

WEBVTT

1

00:00:13.170 --> 00:00:25.000

Danielle Sill, PHII (she/her): Hello, everybody! Thank you for joining the Webinar today, and we're gonna go ahead and wait a few more minutes to let people kind of trickle in. I know a lot of you have back to back meetings, so we'll go ahead and wait for a few minutes before we go ahead and get started

2

00:01:05.170 --> 00:01:06.840

Danielle Sill, PHII (she/her): all right.

3

00:01:07.240 --> 00:01:24.050

It looks like the Teddy was just started to level out, so we'll go ahead and get started. Thank you all for joining this morning. We wanted to welcome you all to the the cornet. Cdc. COVID-19 electronic health care data initiative, Webinar. And we appreciate you taking time out of your day to be with us.

4

00:01:24.050 --> 00:01:35.220

Danielle Sill, PHII (she/her): My name is Daniel Sill, and I'm. With the Public Health Informatics Institute, which is a program of the task force for global health before we get started today. We wanted to provide a bit of housekeeping.

5

00:01:35.300 --> 00:01:47.630

Danielle Sill, PHII (she/her): You are welcome to put questions in the Q. A. Box throughout the Webinar. We will monitor throughout the Webinar and answer questions as they come in, either via the Q. A. Kind of pop up box, or like aloud.

6

00:01:47.630 --> 00:02:05.720

Danielle Sill, PHII (she/her): Additionally, we will have time at the end for you to ask your questions aloud. We can go ahead and unmute you if you just raise your hand or let us know, and then you can go ahead and ask your questions to our panelists. This Webinar is being recorded, and we will send out the link to the recording, the slides and the transcript of this Webinar. After the call has been completed.

7

00:02:05.970 --> 00:02:13.070

Danielle Sill, PHII (she/her): to begin the call, I want to go ahead and introduce you to Sharon, Sada, from Cdc. To provide some opening remarks.

8

00:02:15.550 --> 00:02:34.780

Sharon Saydah: Hello, good morning, or everyone just really wanted to start by thanking everyone for this collaboration is the coronet Cdc. Collaboration has been incredibly valuable, and helping us continue to answer a number of high priority questions that we've had here at Cdc.

9

00:02:35.260 --> 00:02:48.540

So in January of this year we had identified a signal of stroke, possible increase of strokes. A instance after the bivalent Mr. And a back COVID-19 vaccine

10

00:02:49.170 --> 00:03:04.640

Sharon Saydah: coronet was able to rapidly send out a query to assess and stroke incidents after the bivalent vaccines, and we're able to we're working on, comparing that with the incidents after some vaccines and other respiratory viruses.

11

00:03:04.690 --> 00:03:19.910

Sharon Saydah: We've just received this data back and are currently working on that. This is the incredibly fast turnaround of only 5 weeks, and so it will really directly inform our public health discussion around this question. Important question.

12

00:03:21.420 --> 00:03:35.510

We're also looking forward to getting the results from our next mortality query related to COVID-19 treatments, and these will include some patient level data which will really facilitate doing more detailed analysis on this important topic

13

00:03:35.710 --> 00:03:49.850

us understanding the mortality and how it may be prevented through COVID-19 treatments is especially valuable, and it can really provide further evidence that this is a potentially powerful tool to help us save lives.

14

00:03:50.730 --> 00:03:57.660

Sharon Saydah: So with that i'll also turn it. I will turn it over to Dr. Wilts, my colleague, and she'll give a few more comments.

15

00:03:59.130 --> 00:04:17.760

Jennifer Wiltz: Good morning, and welcome to the P. Cornette Webinar.

We are happy to be back here again, representing Cdc. So Dr. Tegan Bamer is back, so you'll be seeing her again as well. I'm Jennifer Wells, the Deputy Medical Director for the Cdc National Center for Chronic Disease Prevention and Health promotion.

16

00:04:17.950 --> 00:04:32.420

Jennifer Wiltz: and it's great to be with you today. You know. Today is a gallant's day honoring connections with special women in your life, and I certainly celebrate all the women and the men colleagues that support this amazing P Cornet partnership.

17

00:04:32.420 --> 00:04:44.770

Jennifer Wiltz: I think Dr. Sada and I were thinking about some of the things that you'd most like to hear about from Cdc today. There's a couple of big things that really demonstrate and drive home the value of this partnership.

18

00:04:44.770 --> 00:04:59.930

Jennifer Wiltz: One is the stroke analysis that Dr. Say that just talked about you're providing the value of timeliness, of a rapid turnaround on a priority request. How great to have that data and your resources to gather information useful for decision making.

19

00:05:01.060 --> 00:05:14.480

Jennifer Wiltz: It was done really quickly, and it builds off the skill of the Prior Covid and the chronic analyses, and the whole team very nicely got the query developed, tested, fielded, and report prepped in that, you know, just over a month time that we were mentioning.

20

00:05:14.530 --> 00:05:16.720

Jennifer Wiltz: So wow! You guys are amazing. Thank you.

21

00:05:16.790 --> 00:05:35.730

Jennifer Wiltz: I look forward to diving into those findings, and we expect it's going to be presented at the upcoming a/C IP. Meeting, and this is a group that advises the Cdc. And providing our guidance on immunization practices. So this is information you have provided that's affecting real life practices and our guidance on vaccines.

22

00:05:35.730 --> 00:05:50.860

Jennifer Wiltz: So, secondly, is the value that pcornet brings to the table with your network of Ehr data as a priority data asset. So we're

moving towards a really neat future directions with the analytic capabilities and diving into leading causes of death.

23

00:05:50.970 --> 00:06:00.200

Jennifer Wiltz: The mortality query that Dr. Sada mentioned, and also the upcoming chronic disease queries that i'll be run on the full cdm will be looking at patient-level data.

24

00:06:00.400 --> 00:06:06.640

and it'll be housed securely at Lph. I. And accessible by analysts to perform more intricate analyses.

25

00:06:06.640 --> 00:06:22.690

Jennifer Wiltz: So, in an order to effectively benefit patients and communities, public health requires granular data to look into factors that make communities resilient, that help with health equity and address chronic disease and underlying mental conditions contributing to the leading causes of death.

26

00:06:22.940 --> 00:06:42.610

Jennifer Wiltz: This type of data can inform core functions of public health with data for quality improvement and an evidence-based decision making and that ultimately benefits the health of Americans. So i'll finally mention that Dr. Block and Dr. Carton presented on P. Cornet to my centers Electronic health record community practice.

27

00:06:42.610 --> 00:06:52.870

Jennifer Wiltz: which garden much interest for all the reasons that I just mentioned. So my goal today was to communicate to you and recognize that we appreciate this collaboration that informs health action.

28

00:06:52.940 --> 00:07:00.890

Jennifer Wiltz: And with that i'll pass over the virtual mic to Dr. Jason Block, and he'll dive into the agenda and run through those activities in more detail. Thank you

29

00:07:07.040 --> 00:07:16.290

Jason Block: all right. Well, thank you to Doctors Wilts, Seda and Bamer, who are our intrepid Cdc. Partners

30

00:07:16.460 --> 00:07:18.000

Jason Block: on this project.

31

00:07:18.030 --> 00:07:29.740

Jason Block: who we meet with frequently and collaboratively work together to come up with the topics and set up the queries and and process the results. And

32

00:07:29.760 --> 00:07:34.480

Jason Block: it's as as always as we've talked about on this

33

00:07:34.750 --> 00:07:46.030

Jason Block: on this Webinar. This partnership with Cdc has been a a wonderful experience, and and continues to pay dividends for the work that we're doing

34

00:07:46.420 --> 00:07:57.370

Jason Block: As As usual. I'll walk through the slides. I'll give you updates on the activities that we've been working on since our last webinar in November.

35

00:07:57.440 --> 00:08:02.830

Jason Block: and Dr. Carton is going to be monitoring the chat. So if you have questions or

36

00:08:03.300 --> 00:08:08.560

Jason Block: comments that you want to put in as we go along, please do that, and Tom will

37

00:08:08.610 --> 00:08:16.090

respond, and then we can pause. And and, as always, Tom knows, to to stop me. If there's a particularly pertinent question

38

00:08:16.200 --> 00:08:28.760

Jason Block: that we can go over. So our agenda today is to focus on our recently completed queries. I'll give you some results of some of the topics that we've been exploring

39

00:08:29.340 --> 00:08:35.299

Jason Block: and put those in context for the overall work that the project has been doing.

40

00:08:35.850 --> 00:08:39.610

Jason Block: I'll go into some detail about some upcoming queries

41

00:08:39.620 --> 00:08:50.650

Jason Block: that we're already mentioned. This query that we're going to be doing on Mortality and Covid. And then these upcoming queries on preventive health services and chronic disease.

42

00:08:50.750 --> 00:09:00.710

Jason Block: and then i'll. I'll touch briefly at the end on manuscripts, and talk about the potential future of this project moving forward and this work together, moving forward.

43

00:09:02.750 --> 00:09:15.300

Jason Block: i'll. I'll sort of march through things and and and touch on a number of details. I i'm not going to cover everything that we've done, but i'll sort of give a a general description of of what we've been working on.

44

00:09:16.450 --> 00:09:34.800

Jason Block: So over the last several months we've been working on several different topics in areas, and some of these have been the subject of repeated queries over the course of time, and some are our newer topics that we're that we're working on, and that are evolving.

45

00:09:35.290 --> 00:09:46.300

Jason Block: I'll get into some more detail about our upcoming mortality and COVID-19 Medication query. We're planning a new version of this. We executed one version of this

46

00:09:46.430 --> 00:09:56.280

Jason Block: over the last several months to to get a sense of what data might look like, and we were able to take those results and decide on how we want to actually lay out

47

00:09:56.350 --> 00:10:03.900

Jason Block: this query to produce some important results that Cdc. Can use for some of their response efforts.

48

00:10:04.420 --> 00:10:14.140

I'll talk about some work that we've been doing really in

collaboration with the Nih. Recover teams on post Acute quality of Sars Cov. 2, I'll show you some results from that, and talk about 150.

49

00:10:14.450 --> 00:10:27.450

Jason Block: How that work might evolve over the next couple of months some work on disease severity focused on the Omegaron era. and some updated results on our on our ongoing

50

00:10:27.540 --> 00:10:41.650

Jason Block: periodic query that we do called our cumulative query, which really reports on trends over the course of the pandemic, and we added some elements for the most recent one that we ran, including some data on flu and ours fee trends.

51

00:10:43.640 --> 00:10:56.010

Jason Block: Okay, so I i'm. I'm not going to give you the results from the mortality. Query: because i'm going to talk about that more in our upcoming queries. But i'll. I'll just show you some brief results for this post to keeps quality of Sars could be 2 query.

52

00:10:56.230 --> 00:11:04.230

Jason Block: We ran this now about probably 2 months ag0 0r 6 weeks ago.

53

00:11:04.670 --> 00:11:06.370

Jason Block: and this covered

54

00:11:06.450 --> 00:11:23.500

Jason Block: data through April of 2,022. And the reason that we cut it off that early in the course of time is because we're looking at the incidents, where the worsening of several different conditions in the 31 t0 180 day period.

55

00:11:23.500 --> 00:11:30.710

after a covid test, it says 30 t0 1 80 here, but it's actually 31 t0 180.

56

00:11:30.900 --> 00:11:40.730

Jason Block: We looked at incidents and worsening of cardiovascular disease, pulmonary disease, diabetes. And then we also looked at incidents of brain fog.

57

00:11:41.280 --> 00:11:56.870

Jason Block: We capture data on those anybody who's been tested over the period of time through April of 2,022, and what we've spent a lot of time working on with our modular program is trying to make sure to the best of our our ability.

58

00:11:56.940 --> 00:12:08.950

Jason Block: We can really identify incident cases when we're looking at incidents and also trying to monitor this. This worsening phenotype. I'm: going to focus on incidents today.

59

00:12:09.450 --> 00:12:22.130

Jason Block: This query included 1.2 million, Covid positive, and about 5.4 million Covid negative adults. We also looked at children, but i'm just going to be focused on sharing results for adults.

60

00:12:23.170 --> 00:12:36.500

Jason Block: And one of the things that just keep in mind. And this is part of the work that we are gonna conceptualize moving forward. Is that the severity of underlying conditions or

61

00:12:36.720 --> 00:12:48.950

Jason Block: cute conditions among those who are testing negative in our data is much higher than those testing positive. And that's because, as many of you know, especially people who are actively taking care of

62

00:12:48.950 --> 00:13:08.350

Jason Block: of patients in the hospital, is that everybody is tested for Covid when they come into the hospital, no matter what the reason they're presenting for. And so those patients who are hospitalized, every single one of them has a Covid test, and most of them are negative. And so that's just Rat R. R. Ratchets up the acuity

63

00:13:08.350 --> 00:13:15.200

of the acute condition that patients are presenting with when they're testing negative compared to positive.

64

00:13:16.420 --> 00:13:31.390

Jason Block: So this is a graphic that Tom and his team at L. Phi have produced for us from this data. This is focused on adults from this query, and this is looking at diabetes, incidents stratified by age

and race and ethnicity.

65

00:13:32.040 --> 00:13:44.710

Jason Block: Covid, positive group. And this is these are people who are actively testing positive. It doesn't include people who've had diagnostic codes for Covid or in purple and in orange or those patients testing negative.

66

00:13:44.710 --> 00:13:56.580

Jason Block: You can see, the incidence is on the Y-axis here goes up to 5. So incidence is pretty low over the course of time. It increases with age. There's certain racial and ethnic

67

00:13:56.630 --> 00:14:10.260

Jason Block: groups that have higher rates. These match what we know from national incidents, information about diabetes, and what you can also see is that the incidence is slightly higher among those testing negative.

68

00:14:10.280 --> 00:14:12.360

Jason Block: Compared to those testing positive.

69

00:14:12.450 --> 00:14:22.580

Jason Block: the absolute difference is small on the order of about one to 1.5% absolute difference. But it's consistently higher among those testing negative

70

00:14:23.520 --> 00:14:36.040

Jason Block: one of the things that we discovered in overall, we see that those who are testing positive for Sars could be to the incidents with 1.6 for diabetes compared to 2.6 for those testing negative.

71

00:14:36.690 --> 00:14:43.830

Jason Block: One of the things that we've also explored. I'm. Not showing that here is that when you focus in on those patients who are hospitalized.

72

00:14:43.860 --> 00:15:00.490

Jason Block: so stratifying or accounting for the acuity of the condition that led to the Covid test. You see that there's clearly a higher incidence of diabetes among those testing positive for Covid compared to those testing negative.

73

00:15:00.490 --> 00:15:07.310

Jason Block: So get that some of these issues that I presented earlier about this higher hospitalization rate among those testing negative.

74

00:15:09.160 --> 00:15:17.660

Jason Block: there's data on pulmonary disease incidents, and this is a range of different pulmonary conditions from asthma to Copd.

75

00:15:17.730 --> 00:15:25.720

Jason Block: to general respiratory complaints, and these, by the way, are phenotypes that have been developed by the nih

76

00:15:25.750 --> 00:15:29.680

recover team and groups of experts and clinicians

77

00:15:29.690 --> 00:15:41.750

Jason Block: that have pulled together these computable phenotypes. So this is the same type of graphic Again, pulmonary disease instead of diabetes. You can see the Y Axis is again out of 5.

78

00:15:41.930 --> 00:15:55.370

Jason Block: We see the stratified by both age and race and ethnicity. Purple is Covid, positive or just Covid negative. And so here you do see that the Covid positive group has a higher incidence, a pulmonary disease compared to the Covid negative group

79

00:15:55.580 --> 00:16:09.740

Jason Block: that's not entirely consistent by race and ethnicity, though it is by age. You see some racial and ethnic groups where the Covid negative group is slightly higher than the Covid positive group, but overall the incidents it's hire among those testing positive.

80

00:16:10.230 --> 00:16:26.010

Jason Block: It's about 2.8 2, point 9 Overall; and again, when we stratify by the acuity of the condition when patients are tested, so hospitalized versus not among those hospitalized.

81

00:16:26.010 --> 00:16:31.890

Jason Block: The pulmonary disease incident is much higher among those testing positive compared to negative.

82

00:16:32.520 --> 00:16:37.270

Jason Block: So we we've been thinking a lot and talking with our Cdc colleagues about

83

00:16:37.320 --> 00:16:45.540

Jason Block: what this cdc project can contribute in this area of post-secution quality of Sars could be 2 Obviously, the Nih Recover

84

00:16:45.610 --> 00:16:56.220

Jason Block: project is working on the same topic, and it's developing phenotypes and doing machine learning, and trying to affect some phenotypes and other things.

85

00:16:56.280 --> 00:17:02.310

Jason Block: And and so we want to make sure that we have a distinct contribution that we think that we can provide on this.

86

00:17:02.960 --> 00:17:11.119

Jason Block: So we're doing some comparisons between the data that the Recover team is assessing and that we're assessing just to make sure that they're aligned.

87

00:17:11.220 --> 00:17:23.910

Jason Block: We're also refining some of our code list and and phenotypes to correct any errors that may have led to some of the findings, and that can help us iterate this on this topic in the future.

88

00:17:24.180 --> 00:17:37.850

Jason Block: And then we think one of the things that is is pretty clear and and rapidly developing over the course of time is that we're not so sure that there's an easy comparison group to the Covid negative group. Obviously, that's an eclectic group.

89

00:17:38.150 --> 00:17:53.260

Jason Block: The 0 prevalence of Covid in the population now is so high that that Covid negative group includes a lot of people who at some point over the pandemic tested positive. And so we're thinking that our contribution may be more on describing the population burdened

90

00:17:53.360 --> 00:17:58.160

Jason Block: among those testing positive than it is necessarily comparing it to a negative group.

91

00:17:58.750 --> 00:18:04.780

Jason Block: We also think that it's probably important to focus on those who have most of your Covid illness

92

00:18:04.890 --> 00:18:13.170

Jason Block: rather than the general population of patients testing positive. This is even more important now that we know we're not detecting a lot of the

93

00:18:13.230 --> 00:18:29.970

Jason Block: lower acuity Covid cases because they're not presenting to the health care system at all, and we're not getting those test results. And so this may be something that's an area where that we really should drill down on more directly rather than talking about the entire population of patients testing positive.

94

00:18:30.360 --> 00:18:37.650

Jason Block: And we think there are some opportunities because of the strength and pornet of longitudinal data over a period of time.

95

00:18:37.910 --> 00:18:52.070

Jason Block: One of the pieces in the areas of research around task or exploration around past is the longer term outcomes. What happens to patients over the longer term, and not just focused on this

96

00:18:52.090 --> 00:19:03.480

Jason Block: post acute period. But among those patients who actually have incident disease in that post-cue period, what happens to them over the course of time, assessed in part by health, care, utilization.

97

00:19:04.530 --> 00:19:14.630

Jason Block: So we had some conversations last week about this, and we expect that this is going to be something that we're going to start working on and developing some queries over the next couple of months.

98

00:19:17.420 --> 00:19:21.210

Jason Block: All right. I'm just gonna switch to our routine.

99

00:19:21.220 --> 00:19:25.730

Jason Block: A cumulative query that we assess trends over the course of the pandemic.

100

00:19:26.330 --> 00:19:39.750

Jason Block: As I mentioned, we relatively recently completed another of these queries. This kind of wrapped up in January. We sent it out right before the holidays in December, and gave people a longer period of time to respond to this 150.

101

00:19:39.850 --> 00:19:44.810

Jason Block: This covers data through November of 2,022,

102

00:19:45.090 --> 00:19:51.130

and you can see in terms of patients that we're following in the Covid Cdm. In our 43 sites

103

00:19:51.260 --> 00:19:57.100

Jason Block: we have 1.8 million adults who have tested positive. So these are objectively tested positive

104

00:19:57.290 --> 00:20:06.230

Jason Block: about another 1 million patients who have diagnostic codes for Covid, who weren't captured in the positive test group

105

00:20:06.370 --> 00:20:22.900

Jason Block: among those testing positive. It's about 13% who have been hospitalized, and that's about 12% among that broader group that includes diagnostic codes. We've assessed second positive test for Covid that separated from the first by at least 90 days.

106

00:20:23.120 --> 00:20:36.810

Jason Block: We have about 70,000 patients in that group, and 9% inpatient and a bit just under 1,500. We've had 3 documented positive tests for Covid, each separated by 90 days.

107

00:20:37.160 --> 00:20:53.690

Jason Block: You can see the numbers for children, almost 600,000 children testing positive, much lower hospitalization rate at 4%,

760,000. When you look at the broader group that includes diagnostic codes in a smaller number of those second and third Covid infections

108

00:20:55.790 --> 00:21:05.430

Jason Block: for the first time in a long time. We also looked at Flu. Rsv. And we added on an additional look at Monkey Pox. We had done this once before as well.

109

00:21:05.600 --> 00:21:18.780

Jason Block: We looked at Flu and Rs. Fe very early in the pandemic, and quickly discovered that the number of cases of fluent Rsv. Was well. We never looked at our 3. We just looked at Flu previously, and saw that that was rapidly declining almost to 0.

110

00:21:18.780 --> 00:21:29.220

Jason Block: But we've provided for this query just to see what was happening, as we know that the number of cases nationally has been rising, especially over the last several months.

111

00:21:29.850 --> 00:21:41.650

Jason Block: So we looked at this, both looking at positive flu test and diagnostic codes, and the same for ours for monkey pox. We focused on diagnostic codes, and we also look at monkey pox vaccinations.

112

00:21:41.870 --> 00:21:55.460

Jason Block: You can see the numbers of cases that we've documented here adults just under 140,000 cases of flu and 17,000. Rsv. You can see the percent hospitalized there. 1,800 cases, the monkey box.

113

00:21:55.610 --> 00:22:07.510

Jason Block: and then for children slightly higher numbers flu much higher numbers of Rsv. Which is consistent with what we'd expect very few cases of monkey pox.

114

00:22:08.070 --> 00:22:12.860

We wanted to get a sense also. This was the first time that we were including

115

00:22:13.820 --> 00:22:21.800

Jason Block: quantitative test results for flu and Rsv. For laboratory testing to see how many cases we're actually

116

00:22:22.200 --> 00:22:32.620

Jason Block: finding. When we add on that quant qualitative test result information, and about 90% of our cases of flu or detected with diagnostic codes.

117

00:22:32.620 --> 00:22:43.910

Jason Block: S0 10% by testing alone, and you can see less for ours. About 75% detected with diagnostic codes and about 25%. With the testing alone.

118

00:22:44.400 --> 00:23:03.360

Jason Block: About 50% of the of the cases of fluent Rsv. For children have documented test results in the data, and it's much fewer for adults, about 34% of those testing positive or that that captured as having flu and about 7%

119

00:23:03.360 --> 00:23:05.920

Jason Block: of those that are diagnosed with Rsv.

120

00:23:07.890 --> 00:23:26.570

Jason Block: Just showing you some graphics here that's just showing you the trends over the course of time which we're able to produce from this data. I decided here to just show the Covid trends for those who have been hospitalized and had second infections here. Adults, children. You can see the Y Axis differs quite a bit.

121

00:23:26.570 --> 00:23:29.090

Jason Block: for adults and children

122

00:23:29.350 --> 00:23:42.850

Jason Block: in blue are the number of cases over the course of time starting in March, 2020 through November of 2022 of patients who are hospitalized and tested positive for sars. Cov. 2

123

00:23:43.050 --> 00:23:50.600

Jason Block: in in green. You can see those second Covid cases which are documented. Objective laboratory confirmed Covid cases

124

00:23:50.620 --> 00:23:53.660

Jason Block: spiking in January 2,022 for both.

125

00:23:53.700 --> 00:23:58.910

and then you can see the trends that kind of start to overlap in latter 2,022

126

00:23:59.380 --> 00:24:06.990

Jason Block: same general pattern that we see for kids, but just on a much lower scale in terms of the numbers that we're detecting.

127

00:24:07.060 --> 00:24:12.540

Jason Block: I didn't show you the overall Covid cases just because that's a much higher number harder to present on this same graphic.

128

00:24:14.600 --> 00:24:19.080

Jason Block: Here our adults flew in Rsv cases, and again, this is

129

00:24:20.180 --> 00:24:25.110

Jason Block: cases detected either with diagnostic codes or laboratory testing.

130

00:24:25.180 --> 00:24:29.780

And, as I mentioned before, you can see that we saw cases in March of 2,020

131

00:24:29.800 --> 00:24:39.900

Jason Block: almost went to 0, and then we started to see some resurgence in late 2,021, that continued into 2022, and this this sharp spike

132

00:24:39.950 --> 00:24:53.130

Jason Block: that's a consistent with what we've been hearing about with the rise in flu cases over the last several months. Here's a monkey. Pox. Infections and vaccines. Vaccines are in green.

133

00:24:53.270 --> 00:24:58.630

blue is monkey pox cases Again, detective, mostly with diagnostic codes.

134

00:24:58.650 --> 00:25:16.450

Jason Block: same pattern that we see detected nationally where the spike was in August of 2,022. This is just 2,022, data by the way. and

then that has fallen to almost 0 in most recent months. And again, that's that's what we're seeing nationally with monkey pox as well.

135

00:25:18.350 --> 00:25:31.580

Jason Block: And last, in terms of presenting the cumulative data results. Here you see fluent Rsv cases among children from March, of 2020 to November of 2,022

136

00:25:31.740 --> 00:25:35.980

Jason Block: very similar pattern that we showed for adults.

137

00:25:36.260 --> 00:25:48.320

Jason Block: You see a higher rate of Rsv. Then I showed you for adults which is consistent with what we see in kids, and then you can see the recent spikes over the last several months of Flu. And Rsv.

138

00:25:51.930 --> 00:26:03.260

Jason Block: Right, and the last sort of recent results that i'll show before I pivot to talking about our upcoming queries is some work that Tom and his team are working on at Lph. I.

139

00:26:03.340 --> 00:26:16.310

Jason Block: This is a a query that we've actually repeated several times over the course of this project where we've been looking at disease severity during the pandemic. We have done this in a couple of ways.

140

00:26:16.350 --> 00:26:33.790

Jason Block: One is by using a published severity index that the team at Children's Hospital, Philadelphia, and the pizza that team has put together, where they sort of rank cases by severity, severe, moderate, and low severity, or

141

00:26:33.790 --> 00:26:37.520

a asymptomatic. We group asymptomatic and low severity together

142

00:26:37.810 --> 00:26:44.660

Jason Block: separately. We pull out a group of patients that have sequeli severe sequeli of Covid. that

143

00:26:45.060 --> 00:26:59.570

Jason Block: is, it necessarily associated with a severe acute case. But they might have some consequence of Covid, such as a Dvt. Or a pulmonary embolism, or a Gambre, or something like that

144

00:26:59.580 --> 00:27:09.450

Jason Block: mit ctl, and that would separately consider them to be a fairly severe cases. We also look at care of setting-based metrics, hospitalization, Critical care Use of the whole layers. One

145

00:27:09.870 --> 00:27:27.230

Jason Block: So what we've done most recently is we updated this data, and we focus solely on the omicron area era from January 2022 0n, and then classified disease severity by sub variant periods the BA. One B, a, 2, and BA. 4 5.

146

00:27:27.970 --> 00:27:29.490

We also join that

147

00:27:29.510 --> 00:27:37.220

Jason Block: with prior data that we have produced in prior queries to look at a disease severity across the entire pandemic.

148

00:27:38.000 --> 00:27:48.050

Jason Block: Tom's team is actively working on this. I'm going to show you some high level information that we produced, and then some graphics. But there's more to come on this soon.

149

00:27:49.320 --> 00:28:04.410

Jason Block: The first thing i'll just show you is this graphic that's just focused on the Omicron period. So in blue is BA. One green is BA. 2 purple with BA. 4 and 5. You can see the numbers of cases that this is based on here

150

00:28:04.570 --> 00:28:19.460

Jason Block: in the percent of patients or the proportions of patients that fall into these different severity indices. So, for example, the first is inpatient to the percent of all patients with Covid who are hospitalized.

151

00:28:19.500 --> 00:28:31.790

Jason Block: In each of these periods you can see it rises sort of in a linear fashion, although the absolute difference is pretty small. We

do this for those severity indices that the pizza net team is produced

152

00:28:31.830 --> 00:28:44.210

Jason Block: shows a similar pattern, which is a rise in severity from be a one to 2 to 4 5 severe sequel. You see that rise. And again, these are all really small, absolute differences.

153

00:28:44.220 --> 00:28:51.590

and then moderate cases. Also follow that same pattern. I don't show the low severity which goes in the opposite pattern.

154

00:28:52.060 --> 00:28:54.240

Jason Block: Among those who are hospitalized.

155

00:28:54.250 --> 00:29:04.650

Jason Block: Also, we see the percent that have used critical care services, and the percent that have used ventilators doesn't necessarily follow the same pattern. It's more

156

00:29:04.760 --> 00:29:18.320

Jason Block: consistent across each of these different errors, then later uses a little bit higher in the BA. One period than compared to the others. And again, these are really small differences on an absolute scale, but just wanted to show them to you.

157

00:29:20.030 --> 00:29:25.840

Jason Block: Same numbers for kids. Y access is different. It's at a 25% here.

158

00:29:25.870 --> 00:29:44.140

Jason Block: many fewer hospitalizations, many fewer severe cases and kids compared to adults. Again. Same color scheme B, a one blue b, 2 green, B, a, 4 5, and purple. You can see the rise in inpatient cases, but relatively low percent overall

159

00:29:44.140 --> 00:29:47.440

Jason Block: severe cases, severe, sequeli, moderate.

160

00:29:47.480 --> 00:29:56.580

And then you can see that among those hospitalized the person using critical care services and then away there is is pretty consistent

across time.

161

00:29:59.470 --> 00:30:04.920

These are some graphs that Tom's team has produced that join together. This most recent data

162

00:30:05.360 --> 00:30:09.620

Jason Block: with the prior data that we get produced in earlier queries.

163

00:30:09.810 --> 00:30:19.110

Jason Block: This is data that's stratified by race, ethnicity, and age. And here we look at all 4 of the severity categories that that pedsnet chop team

164

00:30:19.270 --> 00:30:25.800

Jason Block: had produced, which is low, moderate, high. And then that separate group is the severe Sequeli group.

165

00:30:26.110 --> 00:30:42.140

Jason Block: I'm gonna focus in on a smaller number of these graphics just you can see. But I just wanted to present the overall just. You can see how we're working with this data and trying to join it together across the various periods. The pandemic.

166

00:30:43.850 --> 00:30:52.270

Jason Block: In this slide I blow up the high severity and the severe sequeli. These are again broken down by race, ethnicity, and age.

167

00:30:53.220 --> 00:31:07.860

Jason Block: One of the things I just want to point out among these graphics is that the the scale, the gray scale that you used in order to identify the periods is slightly off. The homicon period really starts in January 2,022,

168

00:31:07.860 --> 00:31:26.180

Jason Block: and then the other periods are slightly off as well. So we're still working on these graphics to get them correct. But what you can see is that generally the patterns that we observe are consistent with what we see, which is that the oldest age groups have higher severity compared to the younger age Groups

169

00:31:26.180 --> 00:31:42.520

Jason Block: we see a slight reduction in the severity of illness that occurs in the early Omerkron period. That spikes a little bit, but then settles out at a lower rate generally than what we've been observing with some of the earlier pandemic periods.

170

00:31:42.700 --> 00:31:57.900

Jason Block: we have a lot of work to really parse this out, and to get this to the point where it's ready for our analyses and and manuscript writing. But this is something that their their team is actively working on. So more more on this to come very soon.

171

00:32:01.020 --> 00:32:10.770

Jason Block: All right. I'm going to pivot in the next 15 min or so to our upcoming queries that we're actively working on, and that you should expect to see

172

00:32:11.130 --> 00:32:12.100

Jason Block: soon.

173

00:32:12.110 --> 00:32:19.880

and the the first is to mention the query that was mentioned by our Cdc colleagues early, which is this

174

00:32:20.080 --> 00:32:25.870

Jason Block: very quick turn around query that we produce to look at stroke as a potential

175

00:32:26.160 --> 00:32:38.280

Jason Block: adverse event associated with the Covid bivalent vaccines, where there was a signal that was detected in some of the surveillance programs that Cdc. Has. And so we wanted to run a query. Looking at this as well.

176

00:32:38.330 --> 00:32:51.950

Jason Block: We just produced this report last Thursday, and we're all actively looking at these results, and can share something, probably at our next Webinar, if not earlier on this. But Haven't really had a chance to review this in great detail. Yet

177

00:32:53.050 --> 00:33:01.430

Jason Block: we're working on this mortality query that's actually in Beta testing right? Now, we've gotten some results back from our initial Beta test partners that we're looking at.

178

00:33:01.530 --> 00:33:21.110

Jason Block: We expect to release this full query either today, tomorrow or certainly by Wednesday, with responses due by around February 20, seventh, depending on. When we release the query. We've given sites a little bit longer to respond to this query because it's a it's a little bit bigger, because it's pulling back patient level data

179

00:33:21.110 --> 00:33:25.170

Jason Block: which is the identified patient level data. I'll talk about that more in a. Sec.

180

00:33:25.910 --> 00:33:33.820

Jason Block: Some queries that we're planning for the full Cdm. Which is part of the scope that sites had for this contract year.

181

00:33:34.600 --> 00:33:42.960

Jason Block: These are looking at trends and preventive care services and incident, chronic disease and control of hypertension and diabetes over the course of the pandemic.

182

00:33:43.300 --> 00:33:47.570

Jason Block: and then we have several other queries that we're going to slot in in the April through May

183

00:33:47.640 --> 00:33:59.620

Jason Block: time period we'll repeat our cumulative query, and, as I mentioned before, we're evolving this work on post-equality of stars. Cov. 2 that likely will translate into a query in this window as well.

184

00:34:01.650 --> 00:34:10.219

Jason Block: Okay. Scroll Query: No results yet. But what we looked at here is we focused on the population 65 years of age and older.

185

00:34:10.710 --> 00:34:25.139

Jason Block: and then we stratify this group by particular outcomes that were of interest that had been detected in that surveillance system that that Cdc. Has been monitoring over the course of time. We

looked at ischemic stroke.

186

00:34:25.179 --> 00:34:28.500

and then the combination of a scheming stroke, and T. I. A.

187

00:34:28.699 --> 00:34:31.679

Jason Block: We looked at intervals after

188

00:34:31.760 --> 00:34:44.080

Jason Block: the index event in the index events that we explored, we're flu vaccines, Mrna bivalent vaccines for Covid, a combination of those bivalent vaccines and flu vaccines on the same day.

189

00:34:44.270 --> 00:34:54.840

Jason Block: and then we also looked at Covid and flu infection to get a sense of of how often stroke occurs in these different time, intervals after that index date.

190

00:34:55.429 --> 00:34:59.030

Jason Block: So more on this. Soon as we parse through these results.

191

00:35:02.430 --> 00:35:16.240

Jason Block: Sharon mentioned at the top this work that we have been exploring on mortality. It's actually a combination of mortality and hospitalizations for for Covid during the

192

00:35:16.240 --> 00:35:26.930

Jason Block: what we're kind of defining is the modern area that the the new era of of Covid, of the Covid pandemic that really began in in April of 2,022, which is, when

193

00:35:26.940 --> 00:35:36.980

Jason Block: medications became more widely available and in use for the treatment of Covid. And when i'm referring to medications, i'm really referring to those that are used in the outpatient setting.

194

00:35:37.260 --> 00:35:47.320

Jason Block: So Pax will then really kicked off in terms of its availability and use in April of 2,000 and 22 and so we focus this query on that time period.

195

00:35:48.070 --> 00:35:59.770

Jason Block: We're we're trying to get a sense of is trying to understand characteristics that are associated with people still having severe disease in this era of time.

196

00:36:00.440 --> 00:36:04.540

Jason Block: So our outcomes that we're looking at our hospitalization and 30 day mortality.

197

00:36:04.550 --> 00:36:12.200

Jason Block: We're looking at information on all patients testing positive or having a Covid diagnostic code or receiving a Covid medication.

198

00:36:12.490 --> 00:36:17.390

And then we're stratifying this information by age. You can see the age intervals here

199

00:36:17.440 --> 00:36:25.090

Jason Block: use of covid medications, and then underlying conditions. So in terms of kind of how this is gonna look

200

00:36:25.240 --> 00:36:37.410

Jason Block: is this table here? We're gonna look at all patients. Those hospitalize those who die within 30 days, and then you can see all the different straight up that we're going to be examining

201

00:36:37.870 --> 00:36:50.890

Jason Block: the Any underlying condition includes a wide list of underlying conditions that is consistent with Cdc's certain medical conditions that they have used to prioritize treatment over the course of the pandemic.

202

00:36:51.240 --> 00:37:05.880

Jason Block: We have looked at this group of severe underlying conditions. These are patients who are on immunosuppressive medications, patients who have had prior organ transplants or receiving active treatment for cancer. That's a group that we're also going to be stratifying, based on.

203

00:37:05.880 --> 00:37:11.550

Jason Block: And the medication groups that we're going to be assessing are those who have not received any covid medications at all

204

00:37:11.900 --> 00:37:16.200

Jason Block: those who have received Pax lid and those who have received molten, pure beer.

205

00:37:17.440 --> 00:37:33.730

Jason Block: So accompanying this, we're going to produce one of our typical aggregate reports that we produce, but we're also going to be pulling back the identified patient level data. It's going to match the information that we're using to produce the aggregate reports, but will be line level data.

206

00:37:33.780 --> 00:37:50.980

Jason Block: and it will be this cohort of all patients in this study time period April 2022 to December, 2022 who have a who have any of these characteristics of having a positive test diagnostic code covid medication.

207

00:37:50.980 --> 00:38:01.650

Jason Block: And then we're going to be assessing the outcomes, and then pulling back a number of different covariates. This will give us the opportunity to do some more detailed analyses about

208

00:38:01.700 --> 00:38:09.440

Jason Block: independent risk factors for being hospitalized and for dying from Covid during this time period.

209

00:38:10.020 --> 00:38:23.800

Jason Block: This is data also as part of the scope for this year of our Contract that we're gonna be providing Cdc. Analysts with some access to this information, and it'll be stored on a sec secure server

210

00:38:23.900 --> 00:38:36.070

Jason Block: at Louisiana. Public Health Institute and Cdc Analysts will be able to access this data on that server only. We're also both doing some processing of this day. But this data our program as well.

211

00:38:36.670 --> 00:38:45.110

Jason Block: So again, this query will be going out shortly, and if you have any questions or concerns, or or issues with this, please let

us know.

212

00:38:48.980 --> 00:38:59.890

Jason Block: So the next set of queries that we're planning to run and Marshall in April. This will be These will be queries that will hit against the full common data model, not just the Covid Cdm.

213

00:39:00.320 --> 00:39:02.980

And we're going to be doing 3 separate assessments.

214

00:39:03.080 --> 00:39:05.150

Jason Block: These will all be aggregate queries.

215

00:39:05.540 --> 00:39:11.850

Jason Block: The first query is going to be looking at preventive health screening over the course of the pandemic.

216

00:39:11.870 --> 00:39:15.770

Jason Block: I'll talk about that more on the next slide, but we're going to be focused on

217

00:39:17.240 --> 00:39:28.700

Jason Block: the on laboratory measurements that are done for preventive health screening and also vital measurements like blood pressure and weight. We're gonna look at other testing that you use for routine screening.

218

00:39:29.240 --> 00:39:44.170

Jason Block: And then in our next query that we'll do in this category, we're going to be looking at incident conditions and trying to look at the number of cases of varied incing conditions that have been diagnosed at at various time periods over the course of the pandemic.

219

00:39:44.500 --> 00:39:49.720

Jason Block: and then the last will be focused on hypertension and diabetes control. So we'll actually look at

220

00:39:49.940 --> 00:40:02.310

Jason Block: what's the proportion of patients with hypertension and diabetes, for example, in different time periods, who've been captured

to be in control or out of control for their treatment for hypertension and diabetes.

221

00:40:03.850 --> 00:40:10.530

Jason Block: The first of these were in active planning stages, for we expect to release this and

222

00:40:10.870 --> 00:40:20.870

Jason Block: early march probably is when this query will be released, and we're going to be looking at the use of of any of these preventive care services that I listed before

223

00:40:20.960 --> 00:40:28.320

Jason Block: in designated time increments before and during the pandemic. So we're going to be looking at six-month increments

224

00:40:28.420 --> 00:40:38.390

Jason Block: in the period of time that preceded the pandemic starting in September of 2,018 going through just before the pandemic began. And then in 6 month increments after

225

00:40:39.380 --> 00:40:42.890

will capture demographics, census data underlying conditions.

226

00:40:42.910 --> 00:40:48.850

Jason Block: some of the geographic information that we capture and history of screening as well. But it's going to allow us to look at the

227

00:40:49.680 --> 00:40:52.820

Jason Block: when when you know how. How

228

00:40:52.890 --> 00:41:08.140

Jason Block: how much did the the rate of screening for these conditions drop during the pandemic? When did that rebound? How much did it recover, and how any of that really compared during the pandemic to the period prior to the pandemic.

229

00:41:08.200 --> 00:41:10.740

So this is a an area that

230

00:41:10.870 --> 00:41:15.370

Jason Block: we're looking to really expand and push on. Which is this chronic business

231

00:41:15.410 --> 00:41:22.510

Jason Block: surveillance work within picornet. Jen had mentioned earlier that we presented some of this work

232

00:41:22.620 --> 00:41:34.000

Jason Block: to the chronic Disease group at Cdc. And they've been very interested in trying to explore how cornet in general can be used for chronic disease surveillance. And this is really our first attempt. At this

233

00:41:34.180 --> 00:41:38.620

Jason Block: we Haven't planned out the other 2 queries, the one on incident conditions

234

00:41:38.630 --> 00:41:48.410

Jason Block: and the one on disease control. But those will follow from these. And so, as soon as we're finished with this one, we'll plan those 2 as well. We have a pretty good sense of how those are going to work

235

00:41:51.190 --> 00:42:03.140

Jason Block: close by talking about the manuscripts that we've had published. We've had 5 manuscripts published over the course of this period of time that we've been working together. The most recent was in October of 2,022

236

00:42:03.210 --> 00:42:05.310

Jason Block: right before we have that November.

237

00:42:05.430 --> 00:42:06.760

Webinar.

238

00:42:07.320 --> 00:42:25.310

Jason Block: and then, as usual, Cdc is updating the Covid data tracker with data focused on patients who've been hospitalized over the course of time. And they recently got this new data that goes through November of 2,022. To add on to the data that they have up

there on a covid data track are already.

239

00:42:26.670 --> 00:42:31.820

Jason Block: We have several manuscripts that have been submitted over the last couple of months.

240

00:42:31.920 --> 00:42:35.490

Jason Block: We have a paper where we did distributed regression. Looking at

241

00:42:36.740 --> 00:42:46.300

Jason Block: differences in the incidence of certain long Covid symptoms and conditions, comparing those testing, positive or just negative.

242

00:42:46.540 --> 00:43:00.740

Jason Block: That paper was submitted to plus medicine a couple of months ago. We've had a couple of papers where we've just been tracking the characteristics of patients, both kids and adults who have had to covid over the course of the pandemic.

243

00:43:00.840 --> 00:43:08.590

Jason Block: We submitted the pediatric paper to academic pediatrics about a month ago, and just submitted today. The adult trend paper to plus medicine.

244

00:43:09.310 --> 00:43:14.050

Jason Block: and then we had a paper that was looking at predictors of severe covid

245

00:43:14.830 --> 00:43:30.260

Jason Block: focused on chronic disease control diabetes, hypertension. That paper was rejected recently by circulation. We got that notice about a week ago, and we're working actively on trying to figure out the next journal that we're going to submit that to

246

00:43:31.500 --> 00:43:46.940

Jason Block: to follow in some of the work that we have completed in the work that we're planning right now. Our next 2 manuscripts probably will be on disease severity, as I outlined, and there'll probably be something that follows on Covid mortality when we're able to complete that query as well.

247

00:43:49.260 --> 00:44:00.580

Jason Block: So I'll. Just close by saying that we are discussing with Cdc. And Phi Ii. Who is the group in the organization that administers the contracts for this project

248

00:44:00.750 --> 00:44:05.610

about what this project might look like going forward.

249

00:44:07.100 --> 00:44:26.620

Jason Block: There's interest in all parties. To continue to work together. Exactly what the shape of that and what it might look like is not certain. But what is what is certain is that there's interest in moving beyond Covid or beyond the pandemic as a work that we collaboratively do together.

250

00:44:26.900 --> 00:44:36.340

Jason Block: So there's interest in and in mixing in some chronic disease, surveillance, and surveillance of other infectious diseases. We've already started to do some stuff on monkey, pox, and flu and rsb one.

251

00:44:36.570 --> 00:44:55.950

Jason Block: but there's sort of a broader interest to engage in this work moving forward. So, as I said, we've started the discussions. This contract period that we have for this project right now goes through the end of July of this year, and so, as we get more information

252

00:44:55.950 --> 00:45:12.410

Jason Block: over the course of our discussions, we will share that with you, but just just know that this is on our radar, and that we're thinking about it. And we believe that this has been a successful and fruitful project that we hope to continue moving forward and hope to keep working with all of you.

253

00:45:13.480 --> 00:45:19.370

Jason Block: I'll close by, just sharing my email. Tom's email. Lauren Cleveland is our project manager.

254

00:45:19.380 --> 00:45:27.650

Jason Block: and I will stop sharing my screen now and see if there

are any comments that we want to talk through, and I know Tom has been monitoring the chat.

255

00:45:29.790 --> 00:45:30.380

Okay.

256

00:45:31.650 --> 00:45:39.210

Tom Carton: Jason's Tom. It's been quiet in the in the chat and in the Q. A. So we can see if folks have any questions or comments now.

257

00:45:57.470 --> 00:46:06.530

Jason Block: right well, I it's we always do these on Monday morning, so that it might might not have the the juices flowing for questions quite yet. But

258

00:46:06.600 --> 00:46:10.260

Jason Block: but you should have all of our emails, and

259

00:46:10.360 --> 00:46:12.970

please feel free to reach out to us.

260

00:46:13.310 --> 00:46:20.950

Jason Block: Danielle. I know that you all make available this slides and these presentation, so i'll let you share that. But again.

261

00:46:21.040 --> 00:46:33.750

Jason Block: always a pleasure to talk with all of you. We will continue these quarterly. We expect the next presentation, probably to be around May in May. and we look forward to working with all of you some more over the next couple of months.

262

00:46:35.120 --> 00:46:42.820

Danielle Sill, PHII (she/her): Yeah, Great Jason, Thank you for that. Just as a reminder we did record this call, and the transcript, as well as the slides will be available Afterwards

263

00:46:42.820 --> 00:46:55.370

we sent out an email to all the lists. So even those of your colleagues that weren't able to make it to the presentation today, they will still get the recording and the size for them to view Later, Like Jason said, If you have any questions at all, please feel free to

email us.

264

00:46:55.370 --> 00:47:02.920

Danielle Sill, PHII (she/her): we would be more than happy to get back to you. So thank you so much for joining on this Monday morning, and we hope you have a great rest of the day and a great week. Thanks.

265

00:47:04.580 --> 00:47:06.050

Tom Carton: thanks. Everyone.