the past year and plans then

NOTE Confidence: 0.8027417

 $00:35:47.981 \dashrightarrow 00:35:50.650$  were people with no opioid use on the left.

NOTE Confidence: 0.8027417

 $00:35:50.650 \longrightarrow 00:35:53.162$  And in fact that no abuse in those

NOTE Confidence: 0.8027417

 $00:35:53.162 \longrightarrow 00:35:55.427$  the medical produced in the middle.

NOTE Confidence: 0.8027417

 $00:35:55.430 \longrightarrow 00:35:57.800$  Look very similar and again,

NOTE Confidence: 0.8027417

 $00:35:57.800 \longrightarrow 00:36:00.160$  it's similar to Julian's work.

NOTE Confidence: 0.8027417

 $00:36:00.160 \longrightarrow 00:36:03.394$  It's suggesting that there's a connection

NOTE Confidence: 0.8027417

 $00:36:03.394 \longrightarrow 00:36:07.080$  between opioid misuse and suicidal behavior.

NOTE Confidence: 0.8027417

 $00:36:07.080 \longrightarrow 00:36:09.170$  Now these sorts of findings.

NOTE Confidence: 0.05135092

 $00:36:11.300 \longrightarrow 00:36:17.428$  Razum an interesting conceptual issue.

NOTE Confidence: 0.05135092

 $00{:}36{:}17.430 \dashrightarrow 00{:}36{:}19.901$  But should we embrace a unified perspective

NOTE Confidence: 0.05135092

 $00:36:19.901 \longrightarrow 00:36:21.906$  to intentional and unintentional injury

NOTE Confidence: 0.05135092

 $00:36:21.906 \longrightarrow 00:36:24.570$  that emphasizes there she shared social

NOTE Confidence: 0.05135092

00:36:24.570 --> 00:36:26.600 determinants like economic adversity,

NOTE Confidence: 0.05135092

 $00:36:26.600 \longrightarrow 00:36:28.705$  as I've been emphasizing this

00:36:28.705 --> 00:36:30.810 morning or maybe even biological

NOTE Confidence: 0.05135092

 $00{:}36{:}30.878 \dashrightarrow 00{:}36{:}32.708$  risk factors like impulsivity and

NOTE Confidence: 0.05135092

 $00:36:32.708 \longrightarrow 00:36:35.360$  so should we kind of conception,

NOTE Confidence: 0.05135092

 $00{:}36{:}35{.}360 {\:\dashrightarrow\:} 00{:}36{:}37.024$  lumped together into sexualize

NOTE Confidence: 0.05135092

 $00:36:37.024 \longrightarrow 00:36:39.950$  them as self injury or self harm?

NOTE Confidence: 0.05135092

00:36:39.950 --> 00:36:40.770 Or Alternatively,

NOTE Confidence: 0.05135092

 $00:36:40.770 \longrightarrow 00:36:42.820$  should we assume the traditional

NOTE Confidence: 0.05135092

 $00:36:42.820 \longrightarrow 00:36:44.541$  psychological perspective that distinguishes

NOTE Confidence: 0.05135092

 $00:36:44.541 \longrightarrow 00:36:47.127$  the motivation of overdoses and considers

NOTE Confidence: 0.05135092

 $00:36:47.127 \longrightarrow 00:36:48.980$  unintentional and intentional overdoses?

NOTE Confidence: 0.05135092

 $00:36:48.980 \longrightarrow 00:36:50.410$  As discrete or separate phenomenon.

NOTE Confidence: 0.05135092

00:36:50.410 --> 00:36:51.830 Now most mental health professionals,

NOTE Confidence: 0.05135092

 $00:36:51.830 \longrightarrow 00:36:54.007$  of course adhere to the latter perspective

NOTE Confidence: 0.05135092

 $00{:}36{:}54.007 \dashrightarrow 00{:}36{:}55.538$  that psychological perspective and you know,

NOTE Confidence: 0.05135092

00:36:55.540 --> 00:36:57.250 if you think I'm from Columbia,

NOTE Confidence: 0.05135092

 $00:36:57.250 \longrightarrow 00:36:58.093$  so you know,

 $00:36:58.093 \longrightarrow 00:36:59.779$  I think about the Columbia suicide

NOTE Confidence: 0.05135092

 $00{:}36{:}59.779 \dashrightarrow 00{:}37{:}01.518$  Severity Rating scale and that scale.

NOTE Confidence: 0.05135092

00:37:01.520 --> 00:37:02.950 Like all suicide scale places,

NOTE Confidence: 0.05135092

 $00:37:02.950 \longrightarrow 00:37:04.300$  great emphasis on intentionality as

NOTE Confidence: 0.05135092

 $00:37:04.300 \dashrightarrow 00:37:06.080$  this in quinone of suicidal behavior.

NOTE Confidence: 0.05135092

 $00{:}37{:}06.080 \dashrightarrow 00{:}37{:}08.136$  But I want to point out that there

NOTE Confidence: 0.05135092

 $00:37:08.136 \longrightarrow 00:37:09.947$  are dissenting voices out there and

NOTE Confidence: 0.05135092

 $00{:}37{:}09.947 \dashrightarrow 00{:}37{:}11.492$  they're calling a little louder.

NOTE Confidence: 0.05135092

 $00{:}37{:}11.500 \dashrightarrow 00{:}37{:}13.488$  I think over the last several years.

NOTE Confidence: 0.05135092

 $00{:}37{:}13.490 \dashrightarrow 00{:}37{:}15.555$  And here's a quote in Rocket and

NOTE Confidence: 0.05135092

 $00{:}37{:}15.555 \dashrightarrow 00{:}37{:}17.200$  his colleagues are one of them.

NOTE Confidence: 0.05135092

 $00:37:17.200 \longrightarrow 00:37:19.704$  And here's a quote from from his work.

NOTE Confidence: 0.05135092

 $00:37:19.710 \dashrightarrow 00:37:21.606$  Suicide and lethal overdoses often share

NOTE Confidence: 0.05135092

 $00{:}37{:}21.606 \dashrightarrow 00{:}37{:}23.304$  many of the antecedent characteristics

NOTE Confidence: 0.05135092

 $00:37:23.304 \longrightarrow 00:37:25.170$  in terms of emotional, behavioral,

 $00:37:25.170 \longrightarrow 00:37:26.530$  familial, and social disruptions.

NOTE Confidence: 0.05135092

 $00{:}37{:}26.530 \dashrightarrow 00{:}37{:}29.311$  He goes on to say the label of accident

NOTE Confidence: 0.05135092

 $00{:}37{:}29.311 \dashrightarrow 00{:}37{:}32.196$  is served as a default determination.

NOTE Confidence: 0.05135092

 $00:37:32.200 \longrightarrow 00:37:33.898$  When definitive approximal

NOTE Confidence: 0.05135092

00:37:33.898 --> 00:37:38.160 evidence remains uncertain, so.

NOTE Confidence: 0.05135092

 $00:37:38.160 \longrightarrow 00:37:38.774$  So again,

NOTE Confidence: 0.05135092

 $00:37:38.774 \longrightarrow 00:37:40.923$  there's this question about how much are

NOTE Confidence: 0.05135092

00:37:40.923 --> 00:37:43.260 these sort of all one phenomena versus

NOTE Confidence: 0.05135092

 $00:37:43.260 \dashrightarrow 00:37:45.069$  discrete phenomenon and and this is,

NOTE Confidence: 0.05135092

00:37:45.070 --> 00:37:45.698 I apologize,

NOTE Confidence: 0.05135092

 $00{:}37{:}45.698 {\:\dashrightarrow\:} 00{:}37{:}47.268$  somewhat of a confusing slide.

NOTE Confidence: 0.05135092

 $00:37:47.270 \longrightarrow 00:37:49.454$  I'll try to walk you through it.

NOTE Confidence: 0.05135092

00:37:49.460 --> 00:37:51.658 This is from our own work here.

NOTE Confidence: 0.05135092

 $00:37:51.660 \dashrightarrow 00:37:53.550$  I'm putting together two different studies,

NOTE Confidence: 0.05135092

 $00:37:53.550 \longrightarrow 00:37:54.782$  two different studies involved

NOTE Confidence: 0.05135092

 $00:37:54.782 \longrightarrow 00:37:56.322$  linking Medicaid data claims to

 $00:37:56.322 \longrightarrow 00:37:57.939$  the National Index Death Index.

NOTE Confidence: 0.05135092

 $00:37:57.940 \dashrightarrow 00:38:00.160$  So we're following people who are

NOTE Confidence: 0.05135092

00:38:00.160 --> 00:38:01.971 in the emergency Department and

NOTE Confidence: 0.05135092

 $00:38:01.971 \longrightarrow 00:38:03.798$  looking out over a year to see

NOTE Confidence: 0.05135092

 $00:38:03.798 \longrightarrow 00:38:05.477$  who dies and what we found.

NOTE Confidence: 0.05135092

 $00{:}38{:}05.480 \dashrightarrow 00{:}38{:}07.984$  There is an what I'm bringing together again,

NOTE Confidence: 0.05135092

 $00:38:07.990 \longrightarrow 00:38:08.956$  or the risks.

NOTE Confidence: 0.05135092

 $00{:}38{:}08.956 \dashrightarrow 00{:}38{:}10.888$  Of suicide in the year following

NOTE Confidence: 0.05135092

 $00{:}38{:}10.888 \dashrightarrow 00{:}38{:}13.056$  suicide attempts an in the year

NOTE Confidence: 0.05135092

 $00:38:13.056 \longrightarrow 00:38:14.841$  following non fatal opioid overdose.

NOTE Confidence: 0.05135092

 $00{:}38{:}14.850 \dashrightarrow 00{:}38{:}17.098$  And if you just focus on the female

NOTE Confidence: 0.05135092

 $00:38:17.098 \longrightarrow 00:38:19.433$  then those two histograms and blue and

NOTE Confidence: 0.05135092

 $00:38:19.433 \dashrightarrow 00:38:21.939$  yellow there are roughly the same height.

NOTE Confidence: 0.05135092

 $00:38:21.940 \longrightarrow 00:38:24.252$  What that this in fact is showing even

NOTE Confidence: 0.05135092

00:38:24.252 --> 00:38:26.449 though it's from two different studies.

 $00:38:26.450 \longrightarrow 00:38:27.926$  The methods are similar.

NOTE Confidence: 0.05135092

 $00{:}38{:}27.926 \dashrightarrow 00{:}38{:}29.771$  We are finding similar risks

NOTE Confidence: 0.05135092

 $00:38:29.771 \longrightarrow 00:38:31.259$  at the group level.

NOTE Confidence: 0.05135092

 $00:38:31.260 \longrightarrow 00:38:34.347$  So that is a woman showing up into the

NOTE Confidence: 0.05135092

 $00:38:34.347 \longrightarrow 00:38:36.700$  emergency Department with a non fatal

NOTE Confidence: 0.05135092

00:38:36.700 --> 00:38:39.490 suicide attempt is just as likely over

NOTE Confidence: 0.05135092

 $00:38:39.490 \longrightarrow 00:38:42.220$  the following year to die of suicide,

NOTE Confidence: 0.05135092

00:38:42.220 --> 00:38:44.884 as is a woman who shows up with a

NOTE Confidence: 0.05135092

 $00{:}38{:}44.884 \dashrightarrow 00{:}38{:}47.510$  non fatal opioid overdose event.

NOTE Confidence: 0.05135092

 $00:38:47.510 \longrightarrow 00:38:49.355$  Some sense the opioid overdose

NOTE Confidence: 0.05135092

 $00{:}38{:}49.355 \dashrightarrow 00{:}38{:}51.670$  and a suicide attempt for women,

NOTE Confidence: 0.05135092

 $00:38:51.670 \longrightarrow 00:38:53.938$  at least according to these analysis,

NOTE Confidence: 0.05135092

00:38:53.940 --> 00:38:55.448 are risks, risk equivalents.

NOTE Confidence: 0.05135092

 $00{:}38{:}55.448 \dashrightarrow 00{:}38{:}57.333$  But let me emphasize this,

NOTE Confidence: 0.05135092

 $00:38:57.340 \longrightarrow 00:38:59.686$  showing similar risks at the group

NOTE Confidence: 0.05135092

 $00:38:59.686 \longrightarrow 00:39:02.369$  level like this isn't the same thing.

 $00:39:02.370 \longrightarrow 00:39:04.526$  Is showing at an individual level and

NOTE Confidence: 0.05135092

 $00{:}39{:}04.526 \to 00{:}39{:}07.451$  that so it isn't yet demonstrated that

NOTE Confidence: 0.05135092

 $00:39:07.451 \longrightarrow 00:39:09.861$  people who make unintentional suicide

NOTE Confidence: 0.05135092

00:39:09.861 --> 00:39:12.374 overdoses are equally at risk for

NOTE Confidence: 0.05135092

 $00:39:12.374 \longrightarrow 00:39:14.334$  both fatal unintentional and suicidal

NOTE Confidence: 0.833633

 $00{:}39{:}14.340 \dashrightarrow 00{:}39{:}17.105$  fatal events, as might be expected under

NOTE Confidence: 0.833633

 $00:39:17.105 \longrightarrow 00:39:19.542$  the assumption under the robust assumption

NOTE Confidence: 0.833633

 $00:39:19.542 \longrightarrow 00:39:21.912$  of the unified self injury model.

NOTE Confidence: 0.833633

 $00{:}39{:}21.920 \longrightarrow 00{:}39{:}26.520$  So to put that concept to the test.

NOTE Confidence: 0.833633

 $00:39:26.520 \longrightarrow 00:39:28.941$  What we did is we found a cohort of

NOTE Confidence: 0.833633

00:39:28.941 --> 00:39:31.103 patients who presented the California

NOTE Confidence: 0.833633

 $00:39:31.103 \longrightarrow 00:39:32.935$  Emergency Department with either

NOTE Confidence: 0.833633

 $00{:}39{:}32.935 \dashrightarrow 00{:}39{:}35.108$  accidental or intentional non fatal

NOTE Confidence: 0.833633

 $00{:}39{:}35.108 \dashrightarrow 00{:}39{:}37.093$  overdoses to evaluate their risk

NOTE Confidence: 0.833633

 $00:39:37.093 \longrightarrow 00:39:39.024$  of suicide and accidental overdose

 $00:39:39.024 \longrightarrow 00:39:40.914$  deaths over the following year.

NOTE Confidence: 0.833633

 $00:39:40.920 \longrightarrow 00:39:43.194$  Sort of similar to the studies

NOTE Confidence: 0.833633

 $00:39:43.194 \longrightarrow 00:39:44.710$  I've just shown you,

NOTE Confidence: 0.833633

 $00:39:44.710 \longrightarrow 00:39:46.990$  but here we're following individuals now.

NOTE Confidence: 0.833633

 $00:39:46.990 \longrightarrow 00:39:48.594$  If accidental and intentional

NOTE Confidence: 0.833633

 $00:39:48.594 \longrightarrow 00:39:50.198$  groups have similar proportionate

NOTE Confidence: 0.833633

 $00:39:50.198 \longrightarrow 00:39:52.287$  risks of these types of deaths,

NOTE Confidence: 0.833633

00:39:52.290 --> 00:39:54.180 it would support the unified

NOTE Confidence: 0.833633

 $00:39{:}54.180 \dashrightarrow 00{:}39{:}55.746$  self injury perspective, right?

NOTE Confidence: 0.833633

 $00:39:55.746 \longrightarrow 00:39:57.450$  People would travel along.

NOTE Confidence: 0.833633

 $00:39:57.450 \longrightarrow 00:39:58.722$  With the same proportionality,

NOTE Confidence: 0.833633

 $00:39:58.722 \longrightarrow 00:40:00.312$  they travel along that those.

NOTE Confidence: 0.833633

 $00:40:00.320 \longrightarrow 00:40:03.300$  Blue lines as the black lines, right?

NOTE Confidence: 0.7919499

00:40:05.450 --> 00:40:09.095 But but if it were the other way around,

NOTE Confidence: 0.7919499

00:40:09.100 --> 00:40:11.506 and if fatal accident overdoses, right?

NOTE Confidence: 0.7919499

00:40:11.506 --> 00:40:13.822 Just say if non fatal accidental

 $00:40:13.822 \longrightarrow 00:40:15.477$  overdoses had greater risk

NOTE Confidence: 0.7919499

00:40:15.477 --> 00:40:17.197 of fatal accidental overdose,

NOTE Confidence: 0.7919499

 $00:40:17.200 \longrightarrow 00:40:19.223$  then of than those with non fatal

NOTE Confidence: 0.7919499

 $00:40:19.223 \longrightarrow 00:40:21.693$  overdose then it would support the

NOTE Confidence: 0.7919499

 $00:40:21.693 \longrightarrow 00:40:23.235$  traditional psychological perspective

NOTE Confidence: 0.7919499

 $00:40:23.235 \longrightarrow 00:40:24.777$  that emphasizes intentionality

NOTE Confidence: 0.7919499

 $00:40:24.777 \longrightarrow 00:40:26.918$  as a central defining feature.

NOTE Confidence: 0.7919499

00:40:26.920 --> 00:40:29.248 People would be much more likely

NOTE Confidence: 0.7919499

 $00{:}40{:}29.248 \dashrightarrow 00{:}40{:}31.779$  to travel along the black lines.

NOTE Confidence: 0.7919499

 $00{:}40{:}31.780 \dashrightarrow 00{:}40{:}33.860$  The accidental non fatal overdoses

NOTE Confidence: 0.7919499

 $00{:}40{:}33.860 \dashrightarrow 00{:}40{:}36.340$  would be in greatly increased risk.

NOTE Confidence: 0.7919499

 $00{:}40{:}36.340 \dashrightarrow 00{:}40{:}37.972$  Fatal accidental overdoses and

NOTE Confidence: 0.7919499

 $00:40:37.972 \longrightarrow 00:40:40.012$  those with intentional not fatal

NOTE Confidence: 0.7919499

 $00:40:40.012 \longrightarrow 00:40:42.112$  events would be a greatly increased

NOTE Confidence: 0.7919499

 $00:40:42.112 \longrightarrow 00:40:44.040$  risk for suicide deaths and not.

 $00:40:44.040 \longrightarrow 00:40:46.240$  Up for the related concepts.

NOTE Confidence: 0.7919499

 $00{:}40{:}46.240 \dashrightarrow 00{:}40{:}49.600$  So if you as you can see from

NOTE Confidence: 0.7919499

 $00:40:49.600 \longrightarrow 00:40:51.060$  the results here.

NOTE Confidence: 0.8123006

 $00:40:53.420 \longrightarrow 00:40:55.036$  The findings provide support

NOTE Confidence: 0.8123006

 $00:40:55.036 \longrightarrow 00:40:56.248$  for both perspectives.

NOTE Confidence: 0.8123006

00:40:56.250 --> 00:40:58.134 Suicide risks are here in yellow

NOTE Confidence: 0.8123006

 $00:40:58.134 \longrightarrow 00:41:00.370$  and that they are greater for

NOTE Confidence: 0.8123006

 $00:41:00.370 \longrightarrow 00:41:02.660$  patients with non fatal intentional

NOTE Confidence: 0.8123006

 $00:41:02.660 \longrightarrow 00:41:04.730$  overdoses than accidental overdoses.

NOTE Confidence: 0.8123006

 $00:41:04.730 \longrightarrow 00:41:07.226$  While the risks of accidental overdose

NOTE Confidence: 0.8123006

 $00{:}41{:}07.226 \dashrightarrow 00{:}41{:}09.720$  death risk circling blue were much

NOTE Confidence: 0.8123006

00:41:09.720 --> 00:41:12.000 greater for patients with non fatal,

NOTE Confidence: 0.8123006

00:41:12.000 --> 00:41:13.700 accidental and intentional overdoses,

NOTE Confidence: 0.8123006

 $00:41:13.700 \longrightarrow 00:41:16.250$  so this differential mortality risks with

NOTE Confidence: 0.8123006

 $00:41:16.313 \longrightarrow 00:41:18.467$  non fatal overdoses by intense supports.

NOTE Confidence: 0.8123006

 $00:41:18.470 \longrightarrow 00:41:20.990$  The clinical utility of distinguishing

 $00:41:20.990 \longrightarrow 00:41:23.510$  non fatal overdoses by intent.

NOTE Confidence: 0.8123006

00:41:23.510 --> 00:41:25.255 However, if you look at

NOTE Confidence: 0.8123006

00:41:25.255 --> 00:41:27.000 that findings on the right,

NOTE Confidence: 0.8123006

 $00:41:27.000 \longrightarrow 00:41:29.016$  which look quite the same in

NOTE Confidence: 0.8123006

 $00:41:29.016 \longrightarrow 00:41:30.840$  terms of their their shape,

NOTE Confidence: 0.8123006

 $00:41:30.840 \longrightarrow 00:41:32.610$  but the scale has changed and

NOTE Confidence: 0.8123006

 $00:41:32.610 \longrightarrow 00:41:34.680$  the scale here is standardized,

NOTE Confidence: 0.8123006

 $00:41:34.680 \longrightarrow 00:41:36.196$  mortality rates rate ratios.

NOTE Confidence: 0.8123006

 $00{:}41{:}36.196 \dashrightarrow 00{:}41{:}38.855$  Those are the extent to which people

NOTE Confidence: 0.8123006

 $00{:}41{:}38.855 \dashrightarrow 00{:}41{:}41.367$  are more likely to die of these causes

NOTE Confidence: 0.8123006

 $00:41:41.367 \longrightarrow 00:41:43.787$  of death than would be expected on

NOTE Confidence: 0.8123006

 $00:41:43.787 \longrightarrow 00:41:45.498$  the from the general population,

NOTE Confidence: 0.8123006

 $00:41:45.498 \longrightarrow 00:41:47.238$  based on their demographic characteristics.

NOTE Confidence: 0.8123006

 $00:41:47.240 \longrightarrow 00:41:49.592$  And here you see that all the groups

NOTE Confidence: 0.8123006

 $00:41:49.592 \longrightarrow 00:41:51.905$  have greatly elevated risks for external

 $00:41:51.905 \longrightarrow 00:41:53.975$  cause mortality across the groups.

NOTE Confidence: 0.8123006

 $00:41:53.980 \longrightarrow 00:41:56.220$  And that if you focus on the fact

NOTE Confidence: 0.8123006

 $00:41:56.220 \longrightarrow 00:41:58.506$  that there are much greater than one.

NOTE Confidence: 0.8123006

 $00:41:58.510 \longrightarrow 00:42:00.688$  Is innocence supportive of this unified

NOTE Confidence: 0.8123006

 $00:42:00.688 \longrightarrow 00:42:02.140$  self injury conceptualisation that

NOTE Confidence: 0.8123006

00:42:02.189 --> 00:42:04.249 emphasizes common underlying determinants,

NOTE Confidence: 0.8123006

 $00:42:04.250 \longrightarrow 00:42:06.030$  either social or biological,

NOTE Confidence: 0.8123006

 $00:42:06.030 \longrightarrow 00:42:08.700$  that might that might contribute to

NOTE Confidence: 0.8123006

 $00:42:08.775 \longrightarrow 00:42:11.623$  their risks or the other causes of death.

NOTE Confidence: 0.8123006

00:42:11.630 --> 00:42:14.500 So a clinical implication of all this,

NOTE Confidence: 0.8123006

 $00{:}42{:}14.500 \dashrightarrow 00{:}42{:}17.124$  and I realize that it's it's a little

NOTE Confidence: 0.8123006

 $00:42:17.124 \longrightarrow 00:42:20.357$  bit in the weeds is that probably makes

NOTE Confidence: 0.8123006

 $00{:}42{:}20.357 \dashrightarrow 00{:}42{:}22.613$  good sense to integrate substance

NOTE Confidence: 0.8123006

 $00:42:22.613 \longrightarrow 00:42:25.158$  use and mental health services,

NOTE Confidence: 0.8123006

00:42:25.160 --> 00:42:26.940 particularly in an emergency

NOTE Confidence: 0.8123006

 $00{:}42{:}26.940 \dashrightarrow 00{:}42{:}29.165$  Department where these people present.

 $00:42:29.170 \longrightarrow 00:42:30.985$  And to carefully evaluate people

NOTE Confidence: 0.8123006

 $00{:}42{:}30.985 \dashrightarrow 00{:}42{:}32.800$  making suicidal overdoses that involve

NOTE Confidence: 0.8123006

 $00:42:32.859 \longrightarrow 00:42:34.857$  opioids for the possibility that they

NOTE Confidence: 0.8123006

00:42:34.857 --> 00:42:36.600 actually have an underlying opioid,

NOTE Confidence: 0.8123006

 $00:42:36.600 \longrightarrow 00:42:37.948$  use disorder, for example,

NOTE Confidence: 0.8123006

 $00:42:37.948 \longrightarrow 00:42:39.970$  and to evaluate those making would

NOTE Confidence: 0.8123006

 $00:42:40.029 \longrightarrow 00:42:41.909$  appear to be accidental overdoses.

NOTE Confidence: 0.8123006

00:42:41.910 --> 00:42:43.378 People with opioid people,

NOTE Confidence: 0.8123006

 $00{:}42{:}43.378 \dashrightarrow 00{:}42{:}45.213$  drug strong drug related histories

NOTE Confidence: 0.8123006

 $00:42:45.213 \longrightarrow 00:42:47.188$  for the possibility when they show

NOTE Confidence: 0.8123006

 $00{:}42{:}47.188 \to 00{:}42{:}49.174$  up in your mer chant with overdose

NOTE Confidence: 0.8123006

 $00:42:49.174 \longrightarrow 00:42:51.034$  that they're actually suicidal and

NOTE Confidence: 0.8123006

 $00:42:51.034 \longrightarrow 00:42:52.881$  may need mental health care.

NOTE Confidence: 0.8123006

 $00:42:52.881 \longrightarrow 00:42:54.987$  And that simply referring them to

NOTE Confidence: 0.8123006

00:42:54.987 --> 00:42:57.668 our back to a substance use center

00:42:57.668 --> 00:42:59.220 may not be sufficient.

NOTE Confidence: 0.8123006

 $00{:}42{:}59.220 --> 00{:}43{:}01.908$  So you know in a sense.

NOTE Confidence: 0.8123006

00:43:01.910 --> 00:43:03.510 These results aren't too surprising,

NOTE Confidence: 0.8123006

 $00:43:03.510 \longrightarrow 00:43:05.498$  yet that in it because in addition

NOTE Confidence: 0.8123006

 $00:43:05.498 \longrightarrow 00:43:07.461$  to the shared socio economic risk

NOTE Confidence: 0.8123006

00:43:07.461 --> 00:43:09.904 factors that I focused on this morning,

NOTE Confidence: 0.8123006

 $00{:}43{:}09.910 \dashrightarrow 00{:}43{:}11.830$  there's also evidence from a bunch

NOTE Confidence: 0.8123006

 $00:43:11.830 \longrightarrow 00:43:12.790$  of prior research.

NOTE Confidence: 0.8123006

 $00{:}43{:}12.790 \to 00{:}43{:}15.150$  I won't go into detail that suicide and

NOTE Confidence: 0.8123006

 $00:43:15.150 \longrightarrow 00:43:16.823$  opioid overdose deaths have several

NOTE Confidence: 0.8123006

00:43:16.823 --> 00:43:18.863 similar or shared other risk factors,

NOTE Confidence: 0.8123006

 $00{:}43{:}18.870 \dashrightarrow 00{:}43{:}22.070$  and you see some of them on the slide here.

NOTE Confidence: 0.8123006

 $00:43:22.070 \longrightarrow 00:43:23.990$  Things like depression and Evers child

NOTE Confidence: 0.8123006

00:43:23.990 --> 00:43:26.035 experiences, severe medical illnesses,

NOTE Confidence: 0.8123006

 $00:43:26.035 \longrightarrow 00:43:27.760$  especially those involving.

NOTE Confidence: 0.8123006

 $00:43:27.760 \longrightarrow 00:43:30.778$  Painful medical conditions.

 $00:43:30.780 \longrightarrow 00:43:33.260$  So.

NOTE Confidence: 0.8123006

00:43:33.260 --> 00:43:36.074 Before closing I I wanted to turn

NOTE Confidence: 0.8123006

 $00:43:36.074 \longrightarrow 00:43:38.576$  briefly to some planned research that

NOTE Confidence: 0.8123006

 $00:43:38.576 \longrightarrow 00:43:41.890$  I hope to be doing over the next.

NOTE Confidence: 0.8123006

00:43:41.890 --> 00:43:43.770 As it's several years several

NOTE Confidence: 0.8123006

 $00:43:43.770 \longrightarrow 00:43:46.080$  years now over the last year.

NOTE Confidence: 0.8123006

 $00:43:46.080 \longrightarrow 00:43:48.234$  So during the pandemic there's been

NOTE Confidence: 0.8123006

 $00:43:48.234 \longrightarrow 00:43:49.670$  considerable concern about the

NOTE Confidence: 0.8123006

00:43:49.730 --> 00:43:51.800 psychological fallout of the pandemic,

NOTE Confidence: 0.8123006

 $00:43:51.800 \longrightarrow 00:43:53.416$  and there's apprehension over

NOTE Confidence: 0.8123006

 $00{:}43{:}53.416 {\: -->\:} 00{:}43{:}55.436$  consequences related not only to

NOTE Confidence: 0.8123006

 $00:43:55.436 \longrightarrow 00:43:57.718$  things like job losses and evictions

NOTE Confidence: 0.8123006

 $00{:}43{:}57.718 \dashrightarrow 00{:}43{:}59.959$  and bankruptcies and high levels of

NOTE Confidence: 0.8123006

 $00{:}43{:}59.959 \dashrightarrow 00{:}44{:}01.774$  personal distress and social and

NOTE Confidence: 0.8123006

 $00:44:01.774 \longrightarrow 00:44:03.719$  personal bonds that become a fraid.

00:44:03.719 --> 00:44:05.675 There's grieving and mourning

NOTE Confidence: 0.8123006

 $00:44:05.675 \longrightarrow 00:44:08.120$  the loss of loved ones.

NOTE Confidence: 0.85559124

 $00:44:08.120 \longrightarrow 00:44:10.120$  Parents coming under great stress,

NOTE Confidence: 0.85559124

00:44:10.120 --> 00:44:12.120 having to home school children,

NOTE Confidence: 0.85559124

 $00:44:12.120 \longrightarrow 00:44:14.962$  and the difficulty set up that poses

NOTE Confidence: 0.85559124

00:44:14.962 --> 00:44:17.678 especially for people who don't have access

NOTE Confidence: 0.85559124

 $00:44:17.678 \longrightarrow 00:44:20.520$  or have limited access to the Internet.

NOTE Confidence: 0.85559124

00:44:20.520 --> 00:44:22.730 People living in congregate living

NOTE Confidence: 0.85559124

 $00:44:22.730 \longrightarrow 00:44:25.343$  situations are at particularly high risk

NOTE Confidence: 0.85559124

 $00:44:25.343 \longrightarrow 00:44:27.716$  and under great stress from the virus,

NOTE Confidence: 0.85559124

 $00:44:27.720 \longrightarrow 00:44:31.014$  and I'm an interested in understanding

NOTE Confidence: 0.85559124

 $00:44:31.014 \longrightarrow 00:44:33.910$  the effects of financial crises.

NOTE Confidence: 0.85559124

 $00:44:33.910 \longrightarrow 00:44:35.458$  On suicide and and

NOTE Confidence: 0.85559124

 $00:44:35.458 \longrightarrow 00:44:36.619$  substance related overdose.

NOTE Confidence: 0.85559124

 $00:44:36.620 \longrightarrow 00:44:38.420$  An in order to target efforts

NOTE Confidence: 0.85559124

 $00:44:38.420 \longrightarrow 00:44:41.013$  to rent or at least buffer or

 $00:44:41.013 \longrightarrow 00:44:43.653$  ameliorate the harmful effects at an

NOTE Confidence: 0.85559124

00:44:43.653 --> 00:44:45.908 individual level of suicidal crises,

NOTE Confidence: 0.85559124

 $00:44:45.910 \longrightarrow 00:44:47.745$  we need to understand something

NOTE Confidence: 0.85559124

00:44:47.745 --> 00:44:49.580 about their vulnerability and the

NOTE Confidence: 0.85559124

 $00{:}44{:}49.642 \dashrightarrow 00{:}44{:}51.250$  vulnerability of economic strain

NOTE Confidence: 0.85559124

 $00{:}44{:}51.250 \dashrightarrow 00{:}44{:}53.260$  to suicide and opioid overdose.

NOTE Confidence: 0.85559124

 $00:44:53.260 \longrightarrow 00:44:55.200$  And I can tell you,

NOTE Confidence: 0.85559124

 $00:44:55.200 \longrightarrow 00:44:56.748$  at a population level,

NOTE Confidence: 0.85559124

 $00:44:56.748 \longrightarrow 00:44:59.070$  it's not really very satisfying research.

NOTE Confidence: 0.85559124

 $00:44:59.070 \longrightarrow 00:45:01.284$  There tends to be an increase

NOTE Confidence: 0.85559124

 $00:45:01.284 \longrightarrow 00:45:03.440$  in suicide rates of roughly.

NOTE Confidence: 0.85559124

 $00:45:03.440 \longrightarrow 00:45:06.208$ .7 per 100,000 for every 1% increase there is

NOTE Confidence: 0.85559124

 $00{:}45{:}06.208 \dashrightarrow 00{:}45{:}08.680$  an unemployment over the course of the year,

NOTE Confidence: 0.85559124

 $00:45:08.680 \longrightarrow 00:45:10.522$  but that's a very general observation

NOTE Confidence: 0.85559124

00:45:10.522 --> 00:45:11.443 from International Studies,

00:45:11.450 --> 00:45:12.634 and it's very imprecise,

NOTE Confidence: 0.85559124

 $00:45:12.634 \longrightarrow 00:45:15.413$  and it likely varies a great deal with things

NOTE Confidence: 0.85559124

 $00:45:15.413 \longrightarrow 00:45:17.604$  like the strength of the social safety,

NOTE Confidence: 0.85559124 00:45:17.610 --> 00:45:17.918 net, NOTE Confidence: 0.85559124

 $00:45:17.918 \longrightarrow 00:45:19.458$  availability of formal informal supports,

NOTE Confidence: 0.85559124

 $00:45:19.460 \longrightarrow 00:45:22.568$  and a whole host of other factors.

NOTE Confidence: 0.85559124

 $00:45:22.570 \longrightarrow 00:45:24.746$  But it turns out we know very little

NOTE Confidence: 0.85559124

 $00:45:24.746 \longrightarrow 00:45:27.520$  about the fact of financial crises on the

NOTE Confidence: 0.85559124

00:45:27.520 --> 00:45:29.560 individuals risk for suicidal behavior,

NOTE Confidence: 0.85559124

 $00:45:29.560 \longrightarrow 00:45:32.168$  and that's the topic that I hope to

NOTE Confidence: 0.85559124

 $00{:}45{:}32.168 \dashrightarrow 00{:}45{:}34.558$  be studying over the next few years.

NOTE Confidence: 0.85559124

 $00:45:34.560 \longrightarrow 00:45:36.891$  And one of the things that motivated

NOTE Confidence: 0.85559124

 $00:45:36.891 \longrightarrow 00:45:39.878$  me to study this with some work that I

NOTE Confidence: 0.85559124

00:45:39.878 --> 00:45:42.550 that was done again with that nice arc,

NOTE Confidence: 0.85559124

 $00:45:42.550 \longrightarrow 00:45:45.147$  first two waves that I mentioned before

NOTE Confidence: 0.85559124

 $00:45:45.147 \longrightarrow 00:45:47.210$  large epidemiological study done by an Hill.

00:45:47.210 --> 00:45:49.328 Garcia la Garza.

NOTE Confidence: 0.85559124

00:45:49.330 --> 00:45:51.647 Who is a doctoral candidate at Columbia?

NOTE Confidence: 0.85559124

 $00:45:51.650 \longrightarrow 00:45:53.018$  I've worked with me.

NOTE Confidence: 0.85559124

 $00:45:53.018 \longrightarrow 00:45:55.777$  What he did was have to say it

NOTE Confidence: 0.85559124

00:45:55.777 --> 00:45:58.265 was a real Tour de force on Hill.

NOTE Confidence: 0.85559124

 $00:45:58.270 \longrightarrow 00:46:00.545$  Took the entire nice arc and there

NOTE Confidence: 0.85559124

 $00:46:00.545 \longrightarrow 00:46:02.568$  are 3000 different variables in it.

NOTE Confidence: 0.85559124

 $00:46:02.570 \longrightarrow 00:46:04.794$  It's a long interview from Wave One and

NOTE Confidence: 0.85559124

 $00:46:04.794 \longrightarrow 00:46:07.540$  then he you use machine learning techniques.

NOTE Confidence: 0.85559124

 $00{:}46{:}07.540 \dashrightarrow 00{:}46{:}09.640$  He tuned to balanced random forest

NOTE Confidence: 0.85559124

 $00{:}46{:}09.640 \dashrightarrow 00{:}46{:}11.380$  analysis with ten fold cross

NOTE Confidence: 0.85559124

 $00:46:11.380 \longrightarrow 00:46:13.540$  validation and so in and in a way

NOTE Confidence: 0.85559124

 $00{:}46{:}13.540 \dashrightarrow 00{:}46{:}15.480$  that doesn't impose any theory.

NOTE Confidence: 0.85559124

 $00:46:15.480 \longrightarrow 00:46:17.713$  He's looking to see at which of

NOTE Confidence: 0.85559124

 $00:46:17.713 \longrightarrow 00:46:19.434$  these 3000 variables that were

 $00:46:19.434 \longrightarrow 00:46:21.184$  collected at wave one predict.

NOTE Confidence: 0.85559124

 $00:46:21.190 \longrightarrow 00:46:23.182$  A suicide attempt over the following

NOTE Confidence: 0.85559124

 $00{:}46{:}23.182 \dashrightarrow 00{:}46{:}25.570$  three years and then he and you know

NOTE Confidence: 0.85559124

 $00:46:25.570 \longrightarrow 00:46:27.455$  you come out with all these explanatory

NOTE Confidence: 0.85559124

 $00:46:27.455 \longrightarrow 00:46:30.335$  power in terms of the area under the curve.

NOTE Confidence: 0.85559124

 $00:46:30.340 \longrightarrow 00:46:32.461$  I won't bore you with the details

NOTE Confidence: 0.85559124

 $00:46:32.461 \longrightarrow 00:46:33.700$  of the model fit,

NOTE Confidence: 0.85559124

 $00:46:33.700 \longrightarrow 00:46:35.220$  but was interesting to me.

NOTE Confidence: 0.85559124

00:46:35.220 --> 00:46:37.324 I think relevant to my to my my

NOTE Confidence: 0.85559124

 $00:46:37.324 \longrightarrow 00:46:39.256$  interest was the ranking of variable

NOTE Confidence: 0.85559124

 $00{:}46{:}39.256 \dashrightarrow 00{:}46{:}41.630$  importance and this is the right here.

NOTE Confidence: 0.85559124

00:46:41.630 --> 00:46:43.979 You see the list of the top ten of

NOTE Confidence: 0.85559124

 $00:46:43.979 \longrightarrow 00:46:46.308$  those things from this list of 3000

NOTE Confidence: 0.85559124

 $00:46:46.308 \longrightarrow 00:46:48.322$  variables and this is derived if

NOTE Confidence: 0.85559124

 $00:46:48.322 \longrightarrow 00:46:50.471$  by taking one variable at a time

NOTE Confidence: 0.85559124

 $00:46:50.471 \longrightarrow 00:46:52.300$  and looking at how it changes,

 $00:46:52.300 \longrightarrow 00:46:55.212$  the overall fit of the model, you can.

NOTE Confidence: 0.85559124

 $00{:}46{:}55.212 \dashrightarrow 00{:}46{:}57.917$  Driver ranking it's not surprising.

NOTE Confidence: 0.85559124

 $00:46:57.920 \longrightarrow 00:46:59.064$  From a clinical perspective,

NOTE Confidence: 0.85559124

 $00:46:59.064 \longrightarrow 00:47:01.661$  that right at the top of the list is

NOTE Confidence: 0.85559124

 $00:47:01.661 \longrightarrow 00:47:03.586$  the people who three years earlier said

NOTE Confidence: 0.8467864

 $00:47:03.644 \longrightarrow 00:47:05.478$  they felt like they wanted to die.

NOTE Confidence: 0.8467864

 $00:47:05.480 \longrightarrow 00:47:06.880$  They would that that single

NOTE Confidence: 0.8467864

 $00{:}47{:}06.880 \dashrightarrow 00{:}47{:}08.000$  variable was the strongest,

NOTE Confidence: 0.8467864

 $00{:}47{:}08.000 \dashrightarrow 00{:}47{:}09.232$  predicting suicide attempts over

NOTE Confidence: 0.8467864

 $00:47:09.232 \longrightarrow 00:47:11.080$  the following three years and that

NOTE Confidence: 0.8467864

 $00:47:11.128 \longrightarrow 00:47:12.888$  you see the other two behind it or

NOTE Confidence: 0.8467864

 $00{:}47{:}12.888 \dashrightarrow 00{:}47{:}14.438$  quite closely connected with suicide.

NOTE Confidence: 0.8467864

 $00:47:14.440 \longrightarrow 00:47:16.400$  And then there's a depression item age.

NOTE Confidence: 0.8467864

 $00{:}47{:}16.400 \dashrightarrow 00{:}47{:}18.374$  We know that suicide attempts are

NOTE Confidence: 0.8467864

 $00:47:18.374 \longrightarrow 00:47:20.332$  highly dependent on age and they

 $00:47:20.332 \longrightarrow 00:47:22.355$  actually go down with age and the

NOTE Confidence: 0.8467864

 $00{:}47{:}22.355 \to 00{:}47{:}24.378$  highest risks are among young people.

NOTE Confidence: 0.8467864

00:47:24.380 --> 00:47:26.546 Fortunately, most those are not hard,

NOTE Confidence: 0.8467864

 $00:47:26.550 \longrightarrow 00:47:27.198$  non fatal.

NOTE Confidence: 0.8467864

 $00:47:27.198 \longrightarrow 00:47:29.466$  And then there's an item about doing

NOTE Confidence: 0.8467864

 $00:47:29.466 \longrightarrow 00:47:31.654$  things less carefully because emotional

NOTE Confidence: 0.8467864

 $00:47:31.654 \longrightarrow 00:47:34.354$  problems and then directly following that.

NOTE Confidence: 0.8467864

 $00:47:34.360 \longrightarrow 00:47:36.348$  Is this issue or the one I've

NOTE Confidence: 0.8467864

 $00{:}47{:}36.348 \dashrightarrow 00{:}47{:}38.050$  highlighted here that item dealing

NOTE Confidence: 0.8467864

00:47:38.050 --> 00:47:40.035 with financial crises and bankruptcy,

NOTE Confidence: 0.8467864

 $00:47:40.040 \longrightarrow 00:47:40.823$  and in fact,

NOTE Confidence: 0.8467864

 $00:47:40.823 \longrightarrow 00:47:43.134$  four out of the top 20 most important

NOTE Confidence: 0.8467864

 $00:47:43.134 \longrightarrow 00:47:46.046$  variables are related to jobs and income,

NOTE Confidence: 0.8467864

 $00:47:46.050 \longrightarrow 00:47:47.976$  and so this provides some of

NOTE Confidence: 0.8467864

 $00:47:47.976 \longrightarrow 00:47:49.720$  its at the individual level.

NOTE Confidence: 0.8467864

00:47:49.720 --> 00:47:50.362 And again,

00:47:50.362 --> 00:47:52.609 it's very crude 'cause we only have

NOTE Confidence: 0.8467864

 $00:47:52.609 \longrightarrow 00:47:54.809$  this one measure and then three years

NOTE Confidence: 0.8467864

00:47:54.809 --> 00:47:57.545 later we have a self report thing about

NOTE Confidence: 0.8467864

 $00:47:57.545 \longrightarrow 00:47:59.735$  suicide attempts and we don't have

NOTE Confidence: 0.8467864

 $00:47:59.740 \longrightarrow 00:48:01.726$  any information on people who died

NOTE Confidence: 0.8467864

00:48:01.726 --> 00:48:03.749 of suicide during that time frame,

NOTE Confidence: 0.8467864

00:48:03.750 --> 00:48:05.134 but nonetheless it's consistent

NOTE Confidence: 0.8467864

 $00:48:05.134 \longrightarrow 00:48:06.518$  with this idea that.

NOTE Confidence: 0.8467864

 $00:48:06.520 \longrightarrow 00:48:09.488$  Financial crises are one of the things

NOTE Confidence: 0.8467864

 $00:48:09.488 \longrightarrow 00:48:14.570$  that predict future suicidal behavior, so.

NOTE Confidence: 0.8467864

 $00:48:14.570 \longrightarrow 00:48:16.786$  And so here's what I've been up to.

NOTE Confidence: 0.8467864

 $00:48:16.790 \longrightarrow 00:48:18.998$  Some of the mischief I'm up to now,

NOTE Confidence: 0.8467864

 $00:48:19.000 \longrightarrow 00:48:21.100$  so I've been working with my colleague

NOTE Confidence: 0.8467864

 $00:48:21.100 \longrightarrow 00:48:23.197$  and close friend Steve Marcus at the

NOTE Confidence: 0.8467864

 $00:48:23.197 \longrightarrow 00:48:25.450$  Penn School of Social Policy and Practice.

00:48:25.450 --> 00:48:26.910 And a colleague, Molly candidate.

NOTE Confidence: 0.8467864

 $00:48:26.910 \longrightarrow 00:48:28.050$  But the Wharton school.

NOTE Confidence: 0.8467864

 $00:48:28.050 \longrightarrow 00:48:30.120$  And we've been working with Trans Union.

NOTE Confidence: 0.8467864

 $00:48:30.120 \longrightarrow 00:48:31.288$  There are consumer credit

NOTE Confidence: 0.8467864

00:48:31.288 --> 00:48:32.164 rating reporting company.

NOTE Confidence: 0.8467864

00:48:32.170 --> 00:48:32.710 It's amazing.

NOTE Confidence: 0.8467864

00:48:32.710 --> 00:48:34.870 I mean they've got data on the credit

NOTE Confidence: 0.8467864

00:48:34.929 --> 00:48:36.384 reporting scores that are updated

NOTE Confidence: 0.8467864

 $00{:}48{:}36.384 \dashrightarrow 00{:}48{:}38.510$  all the time from the great majority

NOTE Confidence: 0.8467864

 $00:48:38.510 \longrightarrow 00:48:40.340$  of people in the United States.

NOTE Confidence: 0.8467864

 $00{:}48{:}40.340 \dashrightarrow 00{:}48{:}41.508$  Well over  $200{,}000{,}000$  people.

NOTE Confidence: 0.8467864

 $00{:}48{:}41.508 \dashrightarrow 00{:}48{:}43.260$  Basically anyone who's in the cache.

NOTE Confidence: 0.8467864

 $00:48:43.260 \longrightarrow 00:48:45.297$  Kind of anyone who's getting a paycheck

NOTE Confidence: 0.8467864

 $00:48:45.297 \longrightarrow 00:48:47.930$  or has a credit card or a debit card,

NOTE Confidence: 0.8467864

 $00:48:47.930 \longrightarrow 00:48:50.002$  they have your credit rating score and

NOTE Confidence: 0.8467864

 $00{:}48{:}50.002 \dashrightarrow 00{:}48{:}52.434$  it changes all the time and we brought

00:48:52.434 --> 00:48:54.650 them together with the people that opt in,

NOTE Confidence: 0.8467864

 $00:48:54.650 \longrightarrow 00:48:56.074$  which is so large.

NOTE Confidence: 0.8467864

 $00:48:56.074 \longrightarrow 00:48:58.210$  Part of the United Health Group

NOTE Confidence: 0.8467864

 $00:48:58.288 \longrightarrow 00:49:00.584$  and and we've got them to agree

NOTE Confidence: 0.8467864

 $00:49:00.584 \longrightarrow 00:49:02.843$  to merge their data to create

NOTE Confidence: 0.8467864

 $00:49:02.843 \longrightarrow 00:49:04.848$  a deidentified merge data set.

NOTE Confidence: 0.8467864

 $00:49:04.850 \longrightarrow 00:49:06.660$  We haven't yet done it.

NOTE Confidence: 0.8467864

 $00:49:06.660 \longrightarrow 00:49:09.488$  When that's well still ironing out the

NOTE Confidence: 0.8467864

 $00{:}49{:}09.488 \longrightarrow 00{:}49{:}12.552$  details to do it on a small scale so

NOTE Confidence: 0.8467864

00:49:12.552 --> 00:49:16.065 we can write it a grant to support this work,

NOTE Confidence: 0.8467864

 $00{:}49{:}16.070 \dashrightarrow 00{:}49{:}18.694$  but the idea is to take this integrated

NOTE Confidence: 0.8467864

 $00:49:18.694 \longrightarrow 00:49:21.251$  database that has at the patient level

NOTE Confidence: 0.8467864

 $00{:}49{:}21.251 \dashrightarrow 00{:}49{:}23.081$  consumer credit rating scores that

NOTE Confidence: 0.8467864

00:49:23.145 --> 00:49:25.035 fluctuate with claims histories and

NOTE Confidence: 0.8467864

 $00:49:25.035 \longrightarrow 00:49:27.838$  link them to the national death in.

00:49:27.838 --> 00:49:31.016 And that will put us in position,

NOTE Confidence: 0.8467864

 $00:49:31.020 \longrightarrow 00:49:31.924$  we believe.

NOTE Confidence: 0.8467864

00:49:31.924 --> 00:49:35.540 To look at the effects of dramatic changes,

NOTE Confidence: 0.8467864

 $00:49:35.540 \longrightarrow 00:49:37.470$  dramatic down grading of people's

NOTE Confidence: 0.8467864

 $00:49:37.470 \longrightarrow 00:49:39.372$  credit rating scores, which are,

NOTE Confidence: 0.8467864

 $00:49:39.372 \longrightarrow 00:49:41.227$  in a sense an individual

NOTE Confidence: 0.8467864

00:49:41.227 --> 00:49:42.890 level of financial crisis,

NOTE Confidence: 0.8467864

 $00:49:42.890 \longrightarrow 00:49:45.086$  and to see whether that impacts

NOTE Confidence: 0.8467864

 $00:49:45.086 \longrightarrow 00:49:47.529$  people's future risks of drug overdose,

NOTE Confidence: 0.8467864

 $00:49:47.530 \longrightarrow 00:49:48.694$  deaths and suicide.

NOTE Confidence: 0.8467864

 $00{:}49{:}48.694 \dashrightarrow 00{:}49{:}49.470$  And Moreover,

NOTE Confidence: 0.8467864

 $00:49:49.470 \longrightarrow 00:49:52.122$  we were particularly interested in is

NOTE Confidence: 0.8467864

 $00:49:52.122 \longrightarrow 00:49:54.276$  whether there are pre-existing factors

NOTE Confidence: 0.8467864

 $00{:}49{:}54.276 \dashrightarrow 00{:}49{:}56.820$  that you can see in the claims data.

NOTE Confidence: 0.86124927

 $00:49:56.820 \longrightarrow 00:50:00.393$  So, for example, if a person has a history.

NOTE Confidence: 0.86124927

 $00:50:00.400 \longrightarrow 00:50:02.920$  Depression. Does that make them particularly

 $00:50:02.920 \longrightarrow 00:50:05.422$  vulnerable in terms of their suicide

NOTE Confidence: 0.86124927

 $00:50:05.422 \longrightarrow 00:50:08.054$  and overdose risk to a financial crisis?

NOTE Confidence: 0.86124927

 $00:50:08.060 \longrightarrow 00:50:10.153$  Those are the kinds of questions that

NOTE Confidence: 0.86124927

00:50:10.153 --> 00:50:11.764 haven't really that I've wondered

NOTE Confidence: 0.86124927

 $00:50:11.764 \dashrightarrow 00:50:13.744$  about but haven't really been able

NOTE Confidence: 0.86124927

 $00:50:13.744 \longrightarrow 00:50:15.249$  to interrogate it empirically,

NOTE Confidence: 0.86124927

00:50:15.250 --> 00:50:17.135 because thankfully, these causes of

NOTE Confidence: 0.86124927

 $00:50:17.135 \longrightarrow 00:50:19.341$  death are sufficiently rare that is

NOTE Confidence: 0.86124927

00:50:19.341 --> 00:50:21.140 hard to get a large enough sample,

NOTE Confidence: 0.86124927

 $00{:}50{:}21.140 \dashrightarrow 00{:}50{:}24.192$  and to get detailed personal level data

NOTE Confidence: 0.86124927

 $00{:}50{:}24.192 \dashrightarrow 00{:}50{:}27.260$  to actually probe these associations so.

NOTE Confidence: 0.86124927

 $00:50:27.260 \longrightarrow 00:50:30.220$  You know, so after many months of working.

NOTE Confidence: 0.86124927

 $00:50:30.220 \longrightarrow 00:50:31.436$  With these two companies,

NOTE Confidence: 0.86124927

00:50:31.436 --> 00:50:33.598 we're gotten them to enter into an

NOTE Confidence: 0.86124927

 $00:50:33.598 \longrightarrow 00:50:35.544$  agreement to link their data at where

 $00:50:35.544 \longrightarrow 00:50:37.593$  the process of getting a small sample

NOTE Confidence: 0.86124927

 $00:50:37.593 \longrightarrow 00:50:40.255$  and building some pilot data for a grant

NOTE Confidence: 0.86124927

 $00:50:40.255 \longrightarrow 00:50:43.810$  that we will be writing over this summer.

NOTE Confidence: 0.86124927

 $00:50:43.810 \longrightarrow 00:50:45.917$  But there are some problems with this

NOTE Confidence: 0.86124927

00:50:45.917 --> 00:50:48.350 thing that didn't occur to me when I

NOTE Confidence: 0.86124927

00:50:48.350 --> 00:50:49.825 was thinking about this abstractly,

NOTE Confidence: 0.86124927

 $00:50:49.830 \longrightarrow 00:50:51.937$  and that is that when people undergo

NOTE Confidence: 0.86124927

 $00:50:51.937 \longrightarrow 00:50:52.840$  a financial crisis,

NOTE Confidence: 0.86124927

 $00:50:52.840 \longrightarrow 00:50:54.947$  they often sadly lose their health insurance.

NOTE Confidence: 0.86124927

00:50:54.950 --> 00:50:56.750 They lose their private health insurance,

NOTE Confidence: 0.86124927

 $00:50:56.750 \dashrightarrow 00:50:59.760$  which is what we can see in the optim data.

NOTE Confidence: 0.86124927

 $00:50:59.760 \longrightarrow 00:51:01.867$  Some of them will stay on Cobra,

NOTE Confidence: 0.86124927

 $00:51:01.870 \longrightarrow 00:51:03.977$  but so we will only really have

NOTE Confidence: 0.86124927

 $00:51:03.977 \longrightarrow 00:51:04.880$  their death data.

NOTE Confidence: 0.86124927

 $00:51:04.880 \longrightarrow 00:51:06.987$  We won't be able to see whether

NOTE Confidence: 0.86124927

00:51:06.987 --> 00:51:07.890 after finish crisis,

00:51:07.890 --> 00:51:10.067 people have an increased risk of going

NOTE Confidence: 0.86124927

 $00{:}51{:}10.067 {\:{\circ}{\circ}{\circ}}>00{:}51{:}11.331$  second emergency Department within

NOTE Confidence: 0.86124927

00:51:11.331 --> 00:51:13.306 a non fatal suicide attempt, or it.

NOTE Confidence: 0.86124927

 $00:51:13.306 \longrightarrow 00:51:15.392$  Non fatal overdose and so forth will

NOTE Confidence: 0.86124927

 $00:51:15.392 \longrightarrow 00:51:17.666$  really only be able to study mortality,

NOTE Confidence: 0.86124927

00:51:17.670 --> 00:51:18.998 but nevertheless, you know,

NOTE Confidence: 0.86124927

 $00:51:18.998 \longrightarrow 00:51:21.426$  we hope to gain some insights on

NOTE Confidence: 0.86124927

 $00{:}51{:}21.426 \to 00{:}51{:}22.918$  risks and protective factors.

NOTE Confidence: 0.86124927

 $00:51:22.920 \longrightarrow 00:51:25.450$  Based on claims histories of

NOTE Confidence: 0.86124927

 $00:51:25.450 \longrightarrow 00:51:27.980$  individuals prior to experiencing an

NOTE Confidence: 0.86124927

 $00:51:28.060 \longrightarrow 00:51:30.432$  individual financial crisis reflected

NOTE Confidence: 0.86124927

 $00:51:30.432 \longrightarrow 00:51:32.804$  in their claims scores.

NOTE Confidence: 0.86124927

00:51:32.810 --> 00:51:35.037 So if it works out, maybe.

NOTE Confidence: 0.86124927

 $00{:}51{:}35.037 \dashrightarrow 00{:}51{:}38.133$  You can come back in a few years

NOTE Confidence: 0.86124927

 $00:51:38.133 \longrightarrow 00:51:40.687$  and tell you what we found.

 $00:51:40.690 \longrightarrow 00:51:41.518$  So in closing,

NOTE Confidence: 0.86124927

 $00:51:41.518 \longrightarrow 00:51:42.898$  let me reiterate that people

NOTE Confidence: 0.86124927

 $00:51:42.898 \longrightarrow 00:51:44.749$  who are financially vulnerable,

NOTE Confidence: 0.86124927

 $00:51:44.750 \longrightarrow 00:51:47.032$  those who have don't work and have

NOTE Confidence: 0.86124927

00:51:47.032 --> 00:51:48.948 less education appear to be an

NOTE Confidence: 0.86124927

 $00:51:48.948 \longrightarrow 00:51:50.403$  increased risk for overdose deaths

NOTE Confidence: 0.86124927

 $00{:}51{:}50.403 \dashrightarrow 00{:}51{:}52.602$  and to a lesser degree chronic

NOTE Confidence: 0.86124927

 $00:51:52.602 \longrightarrow 00:51:54.542$  liver disease and suicide mortality.

NOTE Confidence: 0.86124927

 $00{:}51{:}54.550 {\:{\mbox{--}}}{\:{\mbox{-}}} 00{:}51{:}56.916$  For these reasons, it it's you know,

NOTE Confidence: 0.86124927

00:51:56.920 --> 00:51:58.740 it's possible that social policies

NOTE Confidence: 0.86124927

 $00:51:58.740 \longrightarrow 00:52:00.560$  that support education and employment

NOTE Confidence: 0.86124927

 $00:52:00.617 \longrightarrow 00:52:02.375$  might yield long term benefits in

NOTE Confidence: 0.86124927

 $00:52:02.375 \longrightarrow 00:52:04.010$  reducing these deaths of despair.

NOTE Confidence: 0.86124927

 $00:52:04.010 \longrightarrow 00:52:06.055$  However, also, and you know, I.

NOTE Confidence: 0.86124927

00:52:06.055 --> 00:52:08.185 Realize all of you know this,

NOTE Confidence: 0.86124927

 $00:52:08.190 \longrightarrow 00:52:09.890$  but I'll say it anyway,

 $00:52:09.890 \longrightarrow 00:52:11.580$  that these deaths is fair.

NOTE Confidence: 0.86124927

 $00{:}52{:}11.580 \dashrightarrow 00{:}52{:}13.280$  While they have some overlapping

NOTE Confidence: 0.86124927

00:52:13.280 --> 00:52:14.300 socioeconomic risk factors,

NOTE Confidence: 0.86124927

 $00:52:14.300 \longrightarrow 00:52:16.328$  there are also very distinct clinical

NOTE Confidence: 0.86124927

 $00:52:16.328 \longrightarrow 00:52:16.666$  phenomenon.

NOTE Confidence: 0.86124927

 $00:52:16.670 \longrightarrow 00:52:18.698$  They call for different treatment and

NOTE Confidence: 0.86124927

00:52:18.698 --> 00:52:19.712 different rehabilitation approaches,

NOTE Confidence: 0.86124927

 $00:52:19.720 \longrightarrow 00:52:21.270$  and For these reasons improving

NOTE Confidence: 0.86124927

 $00:52:21.270 \longrightarrow 00:52:23.248$  access to substance use and mental

NOTE Confidence: 0.86124927

 $00:52:23.248 \longrightarrow 00:52:24.720$  health services will obviously

NOTE Confidence: 0.86124927

 $00{:}52{:}24.720 \longrightarrow 00{:}52{:}26.560$  also play a critically important

NOTE Confidence: 0.86124927

 $00:52:26.620 \longrightarrow 00:52:28.200$  role in achieving these goals.

NOTE Confidence: 0.86124927

 $00:52:28.200 \longrightarrow 00:52:28.806$  So Lastly,

NOTE Confidence: 0.86124927

 $00:52:28.806 \longrightarrow 00:52:31.674$  let me just say that I am really fortunate

NOTE Confidence: 0.86124927

 $00:52:31.674 \longrightarrow 00:52:34.977$  in being able to work with and learn from,

 $00:52:34.980 \longrightarrow 00:52:35.841$  such as Sarah.

NOTE Confidence: 0.86124927

 $00{:}52{:}35.841 \dashrightarrow 00{:}52{:}37.563$  Such a large and diverse group

NOTE Confidence: 0.86124927

 $00:52:37.563 \longrightarrow 00:52:39.289$  of exceptionally talented.

NOTE Confidence: 0.86124927

 $00:52:39.290 \longrightarrow 00:52:40.214$  And generous colleagues.

NOTE Confidence: 0.86124927

00:52:40.214 --> 00:52:42.370 And here the ones whose work I

NOTE Confidence: 0.86124927

 $00:52:42.428 \longrightarrow 00:52:44.072$  featured this morning and I want

NOTE Confidence: 0.86124927

 $00:52:44.072 \longrightarrow 00:52:46.070$  to thank you for your attention.

NOTE Confidence: 0.86124927

 $00:52:46.070 \longrightarrow 00:52:48.219$  I'm happy to take on other questions.

NOTE Confidence: 0.8387357

 $00:52:50.200 \longrightarrow 00:52:54.071$  Thank you very much Mark for incredibly

NOTE Confidence: 0.8387357

 $00:52:54.071 \longrightarrow 00:52:56.960$  stimulating and erudite presentation.

NOTE Confidence: 0.8387357

 $00{:}52{:}56.960 {\:{\mbox{--}}}{\:{\mbox{--}}}\ 00{:}53{:}00.313$  And demonstration of the scope of your

NOTE Confidence: 0.8387357

 $00:53:00.313 \longrightarrow 00:53:03.029$  interests and ability to gather data.

NOTE Confidence: 0.8387357

00:53:03.030 --> 00:53:07.224 I wanted to start by asking you one question,

NOTE Confidence: 0.8387357

 $00:53:07.230 \longrightarrow 00:53:08.379$  a methodological question?

NOTE Confidence: 0.8387357

 $00:53:08.379 \longrightarrow 00:53:11.729$  You've looked at the data at the individual

NOTE Confidence: 0.8387357

 $00:53:11.729 \longrightarrow 00:53:14.709$  level and relationships between individuals,

 $00:53:14.710 \longrightarrow 00:53:17.386$  but much of the writing about

NOTE Confidence: 0.8387357

 $00:53:17.386 \longrightarrow 00:53:20.310$  it's true of case and Deaton.

NOTE Confidence: 0.8387357

 $00:53:20.310 \longrightarrow 00:53:24.419$  But also the writing about the opiate

NOTE Confidence: 0.8387357

 $00:53:24.419 \longrightarrow 00:53:29.170$  crisis is about the loss of community and.

NOTE Confidence: 0.8387357

 $00:53:29.170 \longrightarrow 00:53:30.802$  To their defense case,

NOTE Confidence: 0.8387357

00:53:30.802 --> 00:53:32.386 indeed, and you know,

NOTE Confidence: 0.8387357

 $00:53:32.386 \longrightarrow 00:53:34.346$  used deaths of despair as

NOTE Confidence: 0.8387357

 $00:53:34.346 \longrightarrow 00:53:36.498$  a kind of a shorthand,

NOTE Confidence: 0.8387357

 $00:53:36.500 \longrightarrow 00:53:38.942$  but they mainly were interested in

NOTE Confidence: 0.8387357

 $00:53:38.942 \longrightarrow 00:53:40.570$  geographic variability and locations,

NOTE Confidence: 0.8387357

 $00:53:40.570 \longrightarrow 00:53:43.300$  and I wondered if you thought of

NOTE Confidence: 0.8387357

 $00:53:43.300 \longrightarrow 00:53:45.449$  a way using your data.

NOTE Confidence: 0.8387357

 $00:53:45.450 \longrightarrow 00:53:47.485$  Most of these datasets don't

NOTE Confidence: 0.8387357

00:53:47.485 --> 00:53:48.299 identify communities,

NOTE Confidence: 0.8387357

00:53:48.300 --> 00:53:51.171 and I wonder if you've thought of a way

 $00:53:51.171 \longrightarrow 00:53:54.117$  of adding that dimension of Community

NOTE Confidence: 0.8387357

 $00:53:54.117 \longrightarrow 00:53:57.659$  integration or social capital in a community.

NOTE Confidence: 0.8387357

00:53:57.660 --> 00:54:00.276 As as as a major risk factor.

NOTE Confidence: 0.8387357

 $00:54:00.280 \longrightarrow 00:54:01.592$  In addition to these

NOTE Confidence: 0.8387357

00:54:01.592 --> 00:54:02.248 individual characteristics,

NOTE Confidence: 0.8387357

 $00:54:02.250 \longrightarrow 00:54:03.890$  you know that's a wonderful

NOTE Confidence: 0.8387357

 $00:54:03.890 \longrightarrow 00:54:04.874$  question about and

NOTE Confidence: 0.85752666

 $00:54:04.880 \longrightarrow 00:54:06.830$  I and the short answer is

NOTE Confidence: 0.85752666

 $00{:}54{:}06.830 \dashrightarrow 00{:}54{:}08.480$  somewhat a little bit you.

NOTE Confidence: 0.85752666

 $00:54:08.480 \longrightarrow 00:54:11.088$  This M DAG data that I showed those

NOTE Confidence: 0.85752666

 $00:54:11.088 \longrightarrow 00:54:13.799$  detailed slides you know on on the

NOTE Confidence: 0.85752666

 $00:54:13.799 \longrightarrow 00:54:16.029$  different education and income and so forth.

NOTE Confidence: 0.85752666

 $00:54:16.030 \longrightarrow 00:54:17.670$  There is geographic information there,

NOTE Confidence: 0.85752666

 $00{:}54{:}17.670 \dashrightarrow 00{:}54{:}20.286$  and I'm aware that people have looked at.

NOTE Confidence: 0.85752666

00:54:20.290 --> 00:54:22.674 You can look at I don't think you

NOTE Confidence: 0.85752666

 $00:54:22.674 \longrightarrow 00:54:25.206$  can go down to the census track,

 $00:54:25.210 \longrightarrow 00:54:28.504$  but you can go down to the zip code.

NOTE Confidence: 0.85752666

 $00{:}54{:}28.510 \to 00{:}54{:}31.054$  And you can have County level data we

NOTE Confidence: 0.85752666

 $00:54:31.054 \longrightarrow 00:54:33.667$  did for example with that data set.

NOTE Confidence: 0.85752666

00:54:33.670 --> 00:54:36.414 And I know this isn't quite on topic,

NOTE Confidence: 0.85752666

 $00:54:36.420 \longrightarrow 00:54:38.140$  but it's it's structurally related.

NOTE Confidence: 0.85752666

 $00:54:38.140 \longrightarrow 00:54:40.564$  We looked at with that data set at

NOTE Confidence: 0.85752666

 $00:54:40.564 \longrightarrow 00:54:42.692$  firearm related suicides and looked at

NOTE Confidence: 0.85752666

 $00:54:42.692 \longrightarrow 00:54:44.876$  them in relationship to peoples where

NOTE Confidence: 0.85752666

 $00{:}54{:}44.939 \dashrightarrow 00{:}54{:}47.051$  their state of the firearm ownership

NOTE Confidence: 0.85752666

00:54:47.051 --> 00:54:49.441 within this state and you could show

NOTE Confidence: 0.85752666

 $00:54:49.441 \longrightarrow 00:54:51.403$  very strong associations with people who

NOTE Confidence: 0.85752666

 $00:54:51.403 \longrightarrow 00:54:53.966$  live in states with higher firearm ownership,

NOTE Confidence: 0.85752666

 $00{:}54{:}53.970 \dashrightarrow 00{:}54{:}56.714$  being much more likely to die of suicide,

NOTE Confidence: 0.85752666

00:54:56.720 --> 00:54:58.778 but also to die, I proportionately

NOTE Confidence: 0.85752666

 $00:54:58.778 \longrightarrow 00:55:00.500$  have firearm suicides, but I.

 $00:55:00.500 \longrightarrow 00:55:03.260$  Imagine the same kind of thing at a

NOTE Confidence: 0.85752666

 $00:55:03.351 \longrightarrow 00:55:06.147$  more granular level could be done.

NOTE Confidence: 0.85752666

00:55:06.150 --> 00:55:08.142 At the but part of the I think

NOTE Confidence: 0.85752666

 $00:55:08.142 \longrightarrow 00:55:10.030$  one of the challenges, though,

NOTE Confidence: 0.85752666

 $00:55:10.030 \longrightarrow 00:55:12.430$  is that some of these things change if

NOTE Confidence: 0.85752666

00:55:12.430 --> 00:55:14.488 you're looking over a 10 year period,

NOTE Confidence: 0.85752666

 $00:55:14.490 \longrightarrow 00:55:15.980$  you might have to update.

NOTE Confidence: 0.85752666

00:55:15.980 --> 00:55:18.188 You know that you might have

NOTE Confidence: 0.85752666

 $00{:}55{:}18.188 \dashrightarrow 00{:}55{:}20.540$  to work with time dependent.

NOTE Confidence: 0.85752666

 $00:55:20.540 \longrightarrow 00:55:21.112$  Regional variables,

NOTE Confidence: 0.85752666

00:55:21.112 --> 00:55:23.400 but I I think you're right that that

NOTE Confidence: 0.85752666

 $00:55:23.453 \longrightarrow 00:55:25.098$  would really open things up to be

NOTE Confidence: 0.85752666

 $00{:}55{:}25.098 \dashrightarrow 00{:}55{:}27.336$  able to look at the level of social

NOTE Confidence: 0.85752666

 $00{:}55{:}27.336 \dashrightarrow 00{:}55{:}28.816$  capital within the communities that

NOTE Confidence: 0.85752666

 $00:55:28.820 \longrightarrow 00:55:30.614$  these people live as an additional

NOTE Confidence: 0.85752666

 $00:55:30.614 \longrightarrow 00:55:31.810$  dimension or explanatory dimension

 $00:55:31.853 \longrightarrow 00:55:33.239$  to their risks for these deaths.

NOTE Confidence: 0.85752666

00:55:33.240 --> 00:55:35.165 So I think that's an excellent point,

NOTE Confidence: 0.85752666

 $00:55:35.170 \longrightarrow 00:55:37.242$  but it's something if I if I had

NOTE Confidence: 0.85752666

 $00:55:37.242 \longrightarrow 00:55:39.307$  a student who is interested in it,

NOTE Confidence: 0.85752666

 $00:55:39.310 \longrightarrow 00:55:40.960$  I would be I could pursue.

NOTE Confidence: 0.85752666

00:55:40.960 --> 00:55:42.969 But I'm so busy at this point

NOTE Confidence: 0.85752666

 $00:55:42.969 \longrightarrow 00:55:45.098$  will be tough for me to pick up.

NOTE Confidence: 0.85752666

 $00:55:45.100 \longrightarrow 00:55:48.238$  But thanks for pointing that out.

NOTE Confidence: 0.85752666 00:55:48.240 --> 00:55:48.650 So NOTE Confidence: 0.6743414

 $00:55:48.650 \longrightarrow 00:55:53.016$  I see in the chat box, JP Daquino had a

NOTE Confidence: 0.6743414

 $00:55:53.016 \longrightarrow 00:55:56.899$  comment JPD want to make that out loud.

NOTE Confidence: 0.6743414

 $00:55:56.900 \longrightarrow 00:56:00.740$  Sure, thanks for the excellent talk I was.

NOTE Confidence: 0.6743414

 $00{:}56{:}00.740 \dashrightarrow 00{:}56{:}03.890$  I was struck by your introduction of

NOTE Confidence: 0.6743414

 $00:56:03.984 \longrightarrow 00:56:07.356$  vertical as a diagnostician of these

NOTE Confidence: 0.6743414

 $00:56:07.360 \longrightarrow 00:56:11.340$  social ills and some of the things you

 $00:56:11.340 \longrightarrow 00:56:14.330$  said reminded me of another diagnostician.

NOTE Confidence: 0.6743414

 $00:56:14.330 \dashrightarrow 00:56:18.020$  Emailed or climb the French sociologist.

NOTE Confidence: 0.6743414

 $00:56:18.020 \longrightarrow 00:56:21.180$  Who wrote the book called Suicide in late

NOTE Confidence: 0.6743414

 $00{:}56{:}21.180 \to 00{:}56{:}24.099$ 19th century as friends transition from a

NOTE Confidence: 0.6743414

 $00:56:24.100 \longrightarrow 00:56:26.978$  traditional society to an industrial society?

NOTE Confidence: 0.6743414

 $00{:}56{:}26.978 \dashrightarrow 00{:}56{:}29.781$  And I'm I'm, I'm wondering what

NOTE Confidence: 0.6743414

 $00:56:29.781 \longrightarrow 00:56:32.420$  your thoughts would be on as we

NOTE Confidence: 0.6743414

 $00:56:32.498 \longrightarrow 00:56:35.530$  transition to a postindustrial society.

NOTE Confidence: 0.6743414

 $00:56:35.530 \longrightarrow 00:56:39.808$  Whether the same meals that he

NOTE Confidence: 0.6743414

00:56:39.808 --> 00:56:42.668 diagnosed Geneva, few individualism,

NOTE Confidence: 0.6743414

 $00{:}56{:}42.668 \dashrightarrow 00{:}56{:}46.240$  loss of community, excessive hope.

NOTE Confidence: 0.820225

 $00:56:48.390 \longrightarrow 00:56:50.740$  You know loss of organized religion

NOTE Confidence: 0.820225

 $00:56:50.740 \longrightarrow 00:56:53.435$  and weakening of the nation in the

NOTE Confidence: 0.820225

00:56:53.435 --> 00:56:55.912 family weather work. This is kind

NOTE Confidence: 0.820225

 $00:56:55.912 \longrightarrow 00:56:58.290$  of history repeating itself in a

NOTE Confidence: 0.820225

 $00:56:58.290 \longrightarrow 00:57:00.522$  way you know. There's a wonderful

 $00:57:00.522 \dashrightarrow 00:57:03.829$  point and I I think sadly there are.

NOTE Confidence: 0.820225

 $00:57:03.830 \longrightarrow 00:57:05.442$  There are strong parallels.

NOTE Confidence: 0.820225

 $00:57:05.442 \longrightarrow 00:57:09.082$  If you step back and look at the changes

NOTE Confidence: 0.820225

 $00{:}57{:}09.082 \dashrightarrow 00{:}57{:}11.742$  that have a Kurd have hollowed out.

NOTE Confidence: 0.820225

00:57:11.750 --> 00:57:14.222 You know whole communities in the

NOTE Confidence: 0.820225

00:57:14.222 --> 00:57:16.386 in the Industrial Midwest places

NOTE Confidence: 0.820225

00:57:16.386 --> 00:57:19.026 that used to provide steady places

NOTE Confidence: 0.820225

 $00:57:19.026 \longrightarrow 00:57:21.259$  of employment allowed people with.

NOTE Confidence: 0.820225

 $00:57:21.260 \longrightarrow 00:57:23.661$  High school level of education to work

NOTE Confidence: 0.820225

00:57:23.661 --> 00:57:26.238 their way up and supportive family.

NOTE Confidence: 0.820225

 $00:57:26.240 \longrightarrow 00:57:29.480$  Think it really that the changes in our

NOTE Confidence: 0.820225

 $00:57:29.480 \longrightarrow 00:57:32.473$  labor markets and our economy shifting to

NOTE Confidence: 0.820225

 $00:57:32.473 \dashrightarrow 00:57:35.729$  a you know high information based economy.

NOTE Confidence: 0.820225

 $00:57:35.730 \longrightarrow 00:57:37.920$  And you know the greater disparities

NOTE Confidence: 0.820225

 $00:57:37.920 \longrightarrow 00:57:40.515$  in an income that have opened up

 $00:57:40.515 \longrightarrow 00:57:42.633$  over the last couple of decades.

NOTE Confidence: 0.820225

 $00{:}57{:}42.640 \dashrightarrow 00{:}57{:}44.404$  Have really taken a toll on people

NOTE Confidence: 0.820225

 $00:57:44.404 \longrightarrow 00:57:46.278$  and we can see the resentment.

NOTE Confidence: 0.820225

 $00:57:46.280 \longrightarrow 00:57:48.416$  We can see it in our politics over

NOTE Confidence: 0.820225

 $00:57:48.416 \longrightarrow 00:57:50.758$  the last several years and so we are.

NOTE Confidence: 0.820225

 $00:57:50.760 \longrightarrow 00:57:53.460$  You know it's we have a.

NOTE Confidence: 0.820225

 $00:57:53.460 \longrightarrow 00:57:55.796$  A dynamic economy as they had in in

NOTE Confidence: 0.820225

00:57:55.796 --> 00:57:58.010 France in in Durckheim's day and and

NOTE Confidence: 0.820225

 $00{:}57{:}58.010 {\:{\circ}{\circ}{\circ}}>00{:}58{:}00.349$  there are some of the consequences that

NOTE Confidence: 0.820225

00.58:00.349 --> 00.58:03.205 he wrote about I think are still app,

NOTE Confidence: 0.820225

 $00.58:03.210 \longrightarrow 00.58:04.395$  so thanks for.

NOTE Confidence: 0.820225

 $00:58:04.395 \longrightarrow 00:58:05.975$  For pointing that out.

NOTE Confidence: 0.851244

 $00:58:12.490 \longrightarrow 00:58:14.800$  The floor is open for questions

NOTE Confidence: 0.851244

 $00:58:14.800 \longrightarrow 00:58:16.340$  and comments. I believe

NOTE Confidence: 0.851244

 $00:58:16.340 \longrightarrow 00:58:18.270$  Jank Tech has a question.

NOTE Confidence: 0.78473854

 $00:58:19.810 \longrightarrow 00:58:22.822$  Hi, thank you. You also conducted

 $00:58:22.822 \longrightarrow 00:58:25.394$  and published several studies on

NOTE Confidence: 0.78473854

 $00{:}58{:}25.394 \dashrightarrow 00{:}58{:}27.810$  early mortality and serious mental

NOTE Confidence: 0.78473854

 $00:58:27.810 \longrightarrow 00:58:30.310$  illness and schizophrenia and and

NOTE Confidence: 0.78473854

 $00:58:30.310 \longrightarrow 00:58:34.810$  I mean I could with this like in a

NOTE Confidence: 0.78473854

 $00{:}58{:}34.810 \dashrightarrow 00{:}58{:}38.620$ renewed focus on on socio economic

NOTE Confidence: 0.78473854

 $00:58:38.620 \longrightarrow 00:58:41.160$  economic determinants of health.

NOTE Confidence: 0.78473854

00:58:41.160 --> 00:58:45.088 Much of that was. You know poverty.

NOTE Confidence: 0.78473854

00:58:45.088 --> 00:58:47.118 In serious mental illness and

NOTE Confidence: 0.78473854

00:58:47.118 --> 00:58:48.820 how much of that was?

NOTE Confidence: 0.78473854

00:58:48.820 --> 00:58:51.620 I mean, do you have any ideas on that?

NOTE Confidence: 0.78473854

 $00:58:51.620 \longrightarrow 00:58:52.550$  Yeah, well, you

NOTE Confidence: 0.8283872

 $00:58:52.550 \longrightarrow 00:58:53.333$  know, I think.

NOTE Confidence: 0.8283872

 $00{:}58{:}53.333 \dashrightarrow 00{:}58{:}54.899$  Sure, and I didn't really talk

NOTE Confidence: 0.8283872

00:58:54.899 --> 00:58:56.599 about schizophrenia this morning,

NOTE Confidence: 0.8283872

 $00:58:56.600 \longrightarrow 00:58:59.756$  but very happy too, I think.

00:58:59.760 --> 00:59:02.165 You know overall within people

NOTE Confidence: 0.8283872

 $00{:}59{:}02.165 --> 00{:}59{:}03.608$  and also schizophrenia.

NOTE Confidence: 0.8283872

 $00:59:03.610 \longrightarrow 00:59:06.382$  You know you have a population that

NOTE Confidence: 0.8283872

 $00:59:06.382 \longrightarrow 00:59:09.751$  has lots of that that has health

NOTE Confidence: 0.8283872

 $00:59:09.751 \longrightarrow 00:59:12.889$  challenges across a number of dimensions.

NOTE Confidence: 0.8283872

 $00:59:12.890 \longrightarrow 00:59:15.210$  At the most basic level,

NOTE Confidence: 0.8283872

 $00:59:15.210 \longrightarrow 00:59:19.026$  you know we live in a society that depends

NOTE Confidence: 0.8283872

 $00:59:19.026 \longrightarrow 00:59:22.348$  upon people rationally seeking care.

NOTE Confidence: 0.8283872

 $00{:}59{:}22.350 \dashrightarrow 00{:}59{:}25.452$  When they are ever health read

NOTE Confidence: 0.8283872

 $00:59:25.452 \longrightarrow 00:59:27.003$  and people schizophrenia.

NOTE Confidence: 0.8283872

00:59:27.010 --> 00:59:29.320 Are quite impaired in that place,

NOTE Confidence: 0.8283872

 $00:59:29.320 \longrightarrow 00:59:30.860$  so even relatively simple

NOTE Confidence: 0.8283872

 $00:59:30.860 \longrightarrow 00:59:32.400$  things like an appendicitis,

NOTE Confidence: 0.8283872

 $00:59:32.400 \longrightarrow 00:59:34.710$  which generally results in an appendectomy.

NOTE Confidence: 0.8283872

 $00:59:34.710 \longrightarrow 00:59:36.635$  That's not such a serious

NOTE Confidence: 0.8283872

00:59:36.635 --> 00:59:38.560 procedure can be life threatening,

00:59:38.560 --> 00:59:40.100 and someone with schizophrenia

NOTE Confidence: 0.8283872

 $00:59:40.100 \longrightarrow 00:59:41.640$  who delays treatment seeking.

NOTE Confidence: 0.8283872

 $00:59:41.640 \longrightarrow 00:59:43.746$  So there's thinking about the cognitive

NOTE Confidence: 0.8283872

 $00:59:43.746 \longrightarrow 00:59:45.638$  problems that many adults with

NOTE Confidence: 0.8283872

 $00:59:45.638 \longrightarrow 00:59:47.798$  schizophrenia have in negotiating properly,

NOTE Confidence: 0.8283872

 $00:59:47.800 \longrightarrow 00:59:50.362$  go shooting and being received in an

NOTE Confidence: 0.8283872

00:59:50.362 --> 00:59:52.809 unbiased way in our health system.

NOTE Confidence: 0.8283872

 $00:59:52.810 \longrightarrow 00:59:55.384$  There's a layer there that then

NOTE Confidence: 0.8283872

 $00.59.55.384 \longrightarrow 00.59.57.100$  below that there are.

NOTE Confidence: 0.8283872

00:59:57.100 --> 00:59:57.772 Aspects.

NOTE Confidence: 0.8283872

 $00:59:57.772 \longrightarrow 01:00:00.460$  You know up there.

NOTE Confidence: 0.8283872

 $01\text{:}00\text{:}00.460 \dashrightarrow 01\text{:}00\text{:}02.100$  There are aspects related to

NOTE Confidence: 0.8283872

01:00:02.100 --> 01:00:03.442 health behaviors, you know.

NOTE Confidence: 0.8283872

 $01{:}00{:}03.442 \dashrightarrow 01{:}00{:}05.147$  Within schizophrenia we know from

NOTE Confidence: 0.8283872

 $01:00:05.147 \longrightarrow 01:00:07.159$  characterizations of the Katie sample that

01:00:07.159 --> 01:00:09.336 very high rates of obesity and hypertension,

NOTE Confidence: 0.8283872

 $01:00:09.340 \longrightarrow 01:00:09.670$  hyperlipidemia,

NOTE Confidence: 0.8283872

 $01:00:09.670 \longrightarrow 01:00:11.320$  things that pose great risks.

NOTE Confidence: 0.8283872

01:00:11.320 --> 01:00:13.288 We have high rates of smoking,

NOTE Confidence: 0.8283872

 $01:00:13.290 \longrightarrow 01:00:15.324$  the people who's not only people

NOTE Confidence: 0.8283872

01:00:15.324 --> 01:00:17.047 discussing it more likely to

NOTE Confidence: 0.8283872

 $01:00:17.047 \longrightarrow 01:00:18.557$  smoke in the general public.

NOTE Confidence: 0.8283872

01:00:18.560 --> 01:00:20.528 They're more likely of the smokers.

NOTE Confidence: 0.8283872

 $01:00:20.530 \longrightarrow 01:00:22.854$  They smoke more heavily so that their

NOTE Confidence: 0.8283872

01:00:22.854 --> 01:00:24.806 risks of polarities are, you know,

NOTE Confidence: 0.8283872

 $01{:}00{:}24.806 \dashrightarrow 01{:}00{:}26.446$  are greatly out of proportion.

NOTE Confidence: 0.8283872

01:00:26.450 --> 01:00:27.878 Even more greater portion,

NOTE Confidence: 0.8283872

 $01:00:27.878 \longrightarrow 01:00:29.663$  there are suicide and then

NOTE Confidence: 0.8283872

 $01:00:29.663 \longrightarrow 01:00:31.659$  you have the disorder itself.

NOTE Confidence: 0.8283872

 $01:00:31.660 \longrightarrow 01:00:33.652$  We have a paper in impress

NOTE Confidence: 0.8283872

01:00:33.652 --> 01:00:34.980 attempts to control it.

 $01{:}00{:}34.980 \dashrightarrow 01{:}00{:}37.080$  Come out in a few months looking

NOTE Confidence: 0.8283872

 $01:00:37.080 \longrightarrow 01:00:39.306$  at the patterns of suicide in

NOTE Confidence: 0.8283872

 $01:00:39.306 \longrightarrow 01:00:41.401$  schizophrenia and unlike the general

NOTE Confidence: 0.8283872

 $01:00:41.401 \longrightarrow 01:00:43.361$  population where it tends to go

NOTE Confidence: 0.8283872

01:00:43.361 --> 01:00:45.268 up and peaks in late middle age

NOTE Confidence: 0.8283872

 $01:00:45.268 \longrightarrow 01:00:47.564$  or in early adult older adult age

NOTE Confidence: 0.8283872

 $01:00:47.564 \longrightarrow 01:00:49.420$  in schizophrenia goes down and it

NOTE Confidence: 0.8283872

 $01:00:49.420 \longrightarrow 01:00:51.565$  is very highest in those first few

NOTE Confidence: 0.8283872

 $01:00:51.565 \longrightarrow 01:00:53.785$  years so that the psychosis paranoia

NOTE Confidence: 0.8283872

 $01:00:53.785 \longrightarrow 01:00:56.100$  people perhaps aware of the illness

NOTE Confidence: 0.8283872

 $01:00:56.100 \longrightarrow 01:00:58.900$  and the life in front of them.

NOTE Confidence: 0.8283872

 $01:00:58.900 \longrightarrow 01:01:01.438$  And their lives. So the illness.

NOTE Confidence: 0.8283872

 $01{:}01{:}01{:}01{:}440 \dashrightarrow 01{:}01{:}03.757$  How some people believe how we treat

NOTE Confidence: 0.8283872

 $01:01:03.757 \longrightarrow 01:01:06.470$  it with some of the anti psychotics

NOTE Confidence: 0.8283872

 $01:01:06.470 \longrightarrow 01:01:08.530$  and their and their metabolic

 $01:01:08.530 \longrightarrow 01:01:11.163$  problems that they pose as well as

NOTE Confidence: 0.8283872

 $01:01:11.163 \longrightarrow 01:01:13.140$  embedding these issues with in.

NOTE Confidence: 0.8283872

 $01:01:13.140 \longrightarrow 01:01:15.300$  Our health care system,

NOTE Confidence: 0.8283872

 $01:01:15.300 \longrightarrow 01:01:17.360$  in the challenges of accessing

NOTE Confidence: 0.8283872

01:01:17.360 --> 01:01:19.008 appropriate care health behaviors,

NOTE Confidence: 0.8283872

 $01{:}01{:}19.010 \dashrightarrow 01{:}01{:}21.445$  it's really a multiply determined

NOTE Confidence: 0.8283872

 $01:01:21.445 \longrightarrow 01:01:24.516$  thing that results in the shorter

NOTE Confidence: 0.8283872

01:01:24.516 --> 01:01:26.696 longevity of people with.

NOTE Confidence: 0.8283872

 $01:01:26.700 \longrightarrow 01:01:28.945$  Serious mental illness and then

NOTE Confidence: 0.8283872

01:01:28.945 --> 01:01:32.149 on top of that there of course,

NOTE Confidence: 0.8283872

 $01{:}01{:}32.150 \dashrightarrow 01{:}01{:}33.512$  are disproportionately represented

NOTE Confidence: 0.8283872

 $01:01:33.512 \longrightarrow 01:01:35.328$  in the lowest rungs.

NOTE Confidence: 0.8283872

01:01:35.330 --> 01:01:37.600 In terms of socioeconomics, with,

NOTE Confidence: 0.8283872

 $01:01:37.600 \longrightarrow 01:01:41.290$  you know the great majority of

NOTE Confidence: 0.8283872

 $01:01:41.290 \longrightarrow 01:01:43.135$  people with schizophrenia.

NOTE Confidence: 0.8283872

 $01:01:43.140 \longrightarrow 01:01:45.180$  More than 2/3 are in are in the

01:01:45.180 --> 01:01:47.772 Medicare or Medicaid programs, or both.

NOTE Confidence: 0.8283872

01:01:47.772 --> 01:01:49.200 So you know,

NOTE Confidence: 0.8283872

01:01:49.200 --> 01:01:51.398 it's a very difficult and complicated thing.

NOTE Confidence: 0.8283872

01:01:51.400 --> 01:01:52.327 You went back.

NOTE Confidence: 0.8283872

01:01:52.327 --> 01:01:55.170 One of the things that I became aware of,

NOTE Confidence: 0.8283872

01:01:55.170 --> 01:01:57.053 like I went into it, thinking,

NOTE Confidence: 0.8283872

01:01:57.053 --> 01:01:58.618 well, it's probably mostly suicide,

NOTE Confidence: 0.8283872

 $01:01:58.620 \longrightarrow 01:02:00.185$  is probably it's actually not

NOTE Confidence: 0.8283872

 $01:02:00.185 \longrightarrow 01:02:01.124$  much this suicide.

NOTE Confidence: 0.8283872

 $01:02:01.130 \longrightarrow 01:02:02.740$  It's mostly pulmonary and cardiovascular

NOTE Confidence: 0.8283872

 $01:02:02.740 \longrightarrow 01:02:04.350$  disease that's contributing to the

NOTE Confidence: 0.8283872

 $01:02:04.399 \longrightarrow 01:02:05.904$  shorter life expectancy in the

NOTE Confidence: 0.8283872

 $01{:}02{:}05.904 \dashrightarrow 01{:}02{:}07.409$  premature mortality in that population.

NOTE Confidence: 0.80138636

 $01:02:07.410 \longrightarrow 01:02:09.300$  So thanks for bringing that up.

NOTE Confidence: 0.795245

 $01:02:13.930 \longrightarrow 01:02:16.498$  There's a comment from Sandra Bacon.

01:02:22.110 --> 01:02:25.260 Sandra, do you wanna speak up or

NOTE Confidence: 0.8653857

01:02:25.260 --> 01:02:27.510 should I read your sure?

NOTE Confidence: 0.8653857

 $01:02:27.510 \longrightarrow 01:02:29.760$  Sure, so I'm particularly interested

NOTE Confidence: 0.8653857

 $01:02:29.760 \longrightarrow 01:02:32.460$  in the high utilization of patients

NOTE Confidence: 0.8653857

 $01:02:32.460 \longrightarrow 01:02:34.710$  in psychiatric emergency services and

NOTE Confidence: 0.8653857

 $01:02:34.710 \longrightarrow 01:02:37.860$  what strikes me is that these patients,

NOTE Confidence: 0.8653857

 $01:02:37.860 \longrightarrow 01:02:40.560$  despite the amount of time that

NOTE Confidence: 0.8653857

01:02:40.560 --> 01:02:42.810 they spend in acute services,

NOTE Confidence: 0.8653857

 $01{:}02{:}42.810 \longrightarrow 01{:}02{:}45.060$  their outcomes are really poor,

NOTE Confidence: 0.8653857

 $01:02:45.060 \longrightarrow 01:02:46.860$  and disposition planning is

NOTE Confidence: 0.8653857

 $01{:}02{:}46.860 \dashrightarrow 01{:}02{:}49.590$  of tentimes stymied by the fact that.

NOTE Confidence: 0.8653857

 $01:02:49.590 \longrightarrow 01:02:52.212$  What they need is not available

NOTE Confidence: 0.8653857

 $01:02:52.212 \longrightarrow 01:02:53.780$  in the community either.

NOTE Confidence: 0.8653857

01:02:53.780 --> 01:02:56.136 It's not a service that's covered,

NOTE Confidence: 0.8653857

01:02:56.136 --> 01:02:57.709 or there's waiting lists,

NOTE Confidence: 0.8653857

 $01:02:57.710 \longrightarrow 01:02:59.676$  and so they patients continue

 $01{:}02{:}59.676 \dashrightarrow 01{:}03{:}01.638$  to use the emergency service.

NOTE Confidence: 0.8653857

 $01:03:01.638 \longrightarrow 01:03:04.782$  So how do we address the fact that

NOTE Confidence: 0.8653857

 $01:03:04.782 \longrightarrow 01:03:07.536$  the care that people may need is

NOTE Confidence: 0.8653857

01:03:07.536 --> 01:03:10.828 not necessarily always available?

NOTE Confidence: 0.8653857

 $01{:}03{:}10.830 \dashrightarrow 01{:}03{:}13.497$  That is a big and important question.

NOTE Confidence: 0.8653857

01:03:13.500 --> 01:03:14.162 You know,

NOTE Confidence: 0.8653857

01:03:14.162 --> 01:03:16.479 I think first I just want to

NOTE Confidence: 0.8653857

 $01:03:16.479 \longrightarrow 01:03:18.090$  validate your observation.

NOTE Confidence: 0.8653857

 $01:03:18.090 \longrightarrow 01:03:20.113$  If you look and see at people

NOTE Confidence: 0.8653857

 $01:03:20.113 \longrightarrow 01:03:21.902$  who who people with serious

NOTE Confidence: 0.8653857

 $01:03:21.902 \longrightarrow 01:03:24.037$  mental illness who are discharged

NOTE Confidence: 0.8653857

 $01:03:24.037 \longrightarrow 01:03:26.110$  from the emergency Department,

NOTE Confidence: 0.8653857

 $01{:}03{:}26.110 \dashrightarrow 01{:}03{:}28.300$  the single most robust predictor of

NOTE Confidence: 0.8653857

 $01:03:28.300 \longrightarrow 01:03:30.522$  whether they're going to run into

NOTE Confidence: 0.8653857

 $01:03:30.522 \longrightarrow 01:03:32.257$  trouble and require an represent

01:03:32.257 --> 01:03:34.204 to an emergency Department or

NOTE Confidence: 0.8653857

 $01{:}03{:}34.204 \dashrightarrow 01{:}03{:}35.884$  require hospitalization in the

NOTE Confidence: 0.8653857

01:03:35.884 --> 01:03:38.550 ensuing weeks is whether or not

NOTE Confidence: 0.8653857

 $01:03:38.550 \longrightarrow 01:03:41.490$  they're in care before they came.

NOTE Confidence: 0.8653857

01:03:41.490 --> 01:03:42.854 To the emergency Department,

NOTE Confidence: 0.8653857

01:03:42.854 --> 01:03:43.877 it's it also,

NOTE Confidence: 0.8653857

 $01:03:43.880 \longrightarrow 01:03:45.670$  it's the strongest terminal whether

NOTE Confidence: 0.8653857

 $01:03:45.670 \longrightarrow 01:03:48.310$  or not they will follow up with care.

NOTE Confidence: 0.8653857

 $01:03:48.310 \longrightarrow 01:03:50.356$  We ask an awful lot of

NOTE Confidence: 0.8653857

01:03:50.356 --> 01:03:51.038 emergency department's.

NOTE Confidence: 0.8653857

 $01:03:51.040 \longrightarrow 01:03:52.404$  They're not really well

NOTE Confidence: 0.8653857

 $01:03:52.404 \longrightarrow 01:03:53.768$  configured for the care,

NOTE Confidence: 0.8653857

 $01:03:53.770 \longrightarrow 01:03:55.706$  most of them for the care of people

NOTE Confidence: 0.8653857

01:03:55.706 --> 01:03:57.784 who are serious milleson an accept

NOTE Confidence: 0.8653857

 $01:03:57.784 \longrightarrow 01:03:59.699$  replaces psychedelic haven where you

NOTE Confidence: 0.8653857

 $01:03:59.699 \longrightarrow 01:04:01.949$  have a dedicated psychiatric service.

 $01{:}04{:}01{.}950 \dashrightarrow 01{:}04{:}03{.}333$  Most emergency departments

NOTE Confidence: 0.8653857

01:04:03.333 --> 01:04:04.716 actually don't have.

NOTE Confidence: 0.8653857

 $01:04:04.720 \longrightarrow 01:04:06.916$  And this is a remarkable thing.

NOTE Confidence: 0.8653857

01:04:06.920 --> 01:04:08.790 They don't have a psychiatrist

NOTE Confidence: 0.8653857

 $01:04:08.790 \longrightarrow 01:04:10.660$  or a psychologist either on

NOTE Confidence: 0.8653857

 $01:04:10.731 \longrightarrow 01:04:12.406$  site or available on call.

NOTE Confidence: 0.8653857

01:04:12.410 --> 01:04:13.862 It's really primary care.

NOTE Confidence: 0.8653857

 $01:04:13.862 \longrightarrow 01:04:16.040$  It's really part of the General

NOTE Confidence: 0.8653857

 $01{:}04{:}16.113 \dashrightarrow 01{:}04{:}17.898$  Medical sector and you know.

NOTE Confidence: 0.8653857

 $01:04:17.900 \longrightarrow 01:04:20.420$  So to expect that aspect of our

NOTE Confidence: 0.8653857

 $01:04:20.420 \longrightarrow 01:04:23.027$  General Medical sector to care for in

NOTE Confidence: 0.8653857

 $01:04:23.027 \longrightarrow 01:04:24.842$  a compassionate and effective way.

NOTE Confidence: 0.8653857

 $01{:}04{:}24.850 \dashrightarrow 01{:}04{:}27.442$  People who are at a people who have

NOTE Confidence: 0.8653857

 $01:04:27.442 \longrightarrow 01:04:29.292$  the greatest level of psychiatric

NOTE Confidence: 0.8653857

 $01:04:29.292 \longrightarrow 01:04:31.560$  illness severity at a time in

 $01:04:31.560 \longrightarrow 01:04:34.351$  their lives when they are in a

NOTE Confidence: 0.8653857

 $01:04:34.351 \longrightarrow 01:04:35.915$  crisis is completely unrealistic.

NOTE Confidence: 0.8653857

01:04:35.920 --> 01:04:36.996 And then it further,

NOTE Confidence: 0.8653857

 $01:04:36.996 \longrightarrow 01:04:38.610$  there's the point that you make

NOTE Confidence: 0.8653857

 $01:04:38.661 \longrightarrow 01:04:40.416$  that there aren't available slots.

NOTE Confidence: 0.8653857

01:04:40.420 --> 01:04:42.220 Particularly I think for young people,

NOTE Confidence: 0.8653857

 $01{:}04{:}42.220 \to 01{:}04{:}43.966$  children in many communities and for

NOTE Confidence: 0.8653857

01:04:43.966 --> 01:04:46.118 older adults they have long waiting lists.

NOTE Confidence: 0.8653857

01:04:46.120 --> 01:04:48.334 This isn't a group that isn't

NOTE Confidence: 0.8653857

01:04:48.334 --> 01:04:49.810 often internally motivated and

NOTE Confidence: 0.8653857

 $01{:}04{:}49.877 \dashrightarrow 01{:}04{:}51.905$  has the persistence to follow up.

NOTE Confidence: 0.8653857

 $01:04:51.910 \longrightarrow 01:04:53.500$  An emergency Department also overwhelmed.

NOTE Confidence: 0.8653857

 $01:04:53.500 \longrightarrow 01:04:54.445$  They don't have.

NOTE Confidence: 0.8653857

 $01:04:54.445 \longrightarrow 01:04:55.705$  There are some things,

NOTE Confidence: 0.8653857

01:04:55.710 --> 01:04:57.300 and there's a nice review,

NOTE Confidence: 0.8653857

01:04:57.300 --> 01:04:59.836 but I that I refer you to if

01:04:59.836 --> 01:05:01.099 you're interested in this.

NOTE Confidence: 0.8653857

01:05:01.100 --> 01:05:03.008 By Stephanie Dupnik in JAMA Psychiatry.

NOTE Confidence: 0.8653857

 $01:05:03.010 \longrightarrow 01:05:03.562$  Last year,

NOTE Confidence: 0.8653857

01:05:03.562 --> 01:05:05.494 a meta analysis and she's looking at

NOTE Confidence: 0.8653857

 $01:05:05.494 \longrightarrow 01:05:06.818$  things that emergency departments

NOTE Confidence: 0.8653857

 $01:05:06.818 \longrightarrow 01:05:08.810$  can actually do right in the

NOTE Confidence: 0.8653857

01:05:08.810 --> 01:05:10.193 emergency Department and actually

NOTE Confidence: 0.8653857

 $01{:}05{:}10.193 \dashrightarrow 01{:}05{:}11.853$  improve the short term outcome

NOTE Confidence: 0.8653857

 $01:05:11.853 \longrightarrow 01:05:13.471$  for people who are discharged.

NOTE Confidence: 0.8653857

 $01:05:13.471 \longrightarrow 01:05:15.690$  And they are things like sending texts,

NOTE Confidence: 0.8653857

01:05:15.690 --> 01:05:16.638 supportive text reminders,

NOTE Confidence: 0.8653857

01:05:16.638 --> 01:05:17.586 an engaging family,

NOTE Confidence: 0.8653857

 $01:05:17.590 \longrightarrow 01:05:19.809$  and so forth in the follow up.

NOTE Confidence: 0.8653857

 $01:05:19.810 \longrightarrow 01:05:21.826$  But they require effort and they.

NOTE Confidence: 0.8653857

 $01:05:21.830 \longrightarrow 01:05:23.630$  Probably work best in communities

01:05:23.630 --> 01:05:24.710 that have accessible,

NOTE Confidence: 0.8653857

 $01:05:24.710 \longrightarrow 01:05:26.150$  timely accessible mental services.

NOTE Confidence: 0.8653857

01:05:26.150 --> 01:05:27.230 As you say,

NOTE Confidence: 0.8653857

 $01:05:27.230 \longrightarrow 01:05:29.778$  I in a course in many settings

NOTE Confidence: 0.8653857

 $01:05:29.778 \longrightarrow 01:05:30.870$  and particularly even

NOTE Confidence: 0.8560954

01:05:30.949 --> 01:05:33.203 in you know in urban settings that

NOTE Confidence: 0.8560954

 $01:05:33.203 \longrightarrow 01:05:35.510$  this can be quite a challenge.

NOTE Confidence: 0.8560954

01:05:35.510 --> 01:05:38.075 I think it's it you put your finger on

NOTE Confidence: 0.8560954

 $01{:}05{:}38.075 \dashrightarrow 01{:}05{:}40.993$  one of the critical weak points in many

NOTE Confidence: 0.8560954

 $01:05:40.993 \longrightarrow 01:05:43.430$  local mental health systems, so thanks.

NOTE Confidence: 0.8697443

 $01:05:53.150 \longrightarrow 01:05:56.820$  Other comments. So so I

NOTE Confidence: 0.8924619

 $01:05:56.820 \longrightarrow 01:06:00.940$  have one. So first mark.

NOTE Confidence: 0.8924619

 $01{:}06{:}00.940 \dashrightarrow 01{:}06{:}03.630$  A brilliant erudite rigorous tour.

NOTE Confidence: 0.8924619

 $01:06:03.630 \longrightarrow 01:06:05.778$  The first lecture we'd

NOTE Confidence: 0.8924619

01:06:05.780 --> 01:06:08.470 expect nothing less of you,

NOTE Confidence: 0.8924619

 $01{:}06{:}08.470 \dashrightarrow 01{:}06{:}12.709$  but we're extremely pleased to see.

01:06:12.710 --> 01:06:14.982 You know it's a thrill to have you

NOTE Confidence: 0.8924619

 $01:06:14.982 \longrightarrow 01:06:17.207$  here and to have such a brilliant

NOTE Confidence: 0.83685565

 $01:06:17.210 \longrightarrow 01:06:18.410$  lecture. Really thank you.

NOTE Confidence: 0.83685565

01:06:18.410 --> 01:06:19.910 Thanks for your kind words.

NOTE Confidence: 0.8619214

 $01:06:21.170 \longrightarrow 01:06:24.730$  The second thing is that I would like

NOTE Confidence: 0.8619214

 $01:06:24.730 \longrightarrow 01:06:29.046$  to key off of Sandy's last comment

NOTE Confidence: 0.8619214

 $01:06:29.046 \longrightarrow 01:06:32.850$  so we have health care systems.

NOTE Confidence: 0.8619214

 $01:06:32.850 \longrightarrow 01:06:34.335$  There are overstressed.

NOTE Confidence: 0.8619214

 $01:06:34.335 \longrightarrow 01:06:37.305$  We have treatments that are often.

NOTE Confidence: 0.8619214

 $01:06:37.310 \longrightarrow 01:06:39.935$  Not definitive, you know there

NOTE Confidence: 0.8619214

01:06:39.935 --> 01:06:42.560 there they have transient efficacy,

NOTE Confidence: 0.8619214

 $01:06:42.560 \longrightarrow 01:06:46.235$  at least over the short run an.

NOTE Confidence: 0.8409729

 $01:06:48.480 \longrightarrow 01:06:50.825$  And and even in the long run,

NOTE Confidence: 0.8409729

 $01:06:50.830 \longrightarrow 01:06:54.331$  often are not able to achieve all the aims

NOTE Confidence: 0.8409729

 $01:06:54.331 \longrightarrow 01:06:57.460$  that we hope to achieve in treatment.

 $01:06:57.460 \longrightarrow 01:06:59.812$  And there is an implication in

NOTE Confidence: 0.8409729

 $01{:}06{:}59.812 \dashrightarrow 01{:}07{:}02.579$  some of the things that you said.

NOTE Confidence: 0.8409729

 $01:07:02.580 \longrightarrow 01:07:05.832$  How at a societal level,

NOTE Confidence: 0.8409729

01:07:05.832 --> 01:07:08.436 through economic and vocational?

NOTE Confidence: 0.8739959

01:07:10.530 --> 01:07:12.034 Creating vocational, economic and

NOTE Confidence: 0.8739959

01:07:12.034 --> 01:07:13.538 vocational opportunities for people.

NOTE Confidence: 0.8739959

 $01:07:13.540 \longrightarrow 01:07:16.130$  You might be able to prevent some

NOTE Confidence: 0.8739959

01:07:16.130 --> 01:07:18.332 of the downstream consequences of

NOTE Confidence: 0.8739959

 $01{:}07{:}18.332 \longrightarrow 01{:}07{:}20.872$  the social problems that we're

NOTE Confidence: 0.8739959

01:07:20.872 --> 01:07:23.270 essentially treating in psychiatry.

NOTE Confidence: 0.8739959

 $01:07:23.270 \longrightarrow 01:07:25.132$  And and I'm curious.

NOTE Confidence: 0.8739959

 $01{:}07{:}25.132 \dashrightarrow 01{:}07{:}28.848$  I'm curious what what you mean by that,

NOTE Confidence: 0.8739959

 $01:07:28.850 \longrightarrow 01:07:32.826$  but you might mean by that given.

NOTE Confidence: 0.8739959

 $01:07:32.830 \longrightarrow 01:07:33.954$  For example,

NOTE Confidence: 0.8739959

 $01:07:33.954 \longrightarrow 01:07:37.888$  what we're seeing now a \$1500 check.

NOTE Confidence: 0.8739959

 $01:07:37.890 \longrightarrow 01:07:42.540$  \$1600 check being provided for for

 $01:07:42.540 \longrightarrow 01:07:47.110$  covid relief and things like that.

NOTE Confidence: 0.8739959

01:07:47.110 --> 01:07:48.108 What what?

NOTE Confidence: 0.8739959

01:07:48.108 --> 01:07:51.102 What do you think societies can

NOTE Confidence: 0.8739959

01:07:51.102 --> 01:07:54.100 do through through social or

NOTE Confidence: 0.8739959

 $01:07:54.100 \longrightarrow 01:07:57.275$  economic policy that would actually?

NOTE Confidence: 0.8739959

01:07:57.280 --> 01:07:59.135 Measurably had the possibility of

NOTE Confidence: 0.8739959

 $01:07:59.135 \longrightarrow 01:08:00.619$  measure Lee measurably decreasing

NOTE Confidence: 0.8739959

 $01:08:00.619 \longrightarrow 01:08:02.537$  both accidental death and suicide.

NOTE Confidence: 0.8739959

01:08:02.540 --> 01:08:04.420 Yeah, well, first of all,

NOTE Confidence: 0.8739959

 $01:08:04.420 \longrightarrow 01:08:04.800$  it's

NOTE Confidence: 0.7920157

01:08:04.800 --> 01:08:07.056 it's. It's anything I say on

NOTE Confidence: 0.7920157

 $01:08:07.056 \longrightarrow 01:08:08.560$  this point is conjectural.

NOTE Confidence: 0.7920157

 $01:08:08.560 \longrightarrow 01:08:10.672$  We don't really have strong evidence

NOTE Confidence: 0.7920157

 $01:08:10.672 \longrightarrow 01:08:12.958$  that work there being a tight

NOTE Confidence: 0.7920157

01:08:12.958 --> 01:08:14.578 connection between these things,

01:08:14.580 --> 01:08:17.580 but but if you do step back,

NOTE Confidence: 0.7920157

 $01:08:17.580 \longrightarrow 01:08:19.460$  you see you see these

NOTE Confidence: 0.7920157

 $01:08:19.460 \longrightarrow 01:08:21.340$  correlations that I've shown you.

NOTE Confidence: 0.7920157

01:08:21.340 --> 01:08:25.100 My sense is that report is going to far more,

NOTE Confidence: 0.7920157

 $01:08:25.100 \longrightarrow 01:08:27.860$  much more than a \$1600 check.

NOTE Confidence: 0.7920157

 $01:08:27.860 \longrightarrow 01:08:31.270$  It's going to require a

NOTE Confidence: 0.7920157

 $01:08:31.270 \longrightarrow 01:08:33.998$  kind of a reorientation.

NOTE Confidence: 0.7920157

01:08:34.000 --> 01:08:37.680 Uh, and a strengthening of the safety net.

NOTE Confidence: 0.7920157

01:08:37.680 --> 01:08:40.146 But you know, I'm not naive.

NOTE Confidence: 0.7920157

01:08:40.150 --> 01:08:42.082 You know, to the political realities

NOTE Confidence: 0.7920157

 $01{:}08{:}42.082 \dashrightarrow 01{:}08{:}44.834$  we live in a society that's that's

NOTE Confidence: 0.7920157

01:08:44.834 --> 01:08:47.164 very fractured along cultural and

NOTE Confidence: 0.7920157

 $01:08:47.164 \longrightarrow 01:08:49.220$  ideological and political lines.

NOTE Confidence: 0.7920157

 $01{:}08{:}49.220 --> 01{:}08{:}50.146 \ Underneath \ it,$ 

NOTE Confidence: 0.7920157

 $01:08:50.146 \longrightarrow 01:08:53.387$  there isn't as much solidarity as a

NOTE Confidence: 0.7920157

 $01:08:53.387 \longrightarrow 01:08:56.220$  people that we have as is enjoyed in,

01:08:56.220 --> 01:08:57.040 you know,

NOTE Confidence: 0.7920157

 $01:08:57.040 \longrightarrow 01:08:59.140$  in northern European countries that

NOTE Confidence: 0.7920157

 $01:08:59.140 \longrightarrow 01:09:01.580$  have a much stronger safety net.

NOTE Confidence: 0.7920157

01:09:01.580 --> 01:09:02.340 But I,

NOTE Confidence: 0.7920157

 $01:09:02.340 \longrightarrow 01:09:04.620$  I think it requires a much

NOTE Confidence: 0.7920157

 $01:09:04.620 \longrightarrow 01:09:06.401$  larger structural change that

NOTE Confidence: 0.7920157

 $01:09:06.401 \longrightarrow 01:09:08.289$  then providing checks for.

NOTE Confidence: 0.7920157

01:09:08.290 --> 01:09:09.550 A year, you know,

NOTE Confidence: 0.7920157

 $01:09:09.550 \longrightarrow 01:09:11.440$  they say that the recently passed,

NOTE Confidence: 0.7920157

 $01:09:11.440 \longrightarrow 01:09:13.020$  although it's massive in size,

NOTE Confidence: 0.7920157

 $01:09:13.020 \longrightarrow 01:09:15.155$  will lift the large number of children

NOTE Confidence: 0.7920157

 $01:09:15.155 \longrightarrow 01:09:17.729$  out of half of the people to have

NOTE Confidence: 0.7920157

01:09:17.729 --> 01:09:19.319 their children out of poverty.

NOTE Confidence: 0.7920157

01:09:19.320 --> 01:09:21.838 But it's only for a year, you know,

NOTE Confidence: 0.7920157

 $01:09:21.838 \longrightarrow 01:09:23.408$  until you have very basic,

01:09:23.410 --> 01:09:25.930 you know reforms of things like you know,

NOTE Confidence: 0.7920157

 $01:09:25.930 \longrightarrow 01:09:27.174$  providing childcare so that

NOTE Confidence: 0.7920157

 $01:09:27.174 \longrightarrow 01:09:29.400$  women and men are able to work,

NOTE Confidence: 0.7920157

 $01:09:29.400 \longrightarrow 01:09:30.660$  and subsidizing that for

NOTE Confidence: 0.7920157

 $01:09:30.660 \longrightarrow 01:09:31.920$  low income people and,

NOTE Confidence: 0.7920157

01:09:31.920 --> 01:09:32.548 you know,

NOTE Confidence: 0.7920157

 $01:09:32.548 \longrightarrow 01:09:34.118$  fortifying the schools in low

NOTE Confidence: 0.7920157

01:09:34.118 --> 01:09:34.746 income neighborhoods.

NOTE Confidence: 0.7920157

 $01{:}09{:}34.750 \dashrightarrow 01{:}09{:}36.955$  I mean the whole variety of things,

NOTE Confidence: 0.7920157

 $01:09:36.960 \longrightarrow 01:09:39.578$  and it would take a long time.

NOTE Confidence: 0.7920157

 $01{:}09{:}39.580 \longrightarrow 01{:}09{:}42.397$  But it might well be that that that those

NOTE Confidence: 0.7920157

 $01:09:42.397 \longrightarrow 01:09:44.980$  kinds of things would relieve distress.

NOTE Confidence: 0.7920157

 $01:09:44.980 \longrightarrow 01:09:46.420$  They're never going to,

NOTE Confidence: 0.7920157

01:09:46.420 --> 01:09:47.140 you know,

NOTE Confidence: 0.7920157

 $01:09:47.140 \longrightarrow 01:09:49.428$  we would still live in a world with

NOTE Confidence: 0.7920157

 $01:09:49.428 \longrightarrow 01:09:50.832$  schizophrenia and bipolar disorder

 $01{:}09{:}50.832 \dashrightarrow 01{:}09{:}53.160$  and severe mental disorders that are

NOTE Confidence: 0.7920157

 $01{:}09{:}53.160 \dashrightarrow 01{:}09{:}54.700$  largely biological determinants.

NOTE Confidence: 0.7920157

01:09:54.700 --> 01:09:56.860 But for many of the substance

NOTE Confidence: 0.7920157

 $01:09:56.860 \longrightarrow 01:09:57.940$  use related problems.

NOTE Confidence: 0.7920157

 $01:09:57.940 \longrightarrow 01:10:00.558$  And for many of anxiety and depression.

NOTE Confidence: 0.7920157

 $01:10:00.560 \longrightarrow 01:10:02.576$  I can well imagine that that is

NOTE Confidence: 0.7920157

 $01:10:02.576 \longrightarrow 01:10:04.191$  society that was more generous and

NOTE Confidence: 0.7920157

 $01:10:04.191 \longrightarrow 01:10:06.138$  its safety net that you would have

NOTE Confidence: 0.7920157

01:10:06.138 --> 01:10:08.034 ameliorate the course of these things,

NOTE Confidence: 0.7920157

 $01:10:08.040 \longrightarrow 01:10:10.296$  and it might well show up.

NOTE Confidence: 0.7920157

 $01:10:10.300 \longrightarrow 01:10:12.444$  In some of the broad databases that I

NOTE Confidence: 0.7920157

01:10:12.444 --> 01:10:15.039 talk that I've described to you this morning,

NOTE Confidence: 0.7920157

01:10:15.040 --> 01:10:15.630 but again,

NOTE Confidence: 0.7920157

 $01:10:15.630 \longrightarrow 01:10:17.400$  I don't want to oversell this.

NOTE Confidence: 0.7920157

01:10:17.400 --> 01:10:18.584 This is, you know,

 $01:10:18.584 \longrightarrow 01:10:19.768$  this is all conjecture.

NOTE Confidence: 0.60862714

 $01:10:22.130 \longrightarrow 01:10:25.550$  Except Posner had a comment, Seth.

NOTE Confidence: 0.85780346

 $01:10:38.100 \longrightarrow 01:10:41.196$  So Seth asked me to read this the

NOTE Confidence: 0.85780346

01:10:41.196 --> 01:10:43.974 early 1990s insurance parity laws

NOTE Confidence: 0.85780346

01:10:43.974 --> 01:10:46.530 required coverage for bipolar,

NOTE Confidence: 0.85780346

01:10:46.530 --> 01:10:47.522 schizophrenia, etc,

NOTE Confidence: 0.85780346

 $01:10:47.522 \longrightarrow 01:10:49.506$  but not substance abuse.

NOTE Confidence: 0.85780346

01:10:49.510 --> 01:10:52.026 This made it financially advantageous

NOTE Confidence: 0.85780346

 $01{:}10{:}52.026 \dashrightarrow 01{:}10{:}54.591$  for patients and treaters to

NOTE Confidence: 0.85780346

 $01:10:54.591 \longrightarrow 01:10:56.674$  attribute drug overdoses to

NOTE Confidence: 0.85780346

 $01{:}10{:}56.674 \dashrightarrow 01{:}10{:}58.570$  depression and suicidal thinking.

NOTE Confidence: 0.85780346

 $01:10:58.570 \longrightarrow 01:11:00.988$  Which would be covered as opposed

NOTE Confidence: 0.85780346

 $01:11:00.988 \longrightarrow 01:11:02.600$  to uncovered substance use?

NOTE Confidence: 0.85780346

 $01:11:02.600 \longrightarrow 01:11:05.267$  Do you have a way with your

NOTE Confidence: 0.85780346

01:11:05.267 --> 01:11:07.804 datasets to sort out a general

NOTE Confidence: 0.85780346

 $01:11:07.804 \longrightarrow 01:11:10.256$  change over the years in survey

01:11:10.256 --> 01:11:11.864 responses and clinical reporting?

NOTE Confidence: 0.90165836

 $01{:}11{:}13.060 \dashrightarrow 01{:}11{:}17.090$  You know that's a great question, there are.

NOTE Confidence: 0.90165836

01:11:17.090 --> 01:11:19.385 There are examples you know through

NOTE Confidence: 0.90165836

01:11:19.385 --> 01:11:20.933 littered throughout the healthcare

NOTE Confidence: 0.90165836

 $01{:}11{:}20.933 \dashrightarrow 01{:}11{:}22.646$  system where incentives are put

NOTE Confidence: 0.90165836

 $01:11:22.646 \longrightarrow 01:11:24.542$  on to to recognize your diagnose,

NOTE Confidence: 0.90165836

 $01:11:24.550 \longrightarrow 01:11:27.742$  people in different ways so you know

NOTE Confidence: 0.90165836

 $01{:}11{:}27.742 \dashrightarrow 01{:}11{:}31.588$  if you back up a decade or so before.

NOTE Confidence: 0.90165836

 $01:11:31.590 \longrightarrow 01:11:34.254$  The Parity Act and you look in the

NOTE Confidence: 0.90165836

 $01:11:34.254 \longrightarrow 01:11:36.209$  1993 changes in the disability

NOTE Confidence: 0.90165836

 $01:11:36.209 \longrightarrow 01:11:37.829$  in the SSI disability.

NOTE Confidence: 0.90165836

01:11:37.830 --> 01:11:40.399 They excluded substance use as a disability,

NOTE Confidence: 0.90165836

 $01{:}11{:}40.400 \dashrightarrow 01{:}11{:}42.115$  and suddenly those people lost

NOTE Confidence: 0.90165836

 $01:11:42.115 \longrightarrow 01:11:44.684$  their claims and we had more people

NOTE Confidence: 0.90165836

01:11:44.684 --> 01:11:46.639 making claims for other things.

 $01:11:46.640 \longrightarrow 01:11:49.320$  You know you can look at inpatient care

NOTE Confidence: 0.90165836

 $01:11:49.320 \longrightarrow 01:11:51.962$  for children and adolescents and see that

NOTE Confidence: 0.90165836

01:11:51.962 --> 01:11:54.709 you have a great disproportion of children,

NOTE Confidence: 0.90165836

 $01:11:54.710 \longrightarrow 01:11:56.545$  analysis or diagnosis for the

NOTE Confidence: 0.90165836

01:11:56.545 --> 01:11:58.380 first time with bipolar disorder,

NOTE Confidence: 0.90165836

 $01:11:58.380 \longrightarrow 01:12:00.305$  is that something that will

NOTE Confidence: 0.90165836

 $01:12:00.305 \longrightarrow 01:12:02.230$  get you into the hospital.

NOTE Confidence: 0.90165836

01:12:02.230 --> 01:12:04.197 So you need to be whatever you're

NOTE Confidence: 0.90165836

 $01{:}12{:}04.197 \dashrightarrow 01{:}12{:}05.750$  working with these claims data.

NOTE Confidence: 0.90165836

 $01:12:05.750 \longrightarrow 01:12:08.230$  Which are simply a reflection of the actual

NOTE Confidence: 0.90165836

 $01{:}12{:}08.230 \dashrightarrow 01{:}12{:}10.080$  diagnosis that clinicians are making.

NOTE Confidence: 0.90165836

01:12:10.080 --> 01:12:10.666 In practice,

NOTE Confidence: 0.90165836

 $01:12:10.666 \longrightarrow 01:12:12.424$  you need to be mindful that

NOTE Confidence: 0.90165836

 $01:12:12.424 \longrightarrow 01:12:14.945$  it isn't the same thing as a

NOTE Confidence: 0.90165836

 $01:12:14.945 \longrightarrow 01:12:16.067$  structured clinical interview.

NOTE Confidence: 0.90165836

 $01:12:16.070 \longrightarrow 01:12:18.570$  It isn't these aren't skids.

 $01:12:18.570 \longrightarrow 01:12:21.576$  These do represent not only the

NOTE Confidence: 0.90165836

 $01:12:21.576 \longrightarrow 01:12:24.227$  clinical judgments but also the

NOTE Confidence: 0.90165836

01:12:24.227 --> 01:12:26.467 economic context under which.

NOTE Confidence: 0.90165836

01:12:26.470 --> 01:12:28.200 Missions are making those judgments,

NOTE Confidence: 0.90165836

 $01{:}12{:}28.200 \to 01{:}12{:}31.048$  so I guess my short answer to that

NOTE Confidence: 0.90165836

01:12:31.048 --> 01:12:33.264 question is I'm not really aware

NOTE Confidence: 0.90165836

01:12:33.264 --> 01:12:36.342 of a good way with claims data of

NOTE Confidence: 0.90165836

 $01:12:36.342 \longrightarrow 01:12:38.497$  getting beneath these kinds of.

NOTE Confidence: 0.90165836

 $01:12:38.500 \longrightarrow 01:12:40.936$  A biases that are introduced by

NOTE Confidence: 0.90165836

 $01:12:40.936 \longrightarrow 01:12:42.154$  a differential reimbursement,

NOTE Confidence: 0.90165836

01:12:42.160 --> 01:12:43.219 and you know,

NOTE Confidence: 0.90165836

 $01:12:43.219 \longrightarrow 01:12:47.152$  and I think the best you can do is to

NOTE Confidence: 0.90165836

 $01{:}12{:}47.152 \dashrightarrow 01{:}12{:}49.900$  look for natural experiments that occur.

NOTE Confidence: 0.90165836

 $01:12:49.900 \longrightarrow 01:12:52.246$  Look for people who transition it

NOTE Confidence: 0.90165836

01:12:52.246 --> 01:12:54.303 between insurance plans that cover

01:12:54.303 --> 01:12:56.408 different things to quantify them,

NOTE Confidence: 0.90165836

 $01:12:56.410 \longrightarrow 01:12:58.522$  but that doesn't allow you really

NOTE Confidence: 0.90165836

 $01:12:58.522 \longrightarrow 01:13:00.525$  to get underneath and fully

NOTE Confidence: 0.90165836

 $01:13:00.525 \longrightarrow 01:13:02.109$  understand these processes,

NOTE Confidence: 0.90165836

 $01:13:02.110 \longrightarrow 01:13:05.578$  but it does that question does.

NOTE Confidence: 0.90165836

01:13:05.580 --> 01:13:06.194 Give us,

NOTE Confidence: 0.90165836

01:13:06.194 --> 01:13:08.036 I think inappropriate sense of humility,

NOTE Confidence: 0.90165836

01:13:08.040 --> 01:13:09.876 about the validity and the accuracy

NOTE Confidence: 0.90165836

 $01:13:09.876 \longrightarrow 01:13:12.064$  of the data that we work with

NOTE Confidence: 0.90165836

 $01:13:12.064 \longrightarrow 01:13:13.870$  that extends all the way through.

NOTE Confidence: 0.90165836

 $01:13:13.870 \longrightarrow 01:13:17.014$  There's a lot of concern that and there

NOTE Confidence: 0.90165836

01:13:17.014 --> 01:13:20.188 was concern even back in Turkey Times Day.

NOTE Confidence: 0.90165836

01:13:20.190 --> 01:13:20.427 Derek,

NOTE Confidence: 0.90165836

01:13:20.427 --> 01:13:22.560 I made a big deal out of your little

NOTE Confidence: 0.90165836

 $01:13:22.618 \longrightarrow 01:13:25.000$  being differences in rates of suicide

NOTE Confidence: 0.90165836

01:13:25.000 --> 01:13:26.588 between Protestants and Catholics,

 $01:13:26.590 \longrightarrow 01:13:28.830$  saying that Catholics have much lower rates.

NOTE Confidence: 0.9016583601:13:28.830 --> 01:13:29.150 Well,

NOTE Confidence: 0.90165836

01:13:29.150 --> 01:13:30.430 in the Catholic Church,

NOTE Confidence: 0.90165836

01:13:30.430 --> 01:13:32.670 you can't be buried on sacred ground

NOTE Confidence: 0.90165836

01:13:32.670 --> 01:13:33.630 if you have.

NOTE Confidence: 0.90165836

 $01:13:33.630 \longrightarrow 01:13:35.660$  If you're deemed a suicide and so

NOTE Confidence: 0.90165836

 $01:13:35.660 \longrightarrow 01:13:37.713$  that there may have been deliberate

NOTE Confidence: 0.90165836

 $01{:}13{:}37.713 \dashrightarrow 01{:}13{:}39.957$  MIS attributions of causes of death

NOTE Confidence: 0.90165836

01:13:39.957 --> 01:13:42.266 going way back a long period of time,

NOTE Confidence: 0.90165836

 $01:13:42.270 \longrightarrow 01:13:43.230$  so it's not.

NOTE Confidence: 0.90165836

01:13:43.230 --> 01:13:44.830 It's not a new issue,

NOTE Confidence: 0.90165836

 $01:13:44.830 \longrightarrow 01:13:46.756$  and it's anytime you seek to

NOTE Confidence: 0.90165836

01:13:46.756 --> 01:13:48.445 work with large databases where

NOTE Confidence: 0.90165836

 $01:13:48.445 \longrightarrow 01:13:50.175$  you're not actually doing in.

NOTE Confidence: 0.90165836

 $01:13:50.180 \longrightarrow 01:13:51.860$  You know intensive independent assessments.

01:13:51.860 --> 01:13:54.205 You can fall prey to these things,

NOTE Confidence: 0.90165836

 $01:13:54.210 \longrightarrow 01:13:56.226$  so that's a very good point.

NOTE Confidence: 0.8776372

 $01:13:57.990 \longrightarrow 01:14:00.324$  So I think we've reached the

NOTE Confidence: 0.8776372

 $01:14:00.324 \longrightarrow 01:14:02.831$  end of our allotted time. Ann.

NOTE Confidence: 0.8776372

 $01:14:02.831 \longrightarrow 01:14:06.519$  Let me again, thank Mark for joining us.

NOTE Confidence: 0.8776372

01:14:06.520 --> 01:14:09.106 And for sharing both specific subject,

NOTE Confidence: 0.8776372

 $01:14:09.110 \longrightarrow 01:14:12.008$  but also his methodological approach to

NOTE Confidence: 0.8776372

01:14:12.008 --> 01:14:14.833 looking at mental health problems and

NOTE Confidence: 0.8776372

 $01{:}14{:}14.833 \dashrightarrow 01{:}14{:}17.682$  service delivery and a scale that we

NOTE Confidence: 0.8776372

 $01:14:17.682 \longrightarrow 01:14:20.734$  need to pay more and more attention to.

NOTE Confidence: 0.8776372

 $01{:}14{:}20.740 \dashrightarrow 01{:}14{:}23.924$  So thank you very much to every body is

NOTE Confidence: 0.8776372

01:14:23.924 --> 01:14:27.121 joining to John Crystal and especially to

NOTE Confidence: 0.8776372

 $01:14:27.121 \longrightarrow 01:14:30.659$  Mark for returning to Yale for this time.

NOTE Confidence: 0.8776372

01:14:30.660 --> 01:14:32.352 Thanks very much.