WEBVTT

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00:00:37.230 --> 00:00:40.500

TFGH Central Zoom: we'll just get started in about a minute after we let people join.

2

00:01:16.410 --> 00:01:27.990

TFGH Central Zoom: Okay it's about one after so we'll just go ahead and kick off um first of all i'd like to welcome everybody to today's coordinate CDC covered 19 electronic health data initiative webinar.

3

00:01:28.380 --> 00:01:38.550

TFGH Central Zoom: i'm Sami chow and i'm with the public health informatics institute a program of the task force for global health and I wanted to thank everybody for taking the time out of your day to join us today.

4

00:01:39.540 --> 00:01:42.270

TFGH Central Zoom: A few housekeeping items before we get started with the content.

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00:01:42.690 --> 00:01:52.950

TFGH Central Zoom: I wanted to let everybody know that you're welcome to put your questions in the Q amp a box throughout the webinar, we will have that box monitored and we'll try to answer questions as they come in.

6

00:01:53.670 --> 00:02:02.640

TFGH Central Zoom: But we will also have time at the end of the call to do some questions out loud, if you have questions that you'd like to ask an answer out loud this webinar.

7

00:02:02.670 --> 00:02:10.260

TFGH Central Zoom: is being recorded and we will send out the link to the recording the slides and the transcript after this call is completed.

8

00:02:10.770 --> 00:02:26.070

TFGH Central Zoom: Our CDC sponsor would like to thank everybody for being here today and thank everybody for your continued support of this collaboration between PGI the coordinate group and CDC as well as our sponsor and now to.

9

00:02:26.130 --> 00:02:32.310

TFGH Central Zoom: kick off the webinar we have Jason block to talk about our updates.

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00:02:36.270 --> 00:02:40.110

Jason Block: Great thanks Sammy i'm just going to share my screen quickly.

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00:02:51.120 --> 00:02:52.170

Jason Block: Alright, thanks everyone.

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00:02:53.820 --> 00:03:10.410

Jason Block: and appreciate all of you, joining as usual Tom and I will tag team this presentation i'll go over the content of the slides and Tom will weigh in on the comments in the chat and then we'll join me answer the questions at the end.

13

00:03:11.910 --> 00:03:26.760

Jason Block: So normally we do these update webinars every two months we're a little bit late a week delayed for this one, this would normally be an April, update and sorry next one would be expected to be.

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00:03:28.650 --> 00:03:33.060

Jason Block: sometime in June, so what i'm going to walk through is just.

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00:03:34.140 --> 00:03:44.970

Jason Block: A high level overview of the work in general that we've completed today just to give everyone sort of a sense of where we've come in in this work and.

16

00:03:45.660 --> 00:04:03.750

Jason Block: We we have regularly given updates on the type of new results that we've been generating, but I just wanted to give a general overview, to start with i'll go over some new results that we have acquired and been working on since the last webinar that we had.

17

00:04:05.070 --> 00:04:19.110

Jason Block: That that was in February and you kind of fold it in that i'll talk about sort of the evolution of some of this work, which is that some of these results that we've generated are leading to subsequent work.

18

00:04:19.680 --> 00:04:38.850

Jason Block: That will be upcoming queries i'll talk at the end just at a high level about what to expect over the next several weeks to months and then moving on to year three planning, as we start working with bhi and CDC about what this project may look like.

19

00:04:40.560 --> 00:04:42.210

Jason Block: And in a third year.

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00:04:43.740 --> 00:04:57.150

Jason Block: So, so far we have completed 27 queries during the funded period of this project that began in October of 2020 we're currently working on our 28th query which should go out sometime this week.

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00:04:58.200 --> 00:05:02.220

Jason Block: This query that we're gonna we're gonna send out soon is a.

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00:05:03.270 --> 00:05:10.890

Jason Block: A redo of a query that we did previously, which was an assessment of the severity of disease and trends and severity of disease.

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00:05:11.550 --> 00:05:19.680

Jason Block: Over different phases of the pandemic the prior one that we completed in January covered through the end of the delta wave.

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00:05:20.010 --> 00:05:34.980

Jason Block: At the time that we were putting that query together we didn't know that it would be the end of the delta wave, but we quickly transitioned into the home icon wave, and so this query that we would be doing this week will update that through a good portion of the oma cron wave.

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00:05:36.180 --> 00:05:44.130

Jason Block: So I won't go through all of these we've talked about a number of these during the course of these webinars and presentations.

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00:05:44.610 --> 00:05:54.570

Jason Block: But we've covered a lot of ground and we've come quite a long way over the course of this project with our ability, both to break down.

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00:05:55.140 --> 00:06:00.210

Jason Block: subgroups and sub populations of patients who have been infected with stars could be to.

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00:06:00.630 --> 00:06:08.850

Jason Block: To look at different types of characteristics of those patients from post acute some quality to descriptive trends in these infections by care setting and demographics.

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00:06:09.780 --> 00:06:27.990

Jason Block: admissions after an initial evaluation and treatment in an outpatient environment or an emergency department and i'll be talking more about some of this over the course when I give some directed updates about particular projects but we've covered quite a bit of ground.

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00:06:29.580 --> 00:06:39.330

Jason Block: we've also been working really hard to try to update our capabilities and that that has been really a core component of the work that we've been doing as part of this.

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00:06:40.410 --> 00:06:56.670

Jason Block: As I think all of you know by now, the core function of our work in this project is driven by the p and P, or the cornet modular programs, these are SAS programs that can be.

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00:06:57.600 --> 00:07:07.920

Jason Block: adapted for various different queries their modular programs, because we can just take in revised different components of it to execute, we know that they execute well in the network.

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00:07:08.850 --> 00:07:15.930

Jason Block: But when we started this project if everyone can recall, there were a number of different capabilities that we didn't have over the.

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00:07:16.950 --> 00:07:17.940

Jason Block: In the use of these.

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00:07:19.260 --> 00:07:25.200

Jason Block: tool, the p amp he didn't have the capability of identifying cohorts based on laboratory results.

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00:07:26.430 --> 00:07:37.230

Jason Block: didn't have the capability of using vital measures to define cohorts immunization data or mortality data and we've been able to integrate all of those components, as a way that we can.

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00:07:38.430 --> 00:07:43.110

Jason Block: integrate data on to define cohort.

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00:07:45.270 --> 00:07:58.740

Jason Block: We also didn't really have the ability to examine trends over the course of time by race, ethnicity age care setting those types of things and we didn't have a post processing function in order to visualize.

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00:07:59.760 --> 00:08:01.650

Jason Block: The information after it was processed.

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00:08:03.540 --> 00:08:10.980

Jason Block: So, then, the last components which are really, really key here for the evolution of this work is that.

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00:08:11.970 --> 00:08:16.620

Jason Block: we're moving toward having the ability to pull in the identified patient level data sets.

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00:08:17.400 --> 00:08:24.900

Jason Block: And we've also created the capability of doing distributed analytics to accommodate control analyses these two last bullets.

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00:08:25.290 --> 00:08:30.750

Jason Block: Are things that we're going to put together in a lot of our queries moving forward and building into your free.

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00:08:31.740 --> 00:08:39.210

Jason Block: So we now have the tools and these tools are available for use in a cornet writ large, these have been developed for this project.

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00:08:39.990 --> 00:08:54.270

Jason Block: But they they can be adapted and used otherwise and we're continuing to work on this and i'll talk a bit about our conception of year three and how this might come into play for your three the adaptations to this work.

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00:08:56.460 --> 00:09:07.350

Jason Block: Alright, so we were about to have updated numbers from this, we just got all of our responses and for what we have been calling our cumulative where we just ran that over the last two weeks.

47

00:09:08.130 --> 00:09:24.840

Jason Block: As of this morning, we got all participating sites to respond to it, and this covers the population of patients, through the middle of April, but this is through the kind of end of January, this is the data that we had available over 1.3 million and 400.

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00:09:26.370 --> 00:09:35.820

Jason Block: Over 1.3 million adults who tested positive for stars could be to over 400,000 children, you can see, the number of patients that we have in the data.

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00:09:36.240 --> 00:09:42.300

Jason Block: who have been tested for SARS could be too, but have always been negative, and the number of patients that we have who.

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00:09:43.020 --> 00:09:53.190

Jason Block: have received vaccinations so large populations it's getting close to about 20 million people that are contained within the coven cdn.

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00:09:53.940 --> 00:10:03.360

Jason Block: We still know that's not the whole population of patients that are being cared for and then institutions that are participating in this, but quite a large population that's been under surveillance.

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00:10:05.700 --> 00:10:20.280

Jason Block: This is just one graphic that reflects the type of thing that we've evolved to be able to work with in our cumulative or trend data so i've shown over the course of time in these webinars a number of.

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00:10:21.330 --> 00:10:30.000

Jason Block: graphics that have showed the proportion of patients by month by race and ethnicity in different care settings ambulatory ED Inpatient.

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00:10:31.260 --> 00:10:49.680

Jason Block: we've started to look at this in a slightly different way, and this is a trend across time looking at different racial groups within the Inpatient setting So these are patients that are cared for in the hospital and these are only adults and we've been looking at the risk ratios.

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00:10:51.090 --> 00:10:54.270

Jason Block: For testing positive in the Inpatient setting.

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00:10:55.710 --> 00:11:00.660

Jason Block: For different racial groups compared to a reference group of those who identify as white race.

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00:11:01.560 --> 00:11:07.080

Jason Block: What you can see in this graphic of that early in the pandemic, a lot of the minority racial groups.

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00:11:07.650 --> 00:11:18.390

Jason Block: were much more likely to test positive in the Inpatient setting than those who identified as white race that sort of baited over the latter part of 2020.

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00:11:18.840 --> 00:11:33.750

Jason Block: rose again during that winter surge of 20 2020 2021 and then sort of declined further we'll see what this looks like during the oma crime wave, because we really only have one month of that when this data was produced.

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00:11:34.890 --> 00:11:47.670

Jason Block: So we continue to look at this by ethnicity and by age and the ability to look at this by trends and also now being doing this in a comparative way gives us some greater sophistication.

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00:11:48.120 --> 00:11:58.380

Jason Block: And how we're looking at the data, and these are the graphics that serve as the core of our publication on trends that we're getting very close to being able to submit and i'll talk about that at the end.

62

00:12:01.200 --> 00:12:10.020

Jason Block: This isn't data on one mortality by month and race, and this does look at the mortality rate.

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00:12:10.890 --> 00:12:24.510

Jason Block: By racial group in each month of the pandemic, and this is looking at all patients who have tested positive we're looking at 30 day mortality, we believe this is mostly in patient in hospital mortality.

64

00:12:24.960 --> 00:12:40.560

Jason Block: Because of the fact that a lot of the health systems don't have directed linkages to state and national death registries, and so they often may not have at least in the short term, information on when patients actually die.

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00:12:41.370 --> 00:12:53.280

Jason Block: But it's probably a mix of that you can see very high mortality rates overall in the early part of the pandemic and that has settled out at around 2% over the course of time.

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00:12:54.060 --> 00:13:10.470

Jason Block: Some disparities early on as well that also have been more equalized over the course of time, you see some divergences for some of the populations that we're still exploring but we now have this capability of really tracking this over the course of time.

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00:13:13.830 --> 00:13:27.690

Jason Block: See CDC has been very interested in this type of data and what they have been using this data for is to really look at severity of disease over the course of time, using several different data sets that they have available.

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00:13:28.170 --> 00:13:37.560

Jason Block: To them, this is now on the CDC covidien data tracker website, which is titled this if anyone wants to do a search for it.

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00:13:38.520 --> 00:13:44.880

Jason Block: And they're using data that they have in House and also record that data, you can see the coordinate data here is in light blue.

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00:13:45.660 --> 00:13:50.700

Jason Block: This is looking at these two graphics they have a couple more graphics beyond this, but it's .

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00:13:51.570 --> 00:14:00.690

Jason Block: This one's looking at the percent who, who received ventilators among those who are hospitalized over the course of time, you can see, but cornet sort of in the middle of the two.

72

00:14:01.170 --> 00:14:16.980

Jason Block: Other databases that they have with a tailing off in January of 20 2022 and then you can also see the percent who had billing codes for critical care use, which is a proxy for icu we don't have really a better proxy.

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00:14:17.550 --> 00:14:26.100

Jason Block: For icu care, and you can see the trends across time slightly lower percent use among those in the corner compared to the other data sources.

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00:14:26.730 --> 00:14:43.530

Jason Block: That CDC has available but they're updating this as soon as we do our cumulative queries So you can see, this is updated through January 2022 it will soon be updated, when we process, the data through the middle of April, more planning to update this data every two months or so.

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00:14:45.900 --> 00:14:54.150

Jason Block: So we've been calling this are cumulative aquarius is wide look at the experience of patients with stars could be two over the course of time.

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00:14:54.900 --> 00:15:08.280

Jason Block: we've done this in sort of a variable ad hoc way through the course of this project, what we're going to be much more regular about doing this query every two to three months to make sure that we can actually feed into the coven data tracker.

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00:15:09.810 --> 00:15:19.890

Jason Block: As part of that where we also test different things out so we've recently looked at what is the prevalence of all post acute so quality of coven.

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00:15:20.760 --> 00:15:28.410

Jason Block: among the population of patients that we have available to us in this most recent iteration we're going to be looking specifically at respiratory diseases.

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00:15:28.980 --> 00:15:40.800

Jason Block: Because our broad look was sort of a crude way of getting a sense of what percent of patients have post acute so quality, but we think that it's going to be better to do this and refined way disease by disease.

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00:15:41.850 --> 00:15:57.570

Jason Block: And we're having some engagement with the recover projects we're working very hard on defining compatible phenotypes post acute quality of coven conditions and so we're going to be testing these out over the course of time, through these cumulative.

81

00:15:59.160 --> 00:15:59.790

Jason Block: queries.

82

00:16:02.100 --> 00:16:10.050

Jason Block: All right, Tom let me stop for a second and see if there any questions in the chat and then I can go on and talk about a couple of the different topics that we have left.

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00:16:12.030 --> 00:16:24.810

Tom Carton: yeah Jason there was one question from from janice which we can either cover now, or we can cover it year three related to the IRB and the patient later level data pool which I answered in the in the chat.

84

00:16:26.280 --> 00:16:33.750

Tom Carton: So it's really up to you, if we want to get into this now, or if we want to if we want to save this The other thing i'll add is I was looking for the CDC koba data tracker.

85

00:16:34.110 --> 00:16:40.740

Tom Carton: I always stumble around trying to find the right page, but I will find it and put it into the chat for everybody to have so they can put the link up direct.

86

00:16:41.670 --> 00:16:50.760

Jason Block: Thanks Tom why don't we wait on genesis question till the end because you know that's sort of where we're going with your three and we can touch on that and have a conversation about.

87

00:16:50.760 --> 00:16:51.060

Jason Block: It yeah.

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00:16:51.300 --> 00:16:51.690

I agree.

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00:16:54.900 --> 00:17:05.970

Jason Block: So one of the projects that we've been working on is treatment disparities disparities by race and ethnicity and the uptake of certain treatments, this has been focused so far on monoclonal antibodies.

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00:17:07.110 --> 00:17:20.460

Jason Block: And this was the topic that was covered in an email wr publication, led by CDC with several cornet authors as well on that paper that came out in January of 2022.

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00:17:21.570 --> 00:17:29.520

Jason Block: And it really looked at how treatment different systematically over the course of the pandemic by race and ethnicity, looking at relative monthly treatment disparities.

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00:17:30.090 --> 00:17:44.400

Jason Block: We recently have updated that through January of 2022 the publication covered through August of 2021, and this also will be updated through April 2022 shortly in this current query that's out there.

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00:17:45.660 --> 00:17:54.090

Jason Block: So these are just an example of some of the graphics that we have produced as part of this showing disparities that we've discovered.

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00:17:54.810 --> 00:18:03.600

Jason Block: Over the course of time in our most recent iteration of this which took it a level further than what we did, as part of that publication in January.

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00:18:04.020 --> 00:18:09.030

Jason Block: Is that we have not only been looking at overall disparities among all patients testing positive.

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00:18:09.540 --> 00:18:16.410

Jason Block: But we've also been looking at it among those who are clearly eligible to receive monoclonal for the treatment of service could be to.

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00:18:17.190 --> 00:18:34.710

Jason Block: This is an example of this, we looked at all patients who tested positive over the course of the pandemic, this is looking at ethnicity Hispanic groups are in the mustard yellow here and the non Hispanic group is an orange.

98

00:18:36.060 --> 00:18:40.590

Jason Block: You can see that y axis here is out of 10% for all those testing positive.

99

00:18:42.030 --> 00:18:51.480

Jason Block: missing or other ethnic ethnicity is in the Gray dotted lines and the arrow that i'm showing here is just the gap where the disparity.

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00:18:52.050 --> 00:18:58.500

Jason Block: In uptake of these treatments between those who identify as Hispanic ethnicity versus those who are not.

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00:18:59.220 --> 00:19:07.560

Jason Block: You can also see that this disparity is also true in the below graph here, which is among all patients who are 65 years and older.

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00:19:07.980 --> 00:19:20.400

Jason Block: And this case, the Hispanic population is in the blue line, the non Hispanic in the dashed orange line the the level of the disparity is slightly reduced among those who are 65 plus.

103

00:19:20.910 --> 00:19:33.780

Jason Block: But still quite substantial between these groups and we saw similar data when we looked at this in terms of racial disparities, you can see, this rapid decline in the monoclonal uptake in January 2022.

104

00:19:34.980 --> 00:19:42.120

Jason Block: that's probably for a number of factors we also we always know there's some lag in the update of data, we ran this query in early February.

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00:19:42.510 --> 00:19:47.790

Jason Block: And so it may not have actually included all data through January of 2022 at some of the sites.

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00:19:48.240 --> 00:19:52.230

Jason Block: But we also know that monoclonal has have been less useful as a treatment.

107

00:19:52.590 --> 00:20:04.410

Jason Block: But during the oma cron wave initially to travel man was the only one that was available for treatment that's no longer effective in the va to variant and there's only one monoclonal that's relatively new that's effective.

108

00:20:05.160 --> 00:20:14.640

Jason Block: And so we believe that this is part of the decline, because of that and there's been a real shift in the incorporation of oral anti antivirals.

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00:20:15.600 --> 00:20:21.120

Jason Block: So where are we going with this well we're going to do exactly that we're going to do some similar type of assessments.

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00:20:21.930 --> 00:20:31.080

Jason Block: But we're going to focus on oral antivirals and outpatient from desert here we've not looked at that, yet we did look at Inpatient rendez of your index another zone.

111

00:20:31.530 --> 00:20:41.430

Jason Block: As part of that prior paper, where we didn't see much disparity in the use of those treatments for inpatients we suspect that there may be similar disparities that are.

112

00:20:41.880 --> 00:20:50.430

Jason Block: Evidence with oral anti-virals, and so our next assessment that we're building on for probably late may early June for query.

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00:20:51.090 --> 00:21:03.720

Jason Block: is to look at those in the same way that we did monocles we're also going to target this query to look at patients that are in the highest risk groups for severe coven.

114

00:21:04.440 --> 00:21:17.490

Jason Block: So we're going to do a broader assessment by age, not just 65 plus we're going to look at patients who prior who previously received an organ transplant or had codes for such those who we believe are receiving treatment for active cancer.

115

00:21:18.600 --> 00:21:25.080

Jason Block: And then patients who have relatively recently received immunosuppressive who we believe, like we were on them at the time.

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00:21:25.530 --> 00:21:37.350

Jason Block: of their service could be to infection to we're trying to get more granular and our assessment of the overall experience of these patients with respect to their infections and also the uptake.

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00:21:37.740 --> 00:21:48.060

Jason Block: Of these different treatments in this group, and then crossing that with race and ethnicity, as well to additionally enable us to look at some disparities.

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00:21:52.170 --> 00:22:05.040

Jason Block: Okay i'll move on to the next kind of topic that we've covered relatively recently, this was a comparative assessment of cardiac outcomes after stars could be to compare to after.

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00:22:06.060 --> 00:22:20.280

Jason Block: Mr in a vaccination, this was the topic of of a MW our publication that came out in March of 2022 and we assessed three different outcomes one was myocardial mile keratitis alone.

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00:22:20.910 --> 00:22:29.100

Jason Block: The combination of myocarditis or pair current itis and then the combination of myocarditis pair credits or in my s.

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00:22:29.880 --> 00:22:47.580

Jason Block: or multi inflammatory syndrome, we specifically only looked at bad outcome after infection, I mean compared it to the other cardiac outcomes after Mr a vaccination because m is has not been found to be a consequence or quality of Mr a vaccination to date.

122

00:22:48.810 --> 00:23:04.680

Jason Block: We stratified our assessments here by agent sex and then we looked at three different lists period 721 and 40 day incidents, and then we calculated risk ratios of these complications after stars could be two and Compare that to after vaccination.

123

00:23:06.060 --> 00:23:16.920

Jason Block: We looked at several different constructions of vaccination in the study included 40 other participating sites, the overall purpose of this paper was willing to put in context.

124

00:23:17.310 --> 00:23:33.150

Jason Block: Some of the evidence that's been emerging about these risks after Mr a coven 19 vaccination, we wanted to also compare it to what's happening after infection which we know that these consequences occasionally occur after infection.

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00:23:36.000 --> 00:23:48.510

Jason Block: So we looked at incidence of these after infection compared it to the different variations of vaccination that we constructed first, second, we also had this category unspecified vaccination.

126

00:23:49.890 --> 00:23:57.120

Jason Block: That occurred when we had a non specific code for a vaccination in the coven cdn.

127

00:23:57.540 --> 00:24:11.130

Jason Block: And we didn't have to have them so when we had to vaccinations, we knew which one was the first and which one was the second if we only had one of them, and it wasn't for a specific first or second those code, then we didn't have the ability to parse that out.

128

00:24:12.990 --> 00:24:17.880

Jason Block: And then we looked at this from my credits and the same for those combination and then last week we looked at.

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00:24:18.900 --> 00:24:25.680

Jason Block: All three diagnoses after infection compared to my HR coordinators, or a pair of colitis after vaccination.

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00:24:28.080 --> 00:24:34.980

Jason Block: This is a graphic that actually didn't appear in the paper, but just gives you a sense of the type of results that we generated for this.

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00:24:35.970 --> 00:24:51.240

Jason Block: This is showing your data for males 12 to 17 in this group, and then males 18 to 29 we also looked at the age group five to 11 and 30 plus and we looked at this in both males and females.

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00:24:52.350 --> 00:25:02.400

Jason Block: User showing you the risk ratios of these outcomes after infection compared to vaccination, where we show you the graphic of this in actual calculations.

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00:25:03.480 --> 00:25:09.780

Jason Block: We look at micro titus and the 21 day risk window after the first dose, so this is comparing infection to.

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00:25:11.370 --> 00:25:24.120

Jason Block: The the first dose of a vaccination in this population, then we looked at those two outcomes and then the three outcomes and again this was three outcomes after infection compared to two after vaccination.

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00:25:25.440 --> 00:25:28.620

Jason Block: 21 and 42 day risk windows, we also looked at seven.

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00:25:29.790 --> 00:25:39.090

Jason Block: And then we looked at those after the second dose of the vaccination, we did exactly the same in the men 18 to 29 and what you can just see in general here.

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00:25:39.540 --> 00:25:52.320

Jason Block: Is that all of the risk ratios were higher than one, meaning that the risk after infection was higher than it was after vaccination and that was across the board for all sub populations that we looked at.

138

00:25:52.800 --> 00:26:12.150

Jason Block: After first dose second dose and we also found the same for the unspecified dose This was true even in the group that had the highest risk after vaccination, which was men or boys 12 to 17 years of age, after the second dose we still found a higher risk after infection in that subpopulation.

139

00:26:15.090 --> 00:26:25.530

Jason Block: What are we doing with that work so we're continuing to work with CDC about trying to figure out where we can contribute in terms of looking at risks after vaccination and we really think it's in this competitive way.

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00:26:26.100 --> 00:26:34.620

Jason Block: We don't have a full capture of vaccinated populations in part because the charge just don't have all of the vaccine data.

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00:26:35.400 --> 00:26:40.050

Jason Block: And so the way that we have targeted that assessment is trying to use what we think are our strengths.

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00:26:40.680 --> 00:26:50.790

Jason Block: But also taking an account what we think are some of our weaknesses and that's why we have focused on this comparative assessment, rather than, for example, looking at patients who are vaccinated versus not vaccinated.

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00:26:52.920 --> 00:26:57.090

Jason Block: i'll show you a couple slides about some of the work we've been doing o n post acute quality of coven.

144

00:26:57.930 --> 00:27:08.370

Jason Block: We started this work, some time ago and it has evolved, we had a publication quite some time ago, looking descriptive Lee at the prevalence and problem ratios.

145

00:27:08.850 --> 00:27:18.450

Jason Block: of different long covert conditions and symptoms compared to those who tested positive versus negative we've taken this to actually do some distributed regression work.

146

00:27:19.530 --> 00:27:29.160

Jason Block: Where we have accounted for the same thing, but done it in adjusted models comparing those who are stars could be to positive versus negative.

147

00:27:30.510 --> 00:27:39.210

Jason Block: We initially ran these long coven a distributed regression queries in the fall and found that we're having a lot of trouble with.

148

00:27:39.630 --> 00:27:45.870

Jason Block: model convergence in part because in some cases we're looking at relatively uncommon outcomes.

149

00:27:46.650 --> 00:27:51.960

Jason Block: And so we went back to the drawing board to try to make sure that we could execute these distributed regression.

150

00:27:52.890 --> 00:28:02.490

Jason Block: Assessments analysis more efficiently and have gotten much more success doing that one of the big keys to that has been to be much more parsimonious.

151

00:28:02.850 --> 00:28:11.100

Jason Block: about the inclusion of different covariance in these adjusted models so i'll show you some of these results that we've processed so far.

152

00:28:12.270 --> 00:28:24.600

Jason Block: One of them was looking at post acute sequentially of covert conditions So these are diagnoses that occurred in the 31 to 150 days after stars could be to test.

153

00:28:25.230 --> 00:28:29.220

Jason Block: We compared those who are positive versus negative we restricted this.

154

00:28:29.910 --> 00:28:41.880

Jason Block: To those who had some connection to the health care system at baseline and follow up because we wanted to exclude those who had the baseline presence of these conditions so that we could look at incidents after coven.

155

00:28:42.420 --> 00:28:55.110

Jason Block: Rather than prevalence and so that required us to focus on this population that was connected to the health care system previously, we control for a number of different confounders that we thought that might be associated.

156

00:28:56.250 --> 00:29:01.800

Jason Block: With these outcomes in these exposures of testing positive versus negative that you can see somewhere in some of the models.

157

00:29:02.940 --> 00:29:13.740

Jason Block: And some and others, for example, we looked at certain variables like length of stay use of decks and methods own you simply can't go ventilation, when we only looked at patients who are hospitalized.

158

00:29:14.250 --> 00:29:22.950

Jason Block: We stratify these models by those patients were care for only an outpatient setting or were in the emergency department from those who are hospitalized.

159

00:29:24.720 --> 00:29:34.470

Jason Block: i'm just going to show you one snapshot of these results for adults, these are the hazard ratios of those patients testing positive versus negative.

160

00:29:34.950 --> 00:29:44.250

Jason Block: For eight different conditions that we examined as a group and i'm showing you the crude hazard ratios and the adjusted hazard ratios.

161

00:29:44.970 --> 00:30:01.110

Jason Block: In red are those conditions to actually were more common among those testing negative in the adjusted models compared to those testing positive those in black showed no significant results chronic kidney disease and disability and the ones in blue here.

162

00:30:02.280 --> 00:30:05.670

Jason Block: we're more common among those testing positive versus negative.

163

00:30:07.050 --> 00:30:16.560

Jason Block: Some of this is challenging work because, for example, when we look at major cardiovascular events which were more common among those testing negative versus positive.

164

00:30:17.130 --> 00:30:29.430

Jason Block: This doesn't really account for those patients who were actually hospitalized for cardiovascular event and got and tested negative during that hospitalization that had nothing to do with coven are being tested for stars could be too.

165

00:30:30.600 --> 00:30:37.320

Jason Block: And so, this is really kind of hypothesis generating work that we believe is helpful for really isolating those conditions that we think.

166

00:30:37.710 --> 00:30:41.190

Jason Block: are really more common among those testing positive versus negative.

167

00:30:41.820 --> 00:30:56.520

Jason Block: This is the population that was hospitalized for their sorrows could be to infection or during their stars could be to infection, we really didn't find much in the way of the association with these conditions among the patients who are only treated in the outpatient setting.

168

00:30:57.540 --> 00:31:06.300

Jason Block: But interesting results for him to logic disorders, this is mostly blood clotting disorders, diabetes and respiratory diagnoses.

169

00:31:08.670 --> 00:31:22.800

Jason Block: we've also done this for the presence of symptoms after stars can be too so really similar models that we were in but instead of looking for conditions we looked at code related to certain symptoms and i'll show you what those are.

170

00:31:24.450 --> 00:31:27.030

Jason Block: This is 31 to 150 days.

171

00:31:28.110 --> 00:31:39.000

Jason Block: similar to the condition query, but we also look specifically at those later so we've looked at overall 31 250 days, but then, specifically in the 90 215 day period.

172

00:31:40.110 --> 00:31:51.540

Jason Block: We examine 61,000 children 300,000 adults, you can see, the numbers that were hospitalized that we examine those models, and this is through the end of March of 2022 so a little bit longer follow up period.

173

00:31:52.350 --> 00:32:06.840

Jason Block: Then we have for the condition query the outcomes we looked at where any symptom code three or more symptom codes and then we specifically looked at fatigue or muscle weakness as one outcome and then shortness of breath as one outcome.

174

00:32:09.270 --> 00:32:15.720

Jason Block: And here are the results for this, this is hospitalized patients children, and this is again looking at.

175

00:32:16.950 --> 00:32:23.340

Jason Block: I say here hazard ratio, these are actually odds ratios of comparing those who are positive versus negative.

176

00:32:24.930 --> 00:32:37.830

Jason Block: And we didn't see much again in the way of these conditions popping up among those who are treated only in the outpatient setting but among those who are hospitalized we do see some presence of.

177

00:32:39.300 --> 00:32:48.720

Jason Block: A findings, where we have a higher hat higher odds ratio for any of the symptoms that we looked at for those testing positive versus negative.

178

00:32:49.140 --> 00:33:05.280

Jason Block: No significant findings for three or more fatigue, but then another significant finding for those for the outcome of shortness of breath when we looked at the 90 to 150 day period with do you did see a significant finding a higher odds of having any symptom.

179

00:33:06.330 --> 00:33:16.920

Jason Block: But did not find a significant funding for those for the outcome of three or more symptoms, and this is a broad array of symptoms that we looked at that have been associated with prostitutes or quality of coven.

180

00:33:19.650 --> 00:33:27.690

Jason Block: for adults similar outcomes, these are again, these are odds ratio is not hazard ratios overall period of 31 250 days.

181

00:33:28.260 --> 00:33:39.900

Jason Block: And then the 90 to 150 day period and what you can just see here is that all of our outcomes showed a higher odds among those who were testing positive versus negative and that.

182

00:33:40.260 --> 00:33:49.290

Jason Block: ratio range from about 1.1 to 1.5 with the highest being shortness of breath, but that we found as more common among those testing positive versus negative.

183

00:33:50.040 --> 00:33:56.160

Jason Block: So if you had some provocative findings that were coming up with that are helpful, we think hypothesis generating.

184

00:33:56.550 --> 00:34:07.020

Jason Block: Also, that we think will be helpful to the recover projects as they start honing in on what they think are the most important things to look at in terms of this post acute quality of coping.

185

00:34:09.540 --> 00:34:15.060

Jason Block: Alright, so this came up already, but we are working with hai and.

186

00:34:16.080 --> 00:34:32.790

Jason Block: ncdc on what a third year of this project might look like the current funding period for this project is through the end of July, so the third year if everything goes as we hope it will, with start on August 1 of this year.

187

00:34:33.900 --> 00:34:42.120

Jason Block: One of the things that we've been talking to CBC NPI about is trying to have more more efficient execution at the site level.

188

00:34:42.570 --> 00:34:48.240

Jason Block: of some of our queries, we know that some of our queries take a long time to run and so we're trying to.

189

00:34:48.780 --> 00:35:02.940

Jason Block: come up with ways to optimize that infrastructure in order to allow for sites to have more quick turnaround of some of the results and that really is in the actual program itself can we be more efficient in the way that we structure that.

190

00:35:05.100 --> 00:35:10.320

Jason Block: We have some ideas about that our programmers that have developed the module of programs, which is Stat log.

191

00:35:11.880 --> 00:35:17.040

Jason Block: Is the group that's been doing that we've been talking to them about a number of different things that we think can help with this.

192

00:35:17.610 --> 00:35:31.110

Jason Block: We also are looking at a more seamless way of processing data once we get it so that sometimes it takes a while to actually generate the reports once we get the data in hand and there might be some ways to really structure that inefficient way.

193

00:35:32.490 --> 00:35:41.640

Jason Block: One of the things that CDC and we are interested in is all of our queries to data really focused on the coven cdn a lot of the queries that we do.

194

00:35:42.360 --> 00:35:52.410

Jason Block: require timely data there's, so much so much dynamic change during the course of the pandemic that having updated data is one of the things that CDC has really viewed as an asset to this work.

195

00:35:53.100 --> 00:36:01.530

Jason Block: But we know that that requires a lot of work and that updating the covert cpm which we've been asking folks to do at the beginning of the month, and we will continue to for the short term.

196

00:36:02.730 --> 00:36:21.330

Jason Block: Is it is, is a complicated process there might be some queries that we can run against the false edm rather than doing it against the covert cdo some of the queries that I just reported on like the long coven ones were about to create a query where we're looking at.

197

00:36:22.650 --> 00:36:37.860

Jason Block: The relationship between disease control for certain chronic diseases like diabetes and hypertension on the outcome of severe disease related to coding those may not actually require the code CD and they may be able to be run on a full cdn.

198

00:36:39.240 --> 00:36:44.010

Jason Block: CDC is also looking at maybe transitioning into a post covert surveillance.

199

00:36:45.180 --> 00:36:54.000

Jason Block: realm, which is that one of the things that we we got into this work by doing was chronic disease surveillance and corey had funded us to do.

200

00:36:54.330 --> 00:37:06.120

Jason Block: Some infrastructure building for chronic disease surveillance when the pandemic hit that all shifted into focusing on coven, but we believe there's some opportunities to get back to some chronic disease surveillance.

201

00:37:07.740 --> 00:37:14.100

Jason Block: One of the things that also we are trying to build in some flexibility when we do th ese.

202

00:37:15.120 --> 00:37:24.750

Jason Block: distributed regression models, we don't have a lot of flexibility when we execute them we sort of send them out, we get the data back, we analyze it.

203

00:37:25.560 --> 00:37:32.550

Jason Block: But there might be tweaks to that that are really needed in order to dive deeper into a particular aspect of those findings.

204

00:37:33.270 --> 00:37:41.070

Jason Block: In order to facilitate that we've been talking for a while about getting the identified patient level data back to the coordinating centers.

205

00:37:41.640 --> 00:37:52.200

Jason Block: In order to analyze this data and give us some flexibility to do, second and third tier analyses, especially as these papers go through the process of publication.

206

00:37:52.500 --> 00:38:01.350

Jason Block: and submission, where we might get reviewer should say we want you to look at it this way, and then, rather than having to go back to sites to re execute a tribute regression query.

207

00:38:01.920 --> 00:38:09.540

Jason Block: To facilitate that which can take quite a bit of time, we would have patient level data in order to analyze those additional questions.

208

00:38:10.350 --> 00:38:22.260

Jason Block: CDC has asked us to assess whether or not there might be some opportunities for their analysts to access data and so we're exploring maybe some opportunities to store data on a server.

209

00:38:23.250 --> 00:38:34.110

Jason Block: That CDC analysts might be able to remote into these are some of the things that we've been talking about a lot of details to be worked out, but we're we're slowly getting there in this regard.

210

00:38:35.520 --> 00:38:46.650

Jason Block: janice asked about the issue of IRB approval and we're still operating, all of this work under the exemption for public health surveillance as directed by a public health authority.

211

00:38:48.000 --> 00:38:54.930

Jason Block: That there are sites that may well want to get IRB approval for this work, especially as we move towards patient level data.

212

00:38:56.010 --> 00:39:02.250

Jason Block: What we've been talking about so far is only doing patient level data extractions focused on de identified data.

213

00:39:03.210 --> 00:39:17.700

Jason Block: And, and that is really our intention moving forward as well, obviously, if the data has any identify ability, then there might be some additional details that are required and to respond or be approvals but that's kind of where we currently stand on that work.

214

00:39:20.640 --> 00:39:25.110

Jason Block: continued engagement, this is my last slide and we'll have some time for questions.

215

00:39:26.640 --> 00:39:38.610

Jason Block: We are we welcome ideas from folks across the network to propose ideas or queries we have a scientific advisory group that's made above one representative from each clinical research network.

216

00:39:39.480 --> 00:39:49.050

Jason Block: We meet with them monthly to discuss all of these different queries that we that we've been devising over the course of time, and developing.

217

00:39:49.890 --> 00:40:00.630

Jason Block: We work with CDC we meet with CDC every two weeks to talk about our queries and we are happy to bring ideas that percolate up from the network to those groups.

218

00:40:01.710 --> 00:40:13.290

Jason Block: We also constantly are in discussions with the other projects that have developed as part of the overall cornet response to covert 19 will cover is one example of this.

219

00:40:14.220 --> 00:40:18.510

Jason Block: And we're going to continue to try to engage sites on authorship.

220

00:40:19.290 --> 00:40:35.970

Jason Block: We have these two trend papers, the pediatric in the adult trend papers, where we're looking at trends by race and ethnicity age of the course of the pandemic these had been in long development, I think we wrote, our first adult trend paper and something like may of 2020.

221

00:40:37.170 --> 00:40:46.860

Jason Block: We had submitted it initially and then sort of went back to the drawing board, for a long period and have constantly updated that those are these papers are currently going through CDC clearance.

222

00:40:47.790 --> 00:40:55.830

Jason Block: And they're almost completed with that process will be able to update it with new data and then submit that fairly soon after we get another round of interviews.

223

00:40:56.280 --> 00:41:05.160

Jason Block: By our collaborative authors and our main authors, our hope is that we will be able to integrate collaborative authorship meaning each site nominates and author.

224

00:41:06.000 --> 00:41:14.520

Jason Block: For collaborative authorship group for are distributed regression work as well, which are the two ones that have been on the table, right now, are the long coven.

225

00:41:15.030 --> 00:41:27.030

Jason Block: regression work which we have data on in our chronic disease severity and severe covert outcome regression work which is in process and, hopefully, will be released sometime this month.

226

00:41:28.950 --> 00:41:38.640

Jason Block: that's all I had our stop here and stop sharing my slides, and then we can have a discussion with things that are in the chat and our other questions and things that people might have.

227

00:41:41.640 --> 00:41:56.580

Tom Carton: A soon as Tom thanks, we got a question from Betsy corsellis about the group collaborative authorship in the in the Q amp a which I answered, similar to what you presented in the last slide but just want to see if that's if you have any follow up questions or comments on that.

228

00:42:01.470 --> 00:42:09.720

TFGH Central Zoom: And let me and allow her to talk, just in case because I think she's a panel, not a panelists okay let's see if you want to you can unmute.

229

00:42:10.170 --> 00:42:21.120

Betsy Chrischilles: Sure, no, thank you, I appreciate the opportunity I was just thinking of brainstorming with myself about ways to sort of expand authorship at at the sites and you know I.

230

00:42:21.780 --> 00:42:32.790

Betsy Chrischilles: thought that you know just sort of in recognition of collaboration, as opposed to outright authorship that that potentially something like a big morning consortium group author could be added.

231

00:42:33.120 --> 00:42:46.800

Betsy Chrischilles: which might be fairly easy to to populate It could even potentially vary by paper and wouldn't sort of require that level of engagement of obtaining review and that sort of thing.

232

00:42:47.370 --> 00:42:57.150

Betsy Chrischilles: Given that so much happened at the at the local sites to stand up these covered stadiums and I think there was a lot of local conversation about making this work, I thought it might be something to consider.

233

00:42:57.870 --> 00:43:11.100

Betsy Chrischilles: And I realized that pubmed does actually index the the the individual names that are attached to those consortia so if it has if it if you guys have already discussed it and have reasons for not doing that that's fine as well, thanks.

234

00:43:13.980 --> 00:43:21.450

Jason Block: yeah just yeah Thank you Betsy thanks for bringing that up that's exactly what our intention is Betsy for these trend papers so.

235

00:43:22.020 --> 00:43:32.220

Jason Block: We already have authors identified like I said we've we've had many rounds of these two papers but they're the first example of this, where we do have group authors.

236

00:43:33.390 --> 00:43:49.920

Jason Block: Where we have one per site when sites have nominated authors already in pl ace for those two manuscripts and those hopefully will submit over that sometime within the next month to six weeks that's exactly the structure that we intend to follow for.

237

00:43:51.060 --> 00:43:56.730

Jason Block: The papers that are not as rapid turnaround we've had a couple of papers that have been a really rapid turnaround.

238

00:43:58.170 --> 00:44:14.610

Jason Block: In in some journals like men who are that don't have group authorship always available, so our intention is to whenever possible to have group authorship interviews exactly the approach that you identified we we modeled exactly what we did for the obesity.

239

00:44:16.860 --> 00:44:33.000

Jason Block: observational studies that several of us were actively engaged in the antibio tics study in that very metric surgery study, where we had group authorship, and so our intention is to do that as often as we possibly can, because we do want to recognize the work and give.

240

00:44:34.080 --> 00:44:37.290

Jason Block: Sites, the opportunity to participate at that level.

241

00:44:38.730 --> 00:44:47.400

Betsy Chrischilles: Well that's great Thank you, since i'm unmuted i'll just say thank you for your continued excellent leadership for both of you, this has been just really wonderful to to be part of.

242

00:44:48.960 --> 00:44:49.380

Jason Block: That too.

243

00:44:49.860 --> 00:44:53.970

Tom Carton: Thanks Betsy and Jason one of the thing that I noticed in the in the response in the Q amp a.

244

00:44:54.810 --> 00:45:01.710

Tom Carton: To Betsy similar to what you said, some of the papers did the dissemination times just is either moving too quickly or.

245

00:45:02.460 --> 00:45:13.920

Tom Carton: The journal doesn't allow for that, but in those cases, we have also been drawing on the popcorn at CDC scientific working group and so they're they're those folks have been.

246

00:45:14.760 --> 00:45:31.590

Tom Carton: Authors on on several of those papers and that will be as you laid out in the slide that for the trend paper, the long coven the chronic disease ones that we can identify longer runways in advance will commit to the collaborative authorship from the beginning.

247

00:45:33.180 --> 00:45:39.870

Jason Block: And, and all of the papers so far i've had about the same number give or take of CD fee.

248

00:45:40.350 --> 00:45:51.150

Jason Block: And record that authors these trend papers had more cornet authors because again they they really started as originally peconic only papers and then have been brought into this work as well.

249

00:45:51.900 --> 00:45:56.520

Jason Block: But there have been a number of records that authors on the ones that we have been able to accomplish so far.

250

00:46:11.520 --> 00:46:16.050

TFGH Central Zoom: I mean unmute just so it looks like she's got a request to speak.

251

00:46:18.750 --> 00:46:23.280

Janis Curtis: yeah, I just wanted to know a little bit more there was one of the bullets on one of the slides about.

252

00:46:24.210 --> 00:46:35.550

Janis Curtis: Working with other groups and other projects and you had down there as an example of recover, can you talk a little bit about what types of things we would be one that we'd but you would be doing with those other projects.

253

00:46:36.360 --> 00:46:39.180

Jason Block: yeah janice I really meant to say it's it's sort of.

254

00:46:40.530 --> 00:46:55.170

Jason Block: A given take of shared knowledge between the projects and that we are open to sort of engaging with the cornet efforts related to coven and.

255

00:46:55.620 --> 00:47:06.450

Jason Block: The way that we've engaged with the recovery teams is that there are several people actually on both the CDC scientific advisory group and leadership team.

256

00:47:07.290 --> 00:47:16.740

Jason Block: And the recover projects and so we've we've we've been able to share knowledge, you know how do we construct our computer phenotypes how to construct our inclusion criteria.

257

00:47:17.070 --> 00:47:22.920

Jason Block: How are we going to deal collectively, which I think is a really important thing that we're going to have to all talk about.

258

00:47:23.580 --> 00:47:34.920

Jason Block: Which is what is a coven diagnosis or infection in the era where rapid tests are really probably the dominant way that infections are being discovered.

259

00:47:35.700 --> 00:47:49.920

Jason Block: So it's more of a it's more of a shared knowledge and shared resources around things like comfortable phenotypes, which is how I envisioned it, but I think there might be some other opportunities for engagement, depending on how people would like to engage.

260

00:47:50.730 --> 00:47:51.570

Janis Curtis: Okay, thanks.

261

00:47:52.530 --> 00:48:00.150

Tom Carton: yeah and I think a good tangible example of a janice's as the recovery team is building out these conditions specific sub phenotypes.

262

00:48:01.980 --> 00:48:11.700

Tom Carton: That that development has been going back and forth with the CDC team as well, and the cumulative query that Jason just spoke of didn't run a query on.

263

00:48:12.810 --> 00:48:24.270

Tom Carton: A set of terminology diagnostic codes to assess pullman illogic sub phenotype for for past, and so I think it's a lot of.

264

00:48:25.860 --> 00:48:32.460

Tom Carton: Definitions compatible phenotype development worsening of disease, where we're trying to draw as many.

265

00:48:32.910 --> 00:48:42.720

Tom Carton: parallels and connections as as we can, because there's there's still a lot to do on on both projects, and so, if one project is kind of pushing the envelope on one.

266

00:48:43.290 --> 00:48:56.370

Tom Carton: How does that learning transition back to others and that's an example of recover, but there are potentially other you know cross cornet projects that might you know, be able to click in here and relate to the work that's being done through this.

267

00:48:57.420 --> 00:49:04.200

Janis Curtis: that'd be good, I think you know even relative to having some consistency in terms of definitions for some of these things.

268

00:49:04.770 --> 00:49:15.510

Janis Curtis: Because there's so many projects going on, and if everybody defines you know things differently in terms of like you said, the computer phenotype and those kinds of things.

269

00:49:16.110 --> 00:49:27.000

Janis Curtis: And you have data that's all across the board, and so I think that having some consistency, or at least trying to foster consistency around some of those core definitions would be very beneficial.

270

00:49:28.590 --> 00:49:34.770

Jason Block: And janice I mean some of the work that we've done so far around compatible phenotypes for this etc project have been.

271

00:49:36.450 --> 00:49:44.430

Jason Block: have been more general I mean most of what we've used have been diagnostic codes, but we've done a bit more sophisticated work around diabetes and hypertension.

272

00:49:45.660 --> 00:49:53.670

Jason Block: recover, I mean that's all recovers focused on you know recovery is really focused on really the deepest dive that they can think of.

273

00:49:54.060 --> 00:50:05.490

Jason Block: into these post acute to quality diagnoses, so I think there's a real opportunity for our CDC work to be a testing ground for PR cornet in general for some of these initial work.

274

00:50:06.420 --> 00:50:13.530

Jason Block: To help facilitate that those kind of deeper dives that are really the core topics of some of these additional projects that are being funded.

275

00:50:14.550 --> 00:50:15.090

Janis Curtis: Thanks.

276

00:50:22.740 --> 00:50:33.270

Jason Block: While we're waiting for more in the chat i'll just sort of recap, a couple of things at a at a high level number one is that we continue to encourage everyone to update their cogan cgm.

277

00:50:34.500 --> 00:50:50.700

Jason Block: on a monthly basis at the beginning of each month that includes this week we're going to send out this next disease severity by by pandemic phase query this week, which would really benefit from updated data.

278

00:50:52.470 --> 00:51:06.000

Jason Block: we're going to do a similar thing at the beginning of June it looks like for this risk and therapeutic query where we're looking at oral antivirals so we're encouraging everyone again just at the beginning of the month to try to update their cdn with new data.

279

00:51:08.250 --> 00:51:16.290

Jason Block: The other thing is to be on the lookout for scopes of work and those type of things, for your three as we continue to work on with bhi and.

280

00:51:17.490 --> 00:51:29.940

Jason Block: ncdc on that structure, and then we are in the process, hopefully over the next month of submitting these trend manuscripts and we will be engaging with the collaborative authors.

281

00:51:30.210 --> 00:51:41.220

Jason Block: That we already have identified for those publications and be trying to engage collaborative authors on our next paper, which is not long code regression work to.

282

00:51:50.910 --> 00:51:59.940

TFGH Central Zoom: Thank you for that recap Jason it looks like we don't have any other questions coming in the q&a box or the chat and I don't see any other raise hands.

283

00:52:00.990 --> 00:52:07.020

TFGH Central Zoom: So I think we're in a good spot to wrap up for today and I want to thank everybody for.

284

00:52:07.560 --> 00:52:22.770

TFGH Central Zoom: Your questions your discussion your attention and your time and we will all be contacted and again the recording transcript and sides will be posted online and we'll send that out to everybody on the listserv after this call is over.

285

00:52:24.690 --> 00:52:25.740

TFGH Central Zoom: Thank you all so much.

286

00:52:26.490 --> 00:52:27.150

Thanks everyone.