WEBVTT 1 00:03:27.140 --> 00:03:28.070 Jason Block: Okay. 2 00:05:54.210 --> 00:06:03.850 TFGH Central Zoom: Hi, everyone. This is Hailey Mccormick, David from PHI. We're going to give folks maybe one or 2 more minutes to hop on, and then we'll get started. 3 00:07:00.410 --> 00:07:06.219 TFGH Central Zoom: All right. Hi, everybody! We will get started. I 4 00:07:06.290 --> 00:07:29.389 TFGH Central Zoom: So welcome everyone to the cornet. Cdc, COVID-19 electronic healthcare data initiative webinar. Jason will share updates. Our progress Cdc wasn't able to join us today. But I did wanna pass along that they're sorry they couldn't present today, and that they continue to have appreciation for the partnership and everyone's contributions to Cdc's 00:07:29.390 --> 00:07:46.430 TFGH Central Zoom: priority. Public health initiatives, including the agency's high priority work related to COVID-19 influenza, Rsv. throughout the 2023 2024 respiratory virus season, and Jason will share priority highlights of recent projects and 6 00:07:46.480 --> 00:07:50.960 TFGH Central Zoom: priorities. So thanks everyone, and I'll I'll pass it to you, Jason. 7 00:07:51.920 --> 00:07:57.480 Jason Block: Thanks so much, Hailey. I appreciate it. I'll I'll share my slides. 8 00:08:05.130 --> 00:08:05.970 0kay. Q 00:08:06.160 --> 00:08:08.629 Jason Block: Haley, can you let me know if you can see that?

10 00:08:09.070 --> 00:08:11.129 Jason Block: Yes, I can. Okay. Great. 11 00:08:11.200 --> 00:08:22.280 Jason Block: Alright. Well, thanks everyone and appreciate you joining so that we can give you an updated. This is our first update for this contract year, which started in October 12 00:08:22.850 --> 00:08:24.030 Jason Block: and 13 00:08:24.090 --> 00:08:35.850 Jason Block: we we sort of decreased the interval of these especially cause the contract year was a little bit shorter this year. But what I'll do today is I'll go through some updates on 14 00:08:36.090 --> 00:08:44.089 Jason Block: the queries that we have completed our schedule as we know it from this point forward to the end of the contract year. 15 00:08:45.020 --> 00:08:54.699 Jason Block: I'll talk a bit about some of the comparisons that we've done early during this year the project where we've been trying to 16 00:08:54.800 --> 00:09:04.509 Jason Block: understand a bit better about how we should structure these queries moving forward, and specifically the types of data at your local sites that we should use 17 00:09:04.560 --> 00:09:07.059 Jason Block: for the purpose of these queries. 18 00:09:08.160 --> 00:09:16.770 Jason Block: We have pulled a few patient level data files for analysis, and I'll talk through the 2 of those and what our plans are for that. 19 00:09:17.060 --> 00:09:25.339 Jason Block: And then I'll go through some of the results that we've been putting together recently. We recently completed a guery, looking

at
20 00:09:25.860> 00:09:28.100 Jason Block: characteristics of patients
21 00:09:28.110> 00:09:41.659 Jason Block: who had flu over various flu seasons. I'll give you a brief glimpse of that. This is a prelude to some patient-level data analyses that are going to be completed by Cdc. With our participation.
22 00:09:41.790> 00:09:45.810 Jason Block: I'll talk about some queries that we actually completed last summer.
23 00:09:45.910> 00:09:54.340 Jason Block: looking at diabetes and hypertension control over the course of the pandemic and preceding. And where that's gonna lead
24 00:09:54.410> 00:09:58.209 Jason Block: another brief glimpse of some work
25 00:09:58.240> 00:10:16.989 Jason Block: that we're doing with the patient level data to look at risk factors for death and hospitalization among patients who are older, 75 years, and older. And then I'll close by talking about where we are with a number of manuscripts that we've been working on, and that have participation of people across the sites.
26 00:10:18.530> 00:10:30.800 Jason Block: Okay? So before I do that, I'll talk about the scope of of work for this year, and then I'll also, by the way, I didn't ha put this on the agenda, but I'll talk a a bit about where we hope to take this project moving forward.
27 00:10:31.440> 00:10:37.079 Jason Block: So this is year 4 of the project. This project started in October 2020,
28 00:10:37.370> 00:10:43.750 Jason Block: and then was refunded in each of the subsequent 3 years.

This current contract 29 00:10:43.790 --> 00:11:01.960 Jason Block: year in started October goes through the end of July. This was a shorter time period, for a number of reasons, not the least of which was some delays in Federal budgets coming through, and some late cuts to some of the money that was available 30 00:11:02.000 --> 00:11:09.109 Jason Block: to Cdc. To fund. Covid related work. So that led to some changes in our structure of this current year. 31 00:11:09.820 --> 00:11:16.389 Jason Block: We also had reduced, as a result of somewhat less funding that was available for this year we reduced the scope of work 32 00:11:16.440 --> 00:11:26.959 Jason Block: for the project 2 rather than 2 queries per month, or up to 2 queries per month. We're doing one to 2 queries per month, when, with an expected total number of queries of 12 33 00:11:26.990 --> 00:11:32.740 Jason Block: over the 10 month period. we have been asking sites to refresh 34 00:11:33.110 --> 00:11:45.250 Jason Block: what we have been calling our Covid Cdm. The Covid Cdm. Is the filtered common data model that we have been asking sites to refresh fairly frequently over the course of this project. 35 00:11:45.270 --> 00:11:49.569 Jason Block: This is filtered, and I'll talk a bit about this in a sec 36 00:11:49.640 --> 00:11:54.850 Jason Block: more. But this is filtered mostly by patients who've had Covid testing. 37 00:11:54.970 --> 00:11:59.550 Jason Block: Viral illness, diagnostic codes, some other Covid related.

38 00:11:59.960 --> 00:12:16.160 Jason Block: codes, such as medications or vaccines. It's obviously grown fairly large over the course of time. And this is a common data model that sites are are refreshing off cycle from the traditional Bokornet quarterly refresh. 39 00:12:16.250 --> 00:12:25.949 Jason Block: and it's when we needed rapidly refresh data in order to do some of the queries that we wanted, or to answer some of the needs that Cdc. Has had over the course of the project. 40 00:12:25.960 --> 00:12:33.979 Jason Block: So as part of this scope, we've asked sites to continue to do that when needed, though the the need for that has declined quite a bit, and I'll get into that in a bit. 41 00:12:34.770 --> 00:12:44.809 Jason Block: Contribute patient level data sets for ongoing work and allow for us to organize a process where Cdc can have access to that data. 42 00:12:44.920 --> 00:12:50.340 Jason Block: but only on a remote server. So this is data that's being stored 43 00:12:50.490 --> 00:12:56.970 Jason Block: on a server at the Louisiana Public Health Institute. They're the lead site for the reach net Crn. 44 00:12:57.360 - > 00:13:05.019Jason Block: They are maintaining that data on their server. Cdc. Has remote access to it. But the data is actually not going directly to Cdc. 45 00:13:05.340 --> 00:13:10.679 Jason Block: and then also, when we're able to put these together to contribute it as collaborative authors on manuscripts. 46 00:13:10.700 --> 00:13:16.669 Jason Block: And also we have continued to use a pocornet working group

47 00:13:16.720 --> 00:13:27.450 Jason Block: to provide more in-depth feedback on this work, and that is made up of one representative from each of the crns across proportion. 48 00:13:29.610 --> 00:13:38.650 Jason Block: So the queries that we've completed for year 4 we have, nearly completed 4 gueries. So far, the first was in October 2023. 49 00:13:38.800 --> 00:13:51.400 Jason Block: This was what has turned into. We used to call this our cumulative query. Now we're calling it our respiratory viral illness, surveillance? Query. This is a broad query that looks at cases of 50 00:13:51.520 --> 00:13:54.460 Jason Block: covid influenza and Rsv 51 00:13:55.000 --> 00:14:08.399 Jason Block: in designated time periods. And I'll talk a bit about sort of where we're going with this moving forward. This has traditionally been hitting against each site's a rapidly refreshed Covid, Cdm 52 00:14:08.740 --> 00:14:11.260 Jason Block: and the 53 00:14:11.270 --> 00:14:23.070 Jason Block: This has sometimes been coupled with a patient level data extraction, and in October we did this again, where we pulled a patient level data set of patients who had documented evidence of Covid 54 00:14:23.110 --> 00:14:25.730 Jason Block: between April 2022 55 00:14:25.770 --> 00:14:30.989 Jason Block: in September of 2023, and that was for patients who are 20 plus years of age.

00:14:31.640 --> 00:14:53.689 Jason Block: In November of 2023, we did the exact same query, but we actually ran it on the Quarterly, refreshed, full Cdm. That was refreshed in October and contain data for most sites. Through September of 2023. We did that again to determine whether or not we could change the way that we're doing these queries in the future. And I'll talk about that. Next. 57 00:14:54.920 --> 00:14:57.520 Jason Block: in December of 2023, we initiated 58 00:14:57.590 --> 00:15:18.309 Jason Block: a guery that looked at flu cases and the use of medications to treat influenza in each of several different flu seasons, ending with the 2022 to 2023 season. We didn't look at the 2324 season in this case. And we also did extract a patient level data set 59 00:15:18.350 --> 00:15:36.510 Jason Block: for this query as well. It was a bit of a narrower, patient level data set. It included patients 50 plus years of age, who are initially evaluated outside of the emergency department or inpatient settings, and the main purpose of that was to get information on patients who receive treatment 60 00:15:36.560 --> 00:15:43.619 Jason Block: in the outpatient setting and to determine the potential effect of treatment on flu related outcomes. 61 00:15:44.020 --> 00:15:57.889 Jason Block: And then we're just finishing this up and trying to wrap up this query with a couple of sites which is to repeat our respiratory viral illness. Surveillance? Query. And this is on the full Cdm for the most part. 62 00:15:57.920 --> 00:16:18.400 Jason Block: But it is running through the end of December, and for the most part using data from sites that have refreshed their quarterly record full Cdm. In the month of January. This was actually due last Monday. We've had some troubleshooting with long run times that I will discuss as well. 63 00:16:19.610 --> 00:16:29.649

Jason Block: So we've contended with this over the course of this project occasionally, where there have been some queries that we have run that have had long run times 64 00:16:29.820 --> 00:16:40.290 Jason Block: some of these gueries. It made sense that they had long run times, because they were pretty ambitious in their scope in terms of the type of data that we were collecting. 65 00:16:40.650 --> 00:16:44.990 Jason Block: This particular query was not overwhelmingly large. 66 00:16:45.010 --> 00:16:55.320 Jason Block: And we have made quite a few updates to the modular programs that we use to run these queries in order to reduce run runtimes. 67 00:16:55.470 --> 00:17:05.700 Jason Block: We've had a lot of success on that reduction in run times over the last several queries. So this was the first query where this issue cropped up again a bit. 68 00:17:06.250 --> 00:17:14.720 Jason Block: and some of the runtimes were sort of a akin to what we were experiencing before we had made the updates to the modular program to reduce 69 00:17:14.869 --> 00:17:20.690 Jason Block: this issue. We're exploring the reasons for this. We don't exactly know why this is happening. 70 00:17:20.810 --> 00:17:39.789 Jason Block: One of the things that Site had a site had asked us to do, which we just recently incorporated in the modular program was to include a pause, resume feature, so that allowed sites to run a query, that could be paused, or if or if it timed out. For some reason 71 00:17:39.920 --> 00:17:47.349 Jason Block: they could then reinitiate the aquarium wouldn't have to start from the very beginning of the query, which was an issue that has happened in the past

72 $00:17:47.760 \longrightarrow 00:18:15.499$ Jason Block: possible that that new feature that we have included could be causing ironically some of these increased runtimes. So we're working with the programmers to explore why that might be happening and trying to get some more information on that soon. So if your sites have experienced this, we're aware of it. A number of sites thankfully have reached out to us and let us know about this, and we're exploring it so that we can figure out whether or not there's some, some quick fixes or straightforward fixes to this. 73 00:18:18.690 --> 00:18:24.050 Jason Block: So where are we going next? So we have several queries that we have planned. 74 00:18:24.570 --> 00:18:31.649 Jason Block: and some that are still in the conception phase or the the brainstorming phase. 75 00:18:31.970 --> 00:18:41.149 Jason Block: So this week we are going to run a guery, and this will be, I think, probably the the fourth time that we've looked at this one of the priority areas 76 00:18:41.190 --> 00:18:48.380 Jason Block: that Cdc has been interested in includes assessments of cardiac complications both after covid infection. 77 00:18:48.410 --> 00:19:00.750 Jason Block: and after Mrna vaccination. This includes pericarditis, myocrititis. multi-inflammatory syndrome. and of both children and adults. 78 00:19:00.900 --> 00:19:11.349 Jason Block: And so we lasted a query like this in the spring where we had data up through March of 2023. 79 00:19:11.490 --> 00:19:21.960 Jason Block: And we're gonna we're gonna update this through the end of the calendar year of 2023 to try to get a better sense of exactly what's going on with these cardiac complications.

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00:19:22.130 --> 00:19:26.090 Jason Block: We're particularly interested in looking at whether or not 81 00:19:26.150 --> 00:19:34.379 Jason Block: prior vaccination is associated with the lower incidence of these cardiac complications after covin infection. So 82 00:19:34.540 --> 00:19:37.970 Jason Block: so we're looking primarily here at covid infection 83 00:19:37.980 --> 00:19:48.830 Jason Block: and then stratifying that population into those patients who had evidence of prior documented vaccination in their EHR. And those that have not had prior documented vaccination. 84 00:19:49.570 --> 00:19:54.240 and then examining the the differences in the incidence of these credit complications. 85 00:19:54.720 --> 00:20:06.949 Jason Block: there remains residual interest in looking at post vaccination, cardiac complications alone, though those counts have declined quite a bit. And so part of the reason we're updating this is to see to what extent 86 00:20:07.000 --> 00:20:12.529 Jason Block: that has declined over the course of 2023. So that will be going out this week 87 00:20:12.770 --> 00:20:23.300 Jason Block: that's stratified by age and sex. So this is kind of a bigger query. One of the reasons that we're trying to make sure that we understand what's going on with these long, long run times. 88 00:20:24.580 --> 00:20:34.919 Jason Block: a priority area that has emerged also for this work is to look at the uptake of pre-exposure prophylaxis for HIV treatment. Over time. 89 00:20:35.190 --> 00:20:45.770

Jason Block: And this is something that where there have been increasing options that have been made available over the course of the last several years, kind of overlapping with the pandemic 90 00:20:45.910 --> 00:20:59.479 Jason Block: years. And so the HIV Prevention group at Cdc has been working with us on this as a topic which we believe is going to emerge as an important topic for the future of this collaborative work that we're doing between Cocornet and Cdc. 91 00:20:59.550 --> 00:21:02.950 Jason Block: so we have a query that's going to go out in March that's going to assess this 92 00:21:04.200 --> 00:21:12.390 Jason Block: I mentioned to you, and I'll talk briefly about this soon that we've been assessing trends in the treatment 93 00:21:13.130 --> 00:21:16.749 Jason Block: in control of diabetes and hypertension over time. 94 00:21:16.870 --> 00:21:29.340 Jason Block: We did a query that was last summer. I'll show you some of the results of that. And we want to evolve that work to focus a bit more on what Cdc. Is calling health debt from the pandemic. 95 00:21:29.420 --> 00:21:34.040 Jason Block: so trying to get a sense of what happens, for example, to patients who 96 00:21:34.070 --> 00:21:39.640 Jason Block: disappeared from care during the pandemic, and then may have reemerge later on. 97 00:21:39.780 --> 00:21:50.790 Jason Block: This is still sort of a loose topic that we're talking with the Cdc. About right now. And so this is the general idea of where we might have, but it could change, based on our discussions with them 98 00:21:51.350 --> 00:22:11.799

Jason Block: every quarter. Now we're planning to mostly run these viral illness, respiratory viral illness, surveillance queries after the full Cdm is updated. And I'll explain to you why, after this and so our next attempt that that will be sort of later April, when the next quarterly refresh 99 00:22:11.940 --> 00:22:18.290 Jason Block: time is scheduled May. Through July of of this year 100 00:22:18.330 --> 00:22:29.160 Jason Block: they're stop topics that are still being explored. Maybe something on maternal morbidity. There's some interested post Covid complications or or past post acute quality of Covid 101 00:22:29.720 --> 00:22:34.170 Jason Block: and and then some other possibilities. We're trying to connect 102 00:22:34.610 --> 00:22:49.609 Jason Block: with some other Cdc divisions, including the divisions on injury and birth defects, to see if there's some potential pathway for to do some queries that might be appropriate or of interest to those groups. 103 00:22:51.710 --> 00:22:55.589 Jason Block: Okay? So I wanted to. Spend a little time talking about 104 00:22:55.940 --> 00:23:02.590 Jason Block: what our findings have been. We've when we've compared the runs for these surveillance gueries on the Covid 105 00:23:02.720 --> 00:23:08.010 Jason Block: and the full Cdm. So again, the the Covid Cdm. Is this rapidly refreshed data 106 00:23:08.030 --> 00:23:13.540 Jason Block: that we've asked sites to populate prior to our running 107 00:23:13.570 --> 00:23:16.680 Jason Block: gueries that need this rapidly refreshed data.

108 00:23:17.220 --> 00:23:21.879 Jason Block: That's been something we've done, really, since the beginning of this project. 109 00:23:21.920 --> 00:23:34.740 Jason Block: And has been a really important component of that. It's filtered in certain ways. This population has obviously grown quite a bit over the course of time, because of how many patients have had some information related to covid 110 00:23:34.820 --> 00:23:42.660 Jason Block: or viral illness, diagnostic codes over the course of the pandemic. We then reran that same query on the full Cdm. To compare results. 111 00:23:42.790 --> 00:23:55.490 Jason Block: And the the differences that we found were were fairly straightforward and in most cases favored our use of the full Cdm moving forward for these types of queries. 112 00:23:55.590 --> 00:23:58.549 Jason Block: So we so found 14% more cases 113 00:23:58.570 --> 00:24:08.739 Jason Block: for covid and flu in our total population. When we assess this. In the full Cdm compared to the Covid Cdm, so more cases in the full Cdm. 114 00:24:09.060 --> 00:24:11.270 Jason Block: 12% more cases of Rsd. 115 00:24:11.810 --> 00:24:25.519 Jason Block: we broke this down by all cases of flu covid and rsv, and then those cases in which there was an inpatient encounter, and we found pretty similar differences, more cases in the full Cdm. Compared to the Covid Cdm. 116 00:24:25.990 --> 00:24:37.929 Jason Block: The demographics. When we compare the populations and the characteristics of those populations that we got from these 2 separate assessments were pretty similar, but just a larger case, count in the

other group 117 00:24:38.290 --> 00:24:55.660 Jason Block: we actually found that when we looked at medications, because that's another feature of this guery is to look at patients who are receiving medications, outpatient medications for covid and flu. We actually found in the query that looked at the Covid Cdm. There were more Pax lovat prescriptions in 118 00:24:56.130 --> 00:25:04.080 Jason Block: in the Covid Cdm. Then there were in the full Cdm. And also Tamavir was pretty similar across the 2 cdms. 119 00:25:06.150 --> 00:25:12.160 Jason Block: We did a drill down at the site level to find out where those differences were coming from. 120 00:25:12.470 --> 00:25:20.020 Jason Block: We looked at sites that had more Covid cases in their full Cdm. Than the Covid Cdm. We found 12 of those when we looked at adults. 121 00:25:20.150 --> 00:25:28.259 Jason Block: That had at least a greater than 1% difference between the full and the Covid Cdm. With more cases in the full. 122 00:25:28.450 --> 00:25:33.830 Jason Block: And then there were 6 sites that had 20% more cases in the full Cdm than the Covid, Cdm. 123 00:25:34.660 --> 00:25:50.970 Jason Block: We also looked at the sites that actually had more cases in the Covid Cdm. Compared to the full Cdm. And that's really where where we saw the difference around Paxlovin, that there were some sites that had Pexlovin that was populated into the Covid, Cdm. 124 00:25:50.990 --> 00:26:02.999 Jason Block: Because these sites had done some specific work to get information about patients receiving Paxlovic in that Covid Cdm. That had not necessarily been carried forward into the full Cdm.

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00:26:03.160 --> 00:26:13.399 Jason Block: so there are 5 of these adult cases adult sites that had at least 9% more covid cases than the Covid compared to the full. Cdm. And those were where the difference in the packs Covid 126 00:26:13.460 --> 00:26:24.200 Jason Block: prescriptions came too. Pattern was fairly similar for children. We did fly in one pediatric hospital that had 20% more cases in the the full versus the covid. Cdm. 127 00:26:25.550 --> 00:26:28.520 Jason Block: so why? Why is this happening? 128 00:26:28.760 --> 00:26:36.090 Jason Block: we think this is happening in part, because sometimes the full Cdm just has more data. 129 00:26:36.200 --> 00:26:41.030 Jason Block: There may have been some Etl problems with a covid. Cdm. Omitting some data 130 00:26:41.170 --> 00:26:54.670 Jason Block: possible misapplication of the inclusion, criteria or not, all of the inclusion. Criteria is always getting integrated into the covid Cdm. Especially as we have expanded that inclusion criteria over the course of time 131 00:26:55.410 --> 00:27:02.239 Jason Block: in those sites that had more data in the Covid. Tdm, it's possible that the sites didn't really have a full month. 132 00:27:02.360 --> 00:27:08.950 Jason Block: the full last month in their update for the the full Cdm. But they had it in the rapidly refreshed data. 133 00:27:09.210 --> 00:27:16.310 Jason Block: and there were some medication coding fixes that were done for Pexlovin that might not have been carried for it into the full. Cm. 134 00:27:17.780 --> 00:27:22.209

Jason Block: so basically, what we found is that 135 00:27:22.630 --> 00:27:26.929 Jason Block: the full Cdm seems to be better in terms of getting our case counts. And so 136 00:27:27.020 --> 00:27:34.479 Jason Block: our intention, is to for the most part use that as the primary data source 137 00:27:34.620 --> 00:27:40.280 Jason Block: for these respiratory viral illness queries in the future and plant a time. 138 00:27:40.300 --> 00:27:50.069 Jason Block: Our surveillance gueries to fall at the starting at the end of the month, when a full Cdm refresh is occurring. So after that new Cdm. Has been locked 139 00:27:50.080 --> 00:27:56.630 Jason Block: and is ready for research. So we did this for January at the very end of January, running into February. 140 00:27:56.760 --> 00:28:13.250 Jason Block: and then we plan to do it again in April and hopefully in July, and then October will depend on the funding for the next contract year. Most sites, like, I said, should be running most of their queries on a full Cdm. And don't really need to maintain a Covid Cdm anymore. 141 00:28:13.500 --> 00:28:32.049 Jason Block: There are a couple of sites, and it differs a little bit depending on specific site comparisons and site issues. There are a couple of sites that we are gonna ask to continue to update their Covid Cdms, and those are the ones where we found more robust data in that Covid, Cdm, primarily around medications. 142 00:28:32.080 --> 00:28:36.690 Jason Block: And so we are. When we're sending out these queries, we're particularly flagging this issue

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00:28:36.720 --> 00:28:43.000 Jason Block: for those sites and asking them to update their Covid, Cdm, so that they can properly run this query. 144 00:28:44.040 --> 00:28:50.449 Jason Block: It is possible, not expected, but possible, that there could come a need 145 00:28:51.000 --> 00:29:02.799 Jason Block: for sites to maintain or to to create a rapidly refreshed Covid. Cdm. For a particular query. If if Cdc identifies that need. So we're asking sites 146 00:29:02.890 --> 00:29:28.159 Jason Block: to still maintain that capability, but not to actually act on it until we need it. And currently based on the queries that we think we're gonna do for the rest of the contract year. We don't expect that sites are gonna need to need to do that. We expect that we can run our queries as planned on the full Cdm. Again, except for those 4 to 5 sites that we will stay in touch with and notify them for that purpose. 147 00:29:31.020 --> 00:29:31.800 Jason Block: Okay. 148 00:29:32.380 --> 00:29:43.089 Jason Block: that's our comparison. In short, full Cdm is what we expect to use moving forward except for a couple of exceptions. And that seems to be the more robust data. 149 00:29:45.060 --> 00:29:53.890 Jason Block: Okay? As I mentioned, we've extracted in this contract here so far to patient level data sets. The first one was patients with Covid. 150 00:29:53.910 --> 00:30:04.630 Jason Block: This is focused on October to September 2023. We're also pulled some data from April 2022 on. 151 00:30:04.700 --> 00:30:28.310 Jason Block: And this is only patients 20 years and older and we have obtained data from 28 sites, which are the the sites that have both

adults and children are only adults. We didn't really need to necessarily pull this data for the pediatric sites, though some of the pediatric sites we're still working with to get some of their data for this population because they do have some patients in this age group. 152 00:30:29.700 --> 00:30:47.819 Jason Block: The prior data that we had available for this we had in the last contract year. We actually pulled a similar data set that only went up through December 2022. So with this guery that we ran in October, we actually extracted an update of that. So the data now runs through September of 2023. 153 00:30:48.150 --> 00:30:53.150 Jason Block: Also in the new data poll, we added a few additional variables that are 154 00:30:53.450 --> 00:31:05.220 Jason Block: modular programs are now able to work with more efficiently, and that includes vaccines, census bureau region and area deprivation index area deprivation index is mapped 155 00:31:05.290 --> 00:31:11.850 Jason Block: to the Zip code level through the Ztca codes that are now built into the modular programs. 156 00:31:11.910 --> 00:31:20.639 Jason Block: To link that data, we pull back only the information at the Ztca level, not actually the Ztca codes. 157 00:31:21.700 --> 00:31:26.780 Jason Block: We also extracted, as I mentioned before, a patient-level data 5 for patients with flu. 158 00:31:27.110 --> 00:31:37.449 Jason Block: This one was from a query that looked at multiple different flu seasons. But the patient level data extraction was only for the 2022 to 2023 season. 159 00:31:37.490 --> 00:31:47.589 Jason Block: And this is focused on patients 15 over. So we have only pulled this from the 28 sites. Obviously the pediatric sites that we

have available. Are not contributing data to this.

160 00:31:47.950 --> 00:31:53.690 Jason Block: And as I mentioned, this data comes to Harvard Pilgrim. We then pull it together into an analytic data set 161 00:31:53.830 --> 00:31:56.199 Jason Block: transfer over to Lphi. 162 00:31:56.460 --> 00:32:12.819 Jason Block: It sits on a server that lph, I manages, and then Cdc analysts can remote into it, but cannot extract data from it. And that's been an important feature that we have set up to protect that data and make sure that it is still within the cornet 163 00:32:12.880 --> 00:32:15.949 Jason Block: ecosystem rather than going directly to Cdc. 164 00:32:18.800 --> 00:32:19.530 Jason Block: Okay. 165 00:32:19.710 --> 00:32:33.350 Jason Block: now I mentioned I would go through a couple of different sets of results that we have and just give you a glimpse of the type of information that we've either been capturing and exploring at a at a high level 166 00:32:33.380 --> 00:32:44.880 Jason Block: or also doing some further analysis. So on. And this is not none of this stuff is complete. It's just sort of a a start of this work, and some of it's gonna evolve into some future work that I'll explain. 167 00:32:45.990 --> 00:33:08.450 Jason Block: So, as I mentioned in December and this build into January we ran a query that was looking at flu cases. This was both adults and children. We kind of segment. Those population adults are considered 20 and over, and children are considered less than 20. So it really includes a population of children, adolescents, and young adults. 168 00:33:08.870 --> 00:33:14.779

Jason Block: We looked at 4 different flu seasons, the 17 to 18 season, the 18 to 19, 169 00:33:14.820 --> 00:33:19.709 Jason Block: 19 to 20, and then the more recent flu season of 22 to 23, 170 00:33:20.230 --> 00:33:23.150 Jason Block: we excluded the 2021 171 00:33:23.260 --> 00:33:31.030 Jason Block: I mean that 20 to 2020 to 2021 in the 2021 to 2,022 seasons. 172 00:33:31.410 --> 00:33:37.410 primarily because there were almost no flu cases that we detected during that period. So it didn't make a lot of sense for us to capture data on that group. 173 00:33:38.370 --> 00:33:43.049 Jason Block: We captured the data in a couple of ways. We looked at all flu cases. 174 00:33:43.910 --> 00:33:56.530 Jason Block: and then we looked at flu outpatient Ca cases. So we excluded those patients who had an emergency department or inpatient encounter in the negative 7 to positive one days of index. 175 00:33:56.650 --> 00:34:04.520 Jason Block: so that we could really try to isolate a group that had been evaluated and diagnosed, diagnosed with flu in the outpatient setting. 176 00:34:05.140 --> 00:34:13.670 Jason Block: We also separated out patients who had documented flu, and then also had evidence of Osotamovir or Biloxavir script. 177 00:34:13.710 --> 00:34:21.210 Jason Block: and then those who had evidence for flu, but had no evidence for a prescription for ostaltamovir or Biloxiere.

178 00:34:22.030 --> 00:34:40.789 Jason Block: We assess the person treated by age, race, and ethnicity. And then eventually we'll be assessing to the extent that we can. Whether the prescription of ostotamoviral Octavia was associated with outcomes or reduction in outcomes. Related to flu such as hospitalization. 179 00:34:42.770 --> 00:34:51.099 Jason Block: Here are the case. Counts on the Y axis. Here is just the the case counts on the X axis are the different flu seasons that I mentioned to you before 180 00:34:51.699 --> 00:34:58.710 Jason Block: (171) 818–1920, and then the more recent 22 to 23 season. 181 00:34:58.800 --> 00:35:15.760 Jason Block: And these lines are colored, based on the type of cohort that they were captured from so blue or light blue is all of the flu cases. So these are patients that either test a positive for flu or at a flu diagnostic code in any care setting. 182 00:35:16.340 --> 00:35:23.250 Jason Block: We have those who were evaluated in the outpatient settings. So this excludes patients who had an inpatient or ed encounter 183 00:35:23.310 --> 00:35:27.190 Jason Block: in the time period around when they were diagnosed with flu. 184 00:35:27.680 --> 00:35:34.719 Jason Block: Purple is outpatient. So it's a subset of those outpatients. But those who received an ostotamivo octavia prescription. 185 00:35:34.770 --> 00:35:47.080 Jason Block: and then the darker or navy blue is those who hadn't, who were evaluating the outpatient settings. It's again. It's a subset of those outpatient flu cases, but they had no evidence for a prescription.

00:35:47.240 --> 00:36:01.219 Jason Block: And what you can see is these all follow along in parallel. There's some undulation based on the number of cases that were diagnosed in a particular season. The highest case counts for adults within the 2019 to 2020 season. 187 00:36:01.280 --> 00:36:06.330 Jason Block: Then you can see a lot of those patients, but certainly not all were evaluated in outpatient setting. 188 00:36:06.460 --> 00:36:10.000 Jason Block: and a reasonable number received medications. 189 00:36:10.050 --> 00:36:14.450 Jason Block: And actually, there are more patients who receive medications than not. 190 00:36:14.540 --> 00:36:23.189 Jason Block: and the exception to that is, in the more recent season, where you see this crossover, the dark blue, which is no medications over the purple, which is medications. 191 00:36:26.090 --> 00:36:33.419 Jason Block: We also looked at the percent treated. So in other words, we looked at all all outpatient cases. 192 00:36:33.880 --> 00:36:42.630 Jason Block: And then we assessed what percent of those outpatient cases had received a prescription for osotamovir or biloxavier 193 00:36:43.100 --> 00:36:52.069 Jason Block: and this is again color coded by the the flu season. This one is actually color coded by the the flu season. 194 00:36:52.100 --> 00:36:58.540 Jason Block: Blue is 17 to 18. You can see green, purple, and the most recent one is the darker blue or navy. 195 00:36:58.590 --> 00:37:12.129 Jason Block: This is stratified by age. So this is looking at these 6 age categories to again look at the percent treated. And so the

percent treated is on the Y axis is out of 100%. 196 00:37:12.500 --> 00:37:20.969 Jason Block: And what you can see is that there's a remarkable consistency to the percent treated in the first 3 of the flu seasons that we look at. 197 00:37:21.160 --> 00:37:27.370 Jason Block: And there's not a tremendous difference in the percent of patients treated across the different age groups that we capture. 198 00:37:27.390 --> 00:37:32.480 Jason Block: except for some decline in the percent treated in the 75 and over group. 199 00:37:33.000 --> 00:37:50.099 Jason Block: One thing that's also notable is that in the 2022 to 23 season is that we actually do see in that group a lower percent treated compared to the earlier seasons that were pre pandemic, which we found was an interesting and somewhat unexpected finding. 200 $00:37:52.530 \longrightarrow 00:37:59.179$ Jason Block: We also looked at the percent treated, stratified night by age, but rather in this case separately by ethnicity. 201 00:37:59.200 --> 00:38:04.489 Jason Block: which is Hispanic, not Hispanic and missing ethnicity or by race. 202 $00:38:04.600 \rightarrow 00:38:10.750$ Jason Block: And you can see all the different racial categories that are used in the bookcorn at common data model. 203 00:38:10.810 --> 00:38:21.019 Jason Block: This is structured in the same way, which has different colors for flu season, and what we took at sort of a high level from this is that. 204 00:38:21.110 --> 00:38:35.400 Jason Block: There's pretty similar rates of treatment by ethnicity and by a number of the different racial groups. You can see, for

example, pretty consistent percent treated for Asian black, white patients, those multiple rates 205 00:38:36.020 --> 00:38:38.820 Jason Block: slightly lower for American, Indian, Alaskan, native 206 00:38:39.080 --> 00:38:45.830 Jason Block: or native, Hawaiian, other Pacific Islander, and maybe slightly higher rates of treatment in the other race group. 207 00:38:45.940 --> 00:39:01.700 Jason Block: So some disparities that are of note of note. That American, Indian, Alaskan, native and native Hawaiian of the Pacific Islander groups are the lowest groups, and so might be more at risk of having some fluctuation. That's due to that case counts that we have 208 00:39:01.740 --> 00:39:06.790 Jason Block: in that group compared to some of the other racial and ethic groups where we have more numbers. 209 00:39:09.150 --> 00:39:17.670 Jason Block: And we did the same for kids. And so I won't go into this in quite as much detail as except to say that this is structured. It's the same one 210 00:39:17.980 --> 00:39:20.329 Jason Block: the same structure for 211 00:39:20.760 --> 00:39:36.199 Jason Block: the adult figure that I showed the Y axis is number of cases. Then on the X-axis you see the different flu seasons, and the colors are matched to the different cohorts, all flu outpatient flu. and then the subset of that. 212 $00:39:36.250 \longrightarrow 00:39:38.760$ Jason Block: those who receive meds and nomads 213 00:39:38.770 --> 00:39:57.610 Jason Block: same pattern, although maybe a little bit of a consistently higher number of cases and some similar numbers in the 2019 and 2020 season compared to the 2022 and 23 season where you saw

more undulation or variability across the seasons for the adults. 214 00:39:59.550 --> 00:40:06.239 Jason Block: When we broke this down by age, which is looking at percent treated, these are again outpatient flu cases, percent treated by age 215 00:40:06.530 --> 00:40:19.250 Jason Block: lot of consistency, again, by the different age groups, lower treatment in the most recent flu season, but pretty much consistent treatment across age. 216 00:40:20.250 --> 00:40:22.450 Jason Block: and then the racial and ethic groups 217 00:40:22.490 --> 00:40:36.790 Jason Block: again, pretty similar in terms of the percent treated across most of the ethnic and racial subcategories across the season, with with maybe some fluctuation with a couple of these, but nothing that 218 00:40:36.810 --> 00:40:45.109 Jason Block: stood out again at this very generic, high level. Look at this that we can get into in more detail when we start analyzing the patient level data. 219 00:40:48.620 --> 00:41:03.580 Jason Block: Okay, I wanna shift gears and talk about the next 2 of our our our data assessments that we've done just to give you a flavor of the type of work that we have been engaged in most recently. 220 00:41:03.860 --> 00:41:09.720 Jason Block: As I said, we've done a a couple of queries that have been focused on looking at chronic disease 221 00:41:10.580 --> 00:41:12.500 over the course of the pandemic. 222 00:41:13.190 --> 00:41:24.809 Jason Block: We did a series of prairies where we were looking at incident, chronic diseases. We also looked at infectious diseases.

Over the course of the pandemic, looking from 2018 to 2022, 223 00:41:24.950 --> 00:41:29.590 Jason Block: but one of the things that we're really excited by, and we think Cdc is as well 224 00:41:29.810 --> 00:41:38.390 Jason Block: is that, you know, coordinate data and er data in general. Can provide some some data on prevalence and incidence. 225 00:41:38.580 --> 00:41:45.379 Jason Block: but its real strength is on the depth of its information. Among patients who have certain chronic diseases. 226 00:41:45.400 --> 00:41:54.200 Jason Block: So we have the capabilities, for example, to monitor use of therapeutics. and to monitor disease control over the course of time and objective ways. 227 00:41:54.630 --> 00:42:07.349 Jason Block: So this was a query that we launched last summer, which was to assess trends in hypertension and diabetes control over the pandemic, using objective information that we could capture from the Ehrs. 228 00:42:07.990 --> 00:42:09.729 Jason Block: So we identify patients 229 00:42:09.870 --> 00:42:15.819 Jason Block: who had hypertension and diabetes and then tracked their objective measurements over the course of time. 230 00:42:17.740 --> 00:42:38.369 Jason Block: So the general methods here, and you can see the note here that Les Kroll, who's at L. Phi. Has done a lot of work trying to dissect all of this data that we had returned from sites. And so you'll see the next couple of slides are modified from prior work that she has been working on for us. 231 00:42:38.690 --> 00:42:50.810 Jason Block: But overall, this query included patients with evidence

of hypertension or diabetes in the 3 years prior to January first 2019. So we wanted to create a cohort of patients 232 00:42:50.840 --> 00:42:53.950 Jason Block: who had diabetes or hypertension 233 00:42:54.070 --> 00:43:07.219 Jason Block: starting prior to January first, 2019, and then we wanted to assess what their control of those diseases were over the course of the pre-pandemic period, and the post pandemic period. 234 00:43:07.340 --> 00:43:19.759 Jason Block: We captured this data separately. So, in other words, we did a assessment of hypertension where we capture patients who had at least one Icd code for hypertension in that baseline period of 3 years. 235 00:43:20.330 --> 00:43:23.359 Jason Block: or one prescription for an anti hypertensive drug. 236 00:43:23.740 --> 00:43:28.940 Jason Block: And then separately, we looked at patients who had diabetes based on Icd codes 237 $00:43:29.010 \longrightarrow 00:43:40.489$ Jason Block: also our X codes or our storm codes for drugs. We excluded Metformin and Sqlt twos from that assessment, because those were commonly used for reasons other than diabetes. 238 00:43:40.550 - > 00:43:43.629Jason Block: And then in this one. We also overlaid 239 00:43:43.730 --> 00:43:52.380 Jason Block: an inclusion criteria where patients could be classified as having diabetes based on having a hemoglobin, a one c. Of 6.5 or higher. 240 00:43:53.200 --> 00:44:00.900 Jason Block: We define patients as in the case of hypertension, controlled stage one, stage 2,

241 $00:44:00.980 \longrightarrow 00:44:11.290$ Jason Block: and missing. In the case of diabetes, we categorize patients as controlled, which was a hemoglobin, a onec. Less than 7 242 00:44:11.440 --> 00:44:19.080 Jason Block: kind of mid control, which was a hemoglobin, a one c. Of 7 to less than 9, and then above 9, 243 00:44:19.370 --> 00:44:22.859 Jason Block: and and then we also had a missing category for that. 244 00:44:23.200 --> 00:44:38.909 Jason Block: So control groups are the focus of this population. And this includes patients who had hypertension with a blood pressure measurement of less than 1 30, over 80. We looked at their control level in 6 month increments after January first 2019, 245 00:44:39.260 --> 00:44:53.160 Jason Block: and then diabetes. The control of population was those patients who had a hemoglobin, a wouldc of less than 7. Again, same time period of assessing them in 6 month intervals over the course of time after January first, 2019. 246 00:44:54.850 --> 00:45:02.069 Jason Block: So this is for hypertension, and this is just giving you a sense of the population size on whom we captured information. 247 00:45:02.310 --> 00:45:05.980 Jason Block: So across the sites that contributed to this data. 248 00:45:06.030 --> 00:45:13.140 Jason Block: we had 4.5 million or so adults with hypertension, and again we captured 249 00:45:13.240 --> 00:45:21.429 Jason Block: information about whether they had evidence of hypertension prior to January first, 2019. So that was between, say, 2016 to 2019, 250 00:45:21.610 --> 00:45:23.230

Jason Block: and then we followed them 251 00:45:23.290 --> 00:45:37.009 Jason Block: from January first, 2019 in 6 month increments. So January to June 2019 July to December, and then the same for 2020, those 2 6 month increments, the same for 2021, and 2022. 252 00:45:37.930 --> 00:45:41.790 Jason Block: What you can see here are just the numbers of patients who had evidence of control 253 00:45:42.010 --> 00:45:56.150 Jason Block: stage one, hypertension levels of control stage 2. And then we created this stage 2 plus, which are people had blood pressure measurements systolic measurements of 1, 60, or higher or diastolic measurements of 100 or higher. 254 00:45:56.730 --> 00:46:00.129 Jason Block: And then we had this unknown missing category. These were patients that were 255 00:46:00.150 --> 00:46:07.440 Jason Block: diagnosed and entered the cohort as having hypertension, but then did not have any information. Categorize their control. 256 00:46:07.490 --> 00:46:21.449 Jason Block: In these 6 month increments over the course of time. I'll focus on that for a second, just to show you what it looks like. Which is that 41% of patients who are diagnosed had no assessment. January to June of 2019 257 00:46:21.570 --> 00:46:30.789 Jason Block: that rose to 57% right around the when the pandemic started and actually continued at around that level of 55 to 57% 258 00:46:30.840 --> 00:46:43.770 Jason Block: throughout the remaining course of follow-up. So a lot of missingness, some of that's just attrition of patients who are leaving the healthcare system. And some of that's because those patients were not receiving care. During those time periods.

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00:46:43.790 --> 00:47:03.609 Jason Block: You can look at control metrics. We have about a million patients in that control category, 21% of the patients and that drops to about 15% over the course of time, which could be again partly attrition, and also could represent partly that patients are less in control over the course of time, over, follow up. 260 00:47:03.800 --> 00:47:07.370 Jason Block: So this is just to give you a flavor of what the numbers in general look like. 261 00:47:09.490 --> 00:47:24.449 Jason Block: same thing with diabetes. We had 1.9 million or so patients who are categorized as having diabetes in that baseline period. And again, these are the control categories, a one c. Less than 7, 7 to 9, and greater than 9. This is really 7 to less than 9. 262 $00:47:25.030 \longrightarrow 00:47:35.649$ Jason Block: A lot of patients don't have a one C measurements in 6 month increments, so you can see 2 thirds didn't have a measurement in the January to June 2019 time period 263 $00:47:36.430 \longrightarrow 00:47:42.409$ Jason Block: that grew to 73% at the beginning of the pandemic and then stayed around that 70% level 264 00:47:43.220 --> 00:47:57.919 Jason Block: throughout the course of follow up. We see some decline in those in that control group from 17% early to about 13% later on again, could represent just attrition or could could represent true decline in levels of control. 265 00:48:00.000 --> 00:48:04.450 Okay, I just wanted to map out this for you. Just so you can see a little bit about what we're 266 00:48:04.510 --> 00:48:09.859 Jason Block: getting at with this information. This is the percent of total patients with hypertension 267 00:48:10.020 --> 00:48:20.420 Jason Block: on the Y axis and then diabetes on the Y-axis in the

second Second Graphic. And you can see just the percent of patients in that group 268 00:48:20.510 --> 00:48:25.649 Jason Block: who had controlled blood pressure over the course of time. You can see that decline 269 00:48:25.670 --> 00:48:29.310 Jason Block: into 2020, and then some undulation. From that point 270 00:48:29.740 --> 00:48:36.319 Jason Block: the A one C control. These are patients who had an A one C less than 7%. It bounces around a lot more. 271 00:48:36.460 --> 00:48:41.620 Jason Block: So this is more undulation that we see over the course of time. 272 00:48:42.470 --> 00:48:45.659 Jason Block: And this is really focused on patients who had a measurement. 273 00:48:45.670 --> 00:49:00.670 Jason Block: So this is not including those patients who had missing values. It's among all of those who had measured values. What were their trends in control over the course of time? You can see this, this evidence here of maybe some decline, but a lot of variability. 274 00:49:01.850 --> 00:49:05.000 Jason Block: We broke that down by race and ethnicity as well. 275 00:49:05.080 --> 00:49:14.089 Jason Block: You can see they follow pretty similar parallel lines for those who have hypertension in this graphic and those who have diabetes in this one 276 00:49:14.200 --> 00:49:31.039 Jason Block: and then you can see some ordering of the control based on race. And this is just looking at race. We have separate assessment of that ethnicity that I'm not going to show here. But the patients that have the best control for their hypertension. Over the course of

time were patients who were of Asian race. 277 00:49:31.180 --> 00:49:41.989 Jason Block: Second was patients who are white race, and the lowest control was among patients who were black race. not exactly the same in terms of the trends for a one C control 278 00:49:42.160 --> 00:49:47.730 Jason Block: where you can see a grouping or lumping together of those patients of white race. 279 00:49:47.770 --> 00:50:04.289 Jason Block: black race and Asian race up top in terms of their percent control. And some of the other racial groups of American, Indian, Alaskan, Native, Hawaiian, other Pacific Island, or multiple race that had seemed to have lower control over the course of time. But these trends seem to be 280 00:50:04.290 --> 00:50:19.119 Jason Block: tracking. They seem to be parallel rather than movement or widening a widening of disparities. But again, this is focused on patients who had measurements. So there could be some difference that emerge simply cause some patients that did not actually have measurements 281 00:50:21.400 --> 00:50:28.490 Jason Block: to where we do it. Where are we going from here? So this was really our sort of prep to research, or our first 282 00:50:28.590 --> 00:50:35.820 Jason Block: tow in the water for doing this type of work. And it was useful to be able to see the types of data that we can capture from this. 283 00:50:35.920 --> 00:50:38.520 Jason Block: Obviously, these queries are limited by 284 00:50:38.570 --> 00:50:45.410 Jason Block: missing data. And so we want to take this a step further and try to explore how we can use this data

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00:50:45.580 --> 00:50:47.520 Jason Block: for the most important 286 00:50:47.590 --> 00:50:54.479 Jason Block: questions that Cdc can come up with around chronic disease control over the course of time. 287 00:50:54.740 --> 00:51:03.750 Jason Block: So a couple ideas that are merging or explore characteristics of patients who did not receive care during the pandemic. and then their patterns of control when they return to care 288 00:51:03.990 --> 00:51:16.799 Jason Block: or look in more detail about patients defined by their prior control, their control prior to the pandemic, and then look and see what happens to those patients over the pandemic. So, for example. 289 00:51:16.910 --> 00:51:19.960 Jason Block: if patients had well control of hypertension or diabetes 290 00:51:20.130 --> 00:51:28.360 Jason Block: prior to the pandemic, that they tend to stay in those straight up over the course of time. How much movement was there between? Straight up 291 00:51:29.110 --> 00:51:39.870 Jason Block: there may some of this, depending on the complexity of the question, may require a tailored patient level data set. As with Kill Covid influencer. We're talking to Cdc about exactly what they want to do 292 00:51:39.890 --> 00:51:44.409 Jason Block: in this regard. This would have to. Obviously, these are huge data 293 00:51:44.560 --> 00:52:00.269 Jason Block: sources. I mentioned, hypertension is 4.5 million diabetes. Adults is 1.8 million. We're gonna have to have a much more tailored question. If we're gonna pull a patient-level data set because we we? We won't be pulling one. That's that large. It's gonna be much more focal.

294 00:52:01.000 --> 00:52:04.519 Jason Block: So stay tuned on this, as we have some further discussions with them. 295 00:52:07.180 --> 00:52:14.680 Jason Block: Okay? And then I'm just going to show you a brief glimpse of some initial analyses that are being done on the Covid patient level data that I mentioned before. 296 00:52:14.710 --> 00:52:21.129 Jason Block: This is specifically looking at the time period of October 2022 to September 2023, 297 00:52:21.330 --> 00:52:28.760 Jason Block: we pulled this data set of patients 20 and over a positive test, covid diagnostic codes or covid prescriptions. 298 00:52:29.740 --> 00:52:32.650 Jason Block: The main purpose of this patient-level data 299 00:52:32.780 --> 00:52:47.589 Jason Block: is to do a multivariable assessment of risk factors for hospitalization and death. We've done this at the aggregate level. But it's really gonna be important to account for other potential confounders beyond what we can do and stratify by at an aggregate level 300 00:52:48.070 --> 00:52:55.739 Jason Block: and then to look at predictors of uptake, of covid medications focused mostly on racial and ethnic disparities 301 00:52:55.790 --> 00:53:09.239 Jason Block: which has been a topic of interest and something that we've explored. But again, we've done this mostly at the aggregate level. And so there's some real interest in looking at multivariable assessments of multiple factors that could be associated with this. 302 00:53:09.420 --> 00:53:19.019 Jason Block: We've completed some initial work of this on 65 and over group and specifically, the 75 and over group that I'll show you some of right now.

303 00:53:20.530 --> 00:53:35.190 Jason Block: So these slides are taken from Claire Quinlan, who's a Cdc. Intern and a student at her medical school who's been working with Cdc. On some of these analyses in a really narrow subset of these analyses. Looking at the patient group 304 00:53:35.360 --> 00:53:40.550 Jason Block: over the age of 75. This retro retrospective cohort. 305 00:53:40.610 --> 00:53:47.180 Jason Block: It includes a criteria that I mentioned patients who've had Covid diagnosed in different ways. 306 00:53:47.250 --> 00:53:58.860 Jason Block: And the outcome here is looking at all cause, cause hospitalization. So this is essentially hospitalization within 16 days of their index date, being diagnosed with Covid 307 00:53:59.070 --> 00:54:01.489 Jason Block: or all cause death within 30 days. 308 00:54:03.450 --> 00:54:10.140 Jason Block: I'm showing you here just the overall numbers of patients in the breakdown of those patients. 309 00:54:10.280 --> 00:54:14.170 Jason Block: This is focused again on just those 75 years and over 310 00:54:14.580 --> 00:54:27.999 Jason Block: they're about 200,000 patients. 81% of them were considered to be not severe. In other words, were evaluated outside the inpatient setting, and about 19 or 18% of them 311 00:54:28.040 --> 00:54:36.670 Jason Block: were hospitalized. So fairly large percent of patients with Covid in this time period, who are above 75 were hospitalized. 312 00:54:37.200 --> 00:54:45.530 Jason Block: Gender breakdown breaks down as you would expect that a

bit of a higher percent of patients who are male in the severe group 313 00:54:45.550 --> 00:54:51.200 Jason Block: and then some differences also by race, where you can see the proportion of total patients with 314 $00:54:51.290 \rightarrow 00:55:10.930$ Jason Block: covid that was deemed not severe. It's about 7% of those patients, or black or African American. Whereas among those who are hospitalized which includes, by the way, not just hospitalization, it's hospitalization or death within 30 days. That's about 12% of the total proportion of those patients or higher percent of those 315 00:55:10.980 --> 00:55:13.189 Jason Block: and a also declining 316 00:55:13.240 --> 00:55:24.479 Jason Block: percent of patients in that hospitalized group, or the patients who have died who are white race. So you see some disparities that are emerging just at a high level. When we look at that in the first sense. 317 00:55:24.690 --> 00:55:32.610 Jason Block: also a couple differences by ethnicity as well, where a smaller percent of the not severe cases and a higher percent 318 00:55:32.650 --> 00:55:36.470 Jason Block: of the severe cases who are Hispanic ethnicity. 319 $00:55:40.020 \rightarrow 00:55:47.180$ Jason Block: And this is just highlighting those 2 examples of some differences that are merging in the data when we're first looking at it. 320 00:55:48.650 --> 00:56:03.389 Jason Block: We also have been looking at the breakdown of use of outpatient medicines. So Pax woven malnut peer-reviewer and then also looking at some other treatments that have been used over the course of the pandemic monoclonal antibodies, and then RAM Rim desevier 321 00:56:03.570 --> 00:56:09.719

Jason Block: and just trying to get a sense of among those who did not have a severe outcome. So no hospitalization or death 322 00:56:09.770 --> 00:56:12.029 Jason Block: within 30 days, the percent that 323 00:56:12.170 --> 00:56:23.570 Jason Block: received medications. You can see oral covid treatments is about 39 or so of those patients. This is again the 75 plus year old group. 324 00:56:23.850 --> 00:56:28.830 Jason Block: whereas only 5% of those who had severe outcomes actually received an oral 325 00:56:28.840 --> 00:56:30.219 covid treatment. 326 00:56:30.420 --> 00:56:44.000 Jason Block: You can see a lot more received from Desavier, because those are patients who are hospitalized in getting room, Desavier, but not that many had any evidence that we could detect. Being treated with these oral antiviral treatments 327 00:56:46.540 --> 00:56:53.110 Jason Block: when we break that down by age group, you see an interesting trend which is that among all outpatient 328 00:56:53.240 --> 00:57:03.149 Jason Block: outpatient cases of COVID-19. So this excludes patients who are hospitalized, for example, on the day or soon after their covid diagnosis. 329 00:57:03.190 --> 00:57:08.669 Jason Block: You can see the numbers of patients here, and among that group of patients 330 00:57:08.790 --> 00:57:21.989 Jason Block: there's a decline in the percent that received oral antivirals from the 65 plus year old group, or the 65 to 74 year old group to the 90 plus year old Group. So a lot of the 90 year olds are

really not being treated much 331 00:57:22.280 --> 00:57:28.939 Jason Block: with these oral antivirals for probably a number of reasons. And so these are the types of things that we're trying to unpack 332 00:57:29.030 --> 00:57:30.779 Jason Block: with this patient level data. 333 00:57:32.640 --> 00:57:40.480 Jason Block: Alright. So I'm going to close because I only have a few minutes left, anyway, by giving you just an update on the manuscripts that have been published 334 00:57:40.620 --> 00:57:46.849 Jason Block: with collaborative authorship participation. So we give the opportunity for sites that are participating in this project. 335 00:57:46.910 --> 00:58:00.430 Jason Block: To nominate an author to be part of a collaborative authorship group. And that's in addition to the writing group, which is composed of patient of people from Cdc. And people from Brook Cornet. 336 00:58:00.710 --> 00:58:11.749 Jason Block: We've had 2 papers, 2 papers that have been published, this one that just got accepted into Bmc. Infectious Diseases, which is looking at some post acute sequelae of Covid. 337 00:58:11.780 --> 00:58:20.880 Jason Block: and a paper that was published earlier in 2023 that was looking at the association between hypertension and diabetes, control and covid severity. 338 00:58:21.040 --> 00:58:39.619 Jason Block: So these are the citations for these publications. We have 2 that are currently under second reviews in their respective journals. one that is a paper just looking at general trends and the characteristics of patients who've been diagnosed with Covid over the course of time through November of 2022

339 $00:58:40.260 \rightarrow 00:58:58.200$ Jason Block: that has been revised and resubmitted to plus one, and then a paper that's looking at preventive care, use, and incident disease trends over the pandemic. That also has been revised and resubmitted to preventing chronic disease, and so we hope to get information on whether those papers are being published pretty soon. 340 00:58:59.760 --> 00:59:03.729 Jason Block: A few more papers that are coming down the pipeline. 341 00:59:03.740 --> 00:59:15.140 Jason Block: some of which I just discussed just recently. So expect to get some notification of these, and and our general policy is to, whenever it's possible 342 00:59:15.300 --> 00:59:21.179 Jason Block: to add collaborative authors to our manuscripts. There are a couple of circumstances where it may not be possible. 343 00:59:21.830 --> 00:59:40.980 Jason Block: such as when, for example, we're doing a brief report or research letter, or something that's really rapid turnaround, where we had a couple of those, but where possible, we were trying to add collaborative authors to the manuscripts that we published as part of this project to get all of you the credit that you deserve for all the hard work that you've done. 344 00:59:41.820 --> 00:59:45.700 Jason Block: So I'll close by saying the future of this project is in discussion. 345 00:59:45.870 --> 00:59:54.140 Jason Block: We're in discussion with Phi. I, who is the third party administrator of this project, and Cdc. About what the future years are, gonna look like. 346 00:59:54.550 --> 01:00:13.420 Jason Block: Phi, I will probably be going through a recompute for a cooperative agreement. When and if that announcement comes out from Cdc. And we have a real mutual interest in continuing this work as does Cdc so we'll see how this plays out.

347 01:00:13.420 --> 01:00:32.259 Jason Block: Some of the discussions have been hampered by the fact that there's still no full year Federal budget which limits the discussions that we've been able to have. But I think suffice it to say that this has been a project that Cdc. Has seen value in, and would like to try to think through what this might look like over the coming years. 348 01:00:33.570 --> 01:00:42.459 Jason Block: So I will stop there. Didn't give a whole lot of time. But you can certainly email me. Here's my email, that's top. 349 01:00:42.480 --> 01:00:56.959 Jason Block: Tom Carton at Lphi and reach Net. has been a leader. Coleading this project with me. You can reach out to him. Lauren Cleveland is our project manager, and I wanted to just thank Liz and Claire for providing 350 01:00:56.970 --> 01:01:01.949 Jason Block: me with some of the slides that they have been putting together for the varied analyses that they've been doing. 351 01:01:02.430 --> 01:01:12.220 Jason Block: So I'm gonna stop sharing. I did have some extra slides when these go out that you'll see just a couple of more that were from that chronic disease analysis that we did 352 01:01:15.250 --> 01:01:23.580 Jason Block: so I didn't see anything in the Q. And A. But Monet and and Hailey let me know if you saw anything or anything else that you wanted to mention before we close up. 353 01:01:25.520 --> 01:01:32.749 TFGH Central Zoom: Nothing on my end. Just wanna thank everybody for joining today. And thanks Jason, for your presentation. 354 01:01:33.970 --> 01:01:42.250 Jason Block: Absolutely all right. Thanks. Everyone really appreciate you joining, and for all the work that you're doing. and please feel free to reach out with anything at all.

01:01:45.420 --> 01:01:46.850 TFGH Central Zoom: Thanks, everyone. 356 01:01:48.460 --> 01:01:49.140 bye.