WEBVTT

1 00:00:00.000 --> 00:00:02.330 The The future of Sleep Medicine.

2 00:00:02.330 --> 00:00:08.996 The future sleep clinics and actually Andres in truck was supposed to be doing this introduction,

3 00:00:09.064 --> 00:00:15.560 but he's been called away to the intensive care unit and he's working nights a van and anyway,

4 00:00:15.644 --> 00:00:17.658 so I'm gonna introduce current.

5 00:00:17.724 --> 00:00:26.839 I just want to say the way this thing involved is that a few of us were kind of emailing each other about.

6 00:00:26.839 --> 00:00:30.920 What's going to happen in the future with the sleep,

7 00:00:30.920 --> 00:00:34.179 clinics, and so forth and and we said,

8 00:00:34.179 --> 00:00:43.770 well, maybe we should go ahead and an arm should organize zoom session to go over this and get input from various people.

9 00:00:43.856 --> 00:00:47.619 So for those of you who don't know a carne,

10 00:00:47.682 --> 00:00:50.909 she's an associate professor of neurology at UMass.

11 00:00:50.909 --> 00:00:54.439 She went to an obscure College in Cambridge,

12 00:00:54.506 --> 00:00:58.475 MA, then went to University of Chicago for medical school.

13 00:00:58.564 --> 00:01:03.909 Did her in internal Medison and neurology at Brown and then her fellowship.

14 00:01:03.909 --> 00:01:07.540 She did her Harvard and sleep Madison.

15 00:01:07.540 --> 00:01:11.010 So Carne, once you go ahead and

16 00:01:11.010 --> 00:01:12.489 and start the

17 00:01:12.489 --> 00:01:21.599 session. Thank you, um, and I'm just trying to get my chat of field over here.

18 00:01:21.599 --> 00:01:25.709 So overall, even though this is,

19 00:01:25.709 --> 00:01:31.140 uhm, entitled, uh? Uh, a post pandemic sleep lab.

20 00:01:31.140 --> 00:01:36.799 It's actually probably more better to be called a during the pandemic sleep lab,

21 00:01:36.799 --> 00:01:38.829 and we really want to.

22 00:01:38.829 --> 00:01:43.480 You know, talk about what to do next at this point.

23 00:01:43.480 --> 00:01:46.420 Can you get my slides to move forward?

24 00:01:46.420 --> 00:01:48.629 Uhm, so uh. First of all,

25 00:01:48.629 --> 00:01:50.840 uh, you can get CME credit.

26 00:01:50.840 --> 00:01:54.519 You have to be signed up on the LC me,

27 00:01:54.519 --> 00:01:58.459 but here's the code for those who are 14426.

28 00:01:58.459 --> 00:02:09.590 Um? We have gotten disclosures from our panel that I'll introduce you to um or speakers and then we also have piano today,

29 00:02:09.590 --> 00:02:12.479 but overall there's no conflicts of interest.

30 00:02:12.479 --> 00:02:21.129 So the way we're going to work today session is a few of us are going to give some brief presentations.

31 00:02:21.129 --> 00:02:30.639 I'm going to talk about some mitigation strategies and what are the thoughts around opening sleep labs doctor came apart is going to.

32 00:02:30.639 --> 00:02:33.419 Touch on how Pediatrics fits in.

33 00:02:33.419 --> 00:02:43.169 Then Doctor Thomas about the care of some complex sleep patients and how to do things management wise without sleep studies.

34 00:02:43.169 --> 00:02:53.930 And then we're very happy to have doctor new Nas and doctor white to comment from Respironics and res Med related to.

35 00:02:53.930 --> 00:02:56.229 Where things are from manufacturer side,

36 00:02:56.229 --> 00:03:07.340 we're then going to hopefully have time for questions and we are going to keep this line open till 4:00 PM if needed for panel of people to ask.

37 00:03:07.340 --> 00:03:09.650 You know, measures measures so please.

38 00:03:09.650 --> 00:03:17.680 I send in chat questions and we will try to get through as many as we can at the end of things.

39 00:03:17.680 --> 00:03:22.430 So, uh, Peter gay. I just found it may not be joining us,

40 00:03:22.430 --> 00:03:27.080 but uh. Again, we have Carlos Nunez and actually,

41 00:03:27.080 --> 00:03:30.349 I don't have confirmation with David White,

42 00:03:30.349 --> 00:03:36.419 so I gotta make sure we get him on the line with us.

43 00:03:36.419 --> 00:03:40.449 And then in Dera. Google.

44 00:03:40.449 --> 00:03:50.639 Um and Doctor Sullivan are helping represent the ASM Public Safety Committee has been putting out there guys guidelines and recommendations.

45 00:03:50.639 --> 00:04:00.340 Doctor Ken apart from the Ellen getting to give insight under Pediatrics and Doctor Thomas Edison will be talking about.

46 00:04:00.340 --> 00:04:03.409 The speakers, so where we are today.

47 00:04:03.409 --> 00:04:10.439 ASM at the beginning of April put out an initial statement on mitigation strategies with covad,

48 00:04:10.439 --> 00:04:23.610 which basically suggested, given the federal guidance to maintain the social distance that unless it was emergency to pretty much shut down all in person both clinic visits as well

49 00:04:23.610 --> 00:04:31.629 as lab studies. And if they were to be done that they should be done under precautions.

50 00:04:31.629 --> 00:04:38.879 So just Monday they put out a new statement.

51 00:04:38.879 --> 00:04:42.339 Let me see if this is one of my speakers calling in hello.

52 00:04:44.399 --> 00:04:51.189 Hello. Oh, hi, I'm sorry this is Peter Gay.

53 00:04:51.189 --> 00:04:56.370 I'm starting to talk. Can I get you in your oh you're totally locked up from joining?

54 00:04:56.370 --> 00:05:04.300 OK, um, I don't. I think we're at the limit so I don't know if there's anyway.

55 00:05:04.300 --> 00:05:08.649 I can leave you on the phone or.

56 00:05:08.649 --> 00:05:16.620 To leave him on the phone on the phone if you can hear it uhm so overall.

57 00:05:16.620 --> 00:05:22.370 But again, there is, uhm.

58 00:05:22.370 --> 00:05:24.699 Uh, some stand up, sorry.

59 00:05:24.699 --> 00:05:27.019 Yeah, they're they're overall recommendations.

60 00:05:27.019 --> 00:05:33.069 Uhm, related to reopening really depend on what is happening in the community.

61 00:05:33.069 --> 00:05:47.019 So if the community transmission is at substantial levels than to really stay closed if the community transition is more at the minimum of moderate levels to think about reopening

62 00:05:47.019 --> 00:05:52.620 specially those studies that don't involve pap titration zan also not patients.

63 00:05:52.620 --> 00:05:57.660 That would be a large risk if they were to get out of it,

64 00:05:57.660 --> 00:06:01.259 but to still think about holding off on pap titrations,

65 00:06:01.259 --> 00:06:03.060 unless it was an emergency,

66 00:06:03.060 --> 00:06:05.579 and then for no or minimal transmission,

67 00:06:05.579 --> 00:06:10.209 that would be the point to basically resume studies as before.

68 00:06:10.209 --> 00:06:15.920 Hum. Forward so they also commented on that path.

69 00:06:15.920 --> 00:06:29.750 Titration is considered procedure with a higher risk of aerosol transmissions and to use appropriate PE and basically to follow the CDC's transmission based precautions.

70 00:06:29.750 --> 00:06:36.410 So a couple of questions that I still have related to these.

71 00:06:36.410 --> 00:06:43.160 How about these recommendations and sort of the areas that there still are questions,

72 00:06:43.160 --> 00:06:57.620 and again, I recommend you all go to the ASM website for the full descriptions is who is an emergency patient and personally we've had quite a few patients who

73 00:06:57.620 --> 00:07:00.509 still cannot get devices without studies.

74 00:07:00.509 --> 00:07:07.759 Medicure as hopefully most you know has approved the ability to get devices without studies.

75 00:07:07.759 --> 00:07:14.589 But if they need more advanced devices like I've apps or ASV,

76 00:07:14.589 --> 00:07:18.000 we found that D me companies.

77 00:07:18.000 --> 00:07:21.990 Some of them have been unwilling to.

78 00:07:21.990 --> 00:07:24.709 Give them out. Even to Medicare patients,

79 00:07:24.709 --> 00:07:33.269 for fear of potentially audits and that they won't eventually qualify when the studies are needed and the other big question is,

80 00:07:33.269 --> 00:07:35.990 you know, what can we do empirically?

81 00:07:35.990 --> 00:07:44.160 I think a lot of us have been switching patients that were ordered in in lab study to home safe studies,

82 00:07:44.160 --> 00:07:46.500 ones that we would have liked.

83 00:07:46.500 --> 00:07:51.689 The titration for two. To to to to to see pap or auto Bipap.

84 00:07:51.689 --> 00:08:02.579 But I think there are patients that do hit the limits where we still feel we really need that study and I certainly have patients in semi list that I

85 00:08:02.579 --> 00:08:05.850 know I am worried that if we put of-

86 00:08:05.850 --> 00:08:16.449 care for another month or two months or for an unknown period of time that it might lead to them getting re admitted or having some other adverse outcome.

87 00:08:16.449 --> 00:08:20.370 Other question is what is a proper pee pee?

88 00:08:20.370 --> 00:08:29.970 In some cases it's very clear if you have a Costco big positive patient that you really felt you needed to do,

89 00:08:29.970 --> 00:08:36.070 we would very clearly need to do that under airborne precautions and inappropriate room.

90 00:08:36.070 --> 00:08:38.690 But what if it's presumed negative?

91 00:08:38.690 --> 00:08:43.919 You know what if we screen them out and ask them questions?

92 00:08:43.919 --> 00:08:46.580 Do do? Do those patients need?

93 00:08:46.580 --> 00:08:50.419 To be under the same PP and and room precautions.

94 00:08:50.419 --> 00:08:54.639 And then what if we do have the negative viral testing?

95 00:08:54.639 --> 00:09:01.409 Does that put us in a place where we feel that no special precautions are needed?

96 00:09:01.409 --> 00:09:04.580 So I just want to review Watt.

97 00:09:04.580 --> 00:09:12.740 We kind of know about the transmission over all the incubation period for Chobit is about five days,

98 00:09:12.740 --> 00:09:21.799 but the ranges anywhere from about 1 to 14 days and there's a difference between the window of viral shedding,

99 00:09:21.799 --> 00:09:27.389 which is thought to be from about a week prior to.

100 00:09:27.389 --> 00:09:39.340 Um? To symptoms as shown in this graphic here by the black dots and it can go actually out to around 21 days.

101 00:09:39.340 --> 00:09:44.460 After someone presents with symptoms that virus still can be found on PCR testing,

102 00:09:44.460 --> 00:09:47.389 but different concept of the window of infectivity,

103 00:09:47.389 --> 00:09:58.370 which is basically as when is there viable virus that can reproduce and grow and culture and so the red dots on this upper graph show that from about six

104 00:09:58.370 --> 00:10:09.350 days prior to symptoms to about nine days after symptoms start is when it's thought that people have virus that key and transmit and that the peak is actually about

105 00:10:09.350 --> 00:10:11.990 one to three days before symptoms so.

106 00:10:11.990 --> 00:10:14.309 Obviously that puts us, you know,

107 00:10:14.309 --> 00:10:16.250 in a big worry of,

108 00:10:16.250 --> 00:10:20.120 even if we're screening patients for fever and other things,

109 00:10:20.120 --> 00:10:24.340 are they truly? Um? Alright,

110 00:10:24.340 --> 00:10:30.139 I do. They really not have to bed or in this stage that they can still give disease,

111 00:10:30.139 --> 00:10:39.799 spread the virus so it is that most of the spread is not to be pre symptomatic people that will end up having disease and it's a little less unclear

112 00:10:39.799 --> 00:10:46.559 if they're asymptomatic. But again from our standpoint of you know we have a person who wants to come to lab.

113 00:10:46.559 --> 00:10:50.750 We don't know what they're going to be a week down the line.

114 00:10:50.750 --> 00:10:52.679 We do know that there are,

115 00:10:52.679 --> 00:10:55.990 especially in certain communities, very high rates of asymptomatic people.

116 00:10:55.990 --> 00:10:58.200 So in Washington nursing home study,

117 00:10:58.200 --> 00:11:04.090 they found 56% of the people that were pissed PCR positive had no symptoms at all.

118 00:11:04.090 --> 00:11:13.289 And then an interesting study at in New York where they just started testing every single woman I was coming in to have a baby.

119 00:11:13.289 --> 00:11:17.700 They found about 15% of people were positive but less than 2%

120 00:11:17.700 --> 00:11:21.889 of those had symptoms. So on the other end,

121 00:11:21.889 --> 00:11:24.840 you know if we do test someone,

122 00:11:24.840 --> 00:11:27.799 can we trust it? So in general,

123 00:11:27.799 --> 00:11:31.190 most of the tests out there have been.

124 00:11:31.190 --> 00:11:33.840 Said to have about a 95%

125 00:11:33.840 --> 00:11:42.240 sensitivity which is felt to be very good now in some unpublished data from doctor prokop pick Cleveland Clinic,

126 00:11:42.240 --> 00:11:55.500 he took known positive samples and retest them with a number of tests and most test still were good up in the 95 plus percent range but but there was

127 00:11:55.500 --> 00:12:00.360 some variability including one test that came out only at 9885%

128 00:12:00.360 --> 00:12:03.019 sensitivity and so really bringing up.

129 00:12:03.019 --> 00:12:05.659 You know the question of you know,

130 00:12:05.659 --> 00:12:07.929 are all these tests the same?

131 00:12:07.929 --> 00:12:10.509 In terms of, you know,

132 00:12:10.509 --> 00:12:14.120 is it playing out in real life?

133 00:12:14.120 --> 00:12:23.409 For this sensitivity there was one report by Richardson in New York City where they found that 3.2%

134 00:12:23.409 --> 00:12:26.519 of patients out of 5700 patients.

135 00:12:26.519 --> 00:12:30.590 Had a positive first task but.

136 00:12:30.590 --> 00:12:35.789 But three point 2%, it only was positive on the 2nd test,

137 00:12:35.789 --> 00:12:39.679 so that is in line with about the 95%

138 00:12:39.679 --> 00:12:43.600 sensitivity. Now there's the other concept of clinical sensitivity.

139 00:12:43.600 --> 00:12:50.820 Are is it as good picking up real life patients which obviously has to do with how you're swapping them,

140 00:12:50.820 --> 00:12:58.399 how sick they are, how much virus they have in their in their in their upper airway and nose or saliva.

141 00:12:58.399 --> 00:13:00.929 And so one study out of China.

142 00:13:00.929 --> 00:13:04.539 They compared people with positive CT scans consistent with ours,

143 00:13:04.539 --> 00:13:08.870 and they found that the peace TR only picked up about 6680%.

144 00:13:08.870 --> 00:13:12.120 So that brings up what is the gold standard?

145 00:13:12.120 --> 00:13:15.740 Overall, the gold standard right now for who is positive.

146 00:13:15.740 --> 00:13:27.500 Is the PCR test, but but maybe maybe it is and maybe it misses people so there's alot unknown but I think the comforting thing is the thought is if

147 00:13:27.500 --> 00:13:36.909 you have an asymptomatic patient there is a very good chance that even if they do have coded they have so little of it.

148 00:13:36.909 --> 00:13:44.120 If they have a negative task that it's less likely that they can spread the disease.

149 00:13:44.120 --> 00:13:51.129 So the other question is how does this Cove in transmit and the general thought for the most part,

150 00:13:51.129 --> 00:13:54.450 is that it spread through contact and large droplets,

151 00:13:54.450 --> 00:13:59.250 which is why basically if we stay the six feet away from people,

152 00:13:59.250 --> 00:14:01.830 we are very unlikely to get it.

153 00:14:01.830 --> 00:14:12.899 And if we are within that six feet range we can use just contact precautions and there's a number of different studies that are reports that sort of go in

154 00:14:12.899 --> 00:14:14.860 that direction or not. There,

155 00:14:14.860 --> 00:14:17.980 uhm, but but some are little buried,

156 00:14:17.980 --> 00:14:21.549 so a couple of studies want encoded one,

157 00:14:21.549 --> 00:14:26.009 and stars felt that there was not any aerosole spread.

158 00:14:26.009 --> 00:14:31.360 Then there's a number of studies that do think there's possible spread.

159 00:14:31.360 --> 00:14:36.299 One of note is this study by Santarpio and they put.

160 00:14:36.299 --> 00:14:41.309 These sort of collectors around patients rooms and they found that about 63%

161 00:14:41.309 --> 00:14:49.389 of the air samples that they collected from around peoples rooms in somewhere near the patient were still positive with PCR,

162 00:14:49.389 --> 00:14:54.009 so they were suggesting that it potentially is spread in the air.

163 00:14:54.009 --> 00:14:58.629 Now this study did not look for the viability of that virus,

164 00:14:58.629 --> 00:15:03.639 so it's possible that you can pick up viral particles in the air,

165 00:15:03.639 --> 00:15:07.159 but it doesn't necessarily mean that those are transmissible.

166 00:15:07.159 --> 00:15:11.889 So there are some expert warnings that do you know,

167 00:15:11.889 --> 00:15:19.460 state that, specially with certain procedures that are more air sizing that we should be worried.

168 00:15:19.460 --> 00:15:23.240 But again the data is not the strongest,

169 00:15:23.240 --> 00:15:36.960 so it's really we don't know what the CDC really says is 2 of the main studies that they based their recommendations on as related to non invasive ventilation,

170 00:15:36.960 --> 00:15:40.919 possibly spreading. Disease is really these health care workers.

171 00:15:40.919 --> 00:15:45.909 Studies with stars, and so the top one they found that 38%

172 00:15:45.909 --> 00:15:50.909 of workers who had been exposed to non invasive ventilation versus 17%

173 00:15:50.909 --> 00:16:03.389 workers were not exposed with noninvasive ventilation ended up contracting SARS and then a second study that found about 2.3 relative risk that the health care workers contract it's ours.

174 00:16:03.389 --> 00:16:06.299 If they had been exposed to bypass.

175 00:16:06.299 --> 00:16:08.440 But again these were not.

176 00:16:08.440 --> 00:16:15.389 Clean studies by any measures these patients you know somewhere on Bipap and other modalities,

177 00:16:15.389 --> 00:16:20.490 and had other potential reasons why they might spread noninvasive ventilation.

178 00:16:20.490 --> 00:16:27.600 So what meta analysis of the pooled results of those two studies came out with a 3.1 odds ratio,

179 00:16:27.600 --> 00:16:36.950 and then I found one further study where they looked for case warrants that had super spreading of SARS versus case words without super spreading,

180 00:16:36.950 --> 00:16:42.929 and the words that use bilevel ventilation had almost a 12 times higher risk for spreading.

181 00:16:42.929 --> 00:16:50.860 Sorry, so again, I think you know there is a reasonable reason to based on some of these studies to think.

182 00:16:50.860 --> 00:16:57.309 That health care workers could be exposed and more at risk with.

183 00:16:57.309 --> 00:17:02.799 Non invasive ventilation. But what do we know from sort of lab studies?

184 00:17:02.799 --> 00:17:15.460 So there's these two studies that basically show if in a lab and sort of under control settings that there's no more in about a one meter spread of droplets,

185 00:17:15.460 --> 00:17:18.410 again consistent with sort of context bread,

186 00:17:18.410 --> 00:17:29.880 but not not the small aerosol spread and the first study even tested people with active influenza and with symptoms and still did not find any change.

187 00:17:29.880 --> 00:17:35.920 Um, another set of sort of lab based studies were done by Huey and.

188 00:17:35.920 --> 00:17:41.680 China, Anne he Interestingly tested different types of mass to see what the air dispersion was.

189 00:17:41.680 --> 00:17:52.480 So he mixed in smoke with the air and looked for the spread of that and the sort of the oxygen therapy by nasal cannula and some of the full

190 00:17:52.480 --> 00:17:57.880 face mask that had a sort of large single exhalation port had the largest spread,

191 00:17:57.880 --> 00:18:00.400 but still no more than a meter.

192 00:18:00.400 --> 00:18:04.359 Interestingly, the Quadrel Air Mask had no measurable dispersion of air,

193 00:18:04.359 --> 00:18:08.029 and they found it was due to the multiple small.

194 00:18:08.029 --> 00:18:15.690 Exclamation points, which is sort of more standard with a lot of our newer mass today.

195 00:18:15.690 --> 00:18:18.960 Um, I'm going to refer you to a yells.

196 00:18:18.960 --> 00:18:22.950 Lastly, grand rounds up if you want more information on this,

197 00:18:22.950 --> 00:18:33.839 but Doctor Krieger and Thomas proposed using a non vented mask with a viral filter followed by an exclamation point in order to sort of filter out the virus before

198 00:18:33.839 --> 00:18:36.019 the air escapes. And you know,

199 00:18:36.019 --> 00:18:40.009 I think that can be a mitigation strategy to be used.

200 00:18:40.009 --> 00:18:47.339 However, one issue is that if there is a leak around the mask you kind of negate the issue so.

201 00:18:47.339 --> 00:18:54.185 You do want to make sure you can have a good fit with the mask.

202 00:18:54.287 --> 00:18:59.259 Um, another UM thing is related to the isolation rooms.

203 00:18:59.259 --> 00:19:09.890 Is this bottom reference here from Minnesota list some different methods to basically essentially make a negative pressure room using things like help,

204 00:19:09.890 --> 00:19:17.279 HEPA filters and other equipment so for people who feel they need those error isolation rooms,

205 00:19:17.279 --> 00:19:21.930 there may be some ways to sort of make them.

206 00:19:21.930 --> 00:19:24.289 No, this this bottom picture here.

207 00:19:24.289 --> 00:19:29.789 I did find one patent for a device that is essentially what a doctor,

208 00:19:29.789 --> 00:19:32.390 krieger and Thomas were proposing.

209 00:19:32.390 --> 00:19:36.839 So some other possible precautions on the latest ASM recommendations.

210 00:19:36.839 --> 00:19:41.289 They recommended things like checking the patients temperature on arrival,

211 00:19:41.289 --> 00:19:43.960 checking the text temperature twice daily,

212 00:19:43.960 --> 00:19:47.519 having patients not sit around in waiting rooms.

213 00:19:47.519 --> 00:19:51.970 Some other potential ideas are checking oxygen saturation's on arrival,

214 00:19:51.970 --> 00:19:58.650 and if they are low and that's not what you're expecting from their baseline conditions,

215 00:19:58.650 --> 00:20:01.619 that can potentially suggest. Respiratory symptoms,

216 00:20:01.619 --> 00:20:05.160 potentially using one on one text.

217 00:20:05.160 --> 00:20:12.309 If you are using. APPE using donning and dolphin coaches to make sure it's used appropriately,

218 00:20:12.309 --> 00:20:20.650 potentially limiting titration studies only to certain you rooms or using disposable supplies for those studies like in this picture here,

219 00:20:20.650 --> 00:20:30.970 potentially having a filter on the device end of the tubing in order to at least try to keep any contamination out of the machines themselves,

220 00:20:30.970 --> 00:20:34.150 and then what to do with cleaning procedures.

221 00:20:34.150 --> 00:20:38.569 Do you need to wait for an hour before the cleaning?

222 00:20:38.569 --> 00:20:40.279 People come in and clean,

223 00:20:40.279 --> 00:20:43.700 or if those rooms are being used in the day,

224 00:20:43.700 --> 00:20:45.410 do you need to wait,

225 00:20:45.410 --> 00:20:55.670 wait for that and then is there any other special ways to clean the room and especially kind of within that that one meter of where the path is being

226 00:20:55.670 --> 00:20:58.220 used? So overall you know all these things,

227 00:20:58.220 --> 00:21:00.720 uh, whether you can do him or not.

228 00:21:00.720 --> 00:21:03.220 It really partly depends on availability and supplies.

229 00:21:03.220 --> 00:21:12.579 So obviously the testing capability of the PP ability are two of the biggest in terms of supplies and then you know some of these other things is what is

230 00:21:12.579 --> 00:21:14.450 the cost, and is it doable?

231 00:21:14.450 --> 00:21:22.869 And as it is it worth it to try to be able to take care of any of these patients before things really change in your area.

232 00:21:22.869 --> 00:21:27.240 Some other issues that I know certain people have is a lot of text,

233 00:21:27.240 --> 00:21:29.210 specially if their respiratory therapist maybe.

234 00:21:29.210 --> 00:21:38.119 We deployed and are you able to get them back at this time and you have plans if attacks only does go out on quarantine and can you replace them

235 00:21:38.119 --> 00:21:40.200 during that period and then you know,

236 00:21:40.200 --> 00:21:41.680 especially pulmonologist may be redeployed.

237 00:21:41.680 --> 00:21:44.359 So you have enough people to read your studies.

238 00:21:44.359 --> 00:21:47.619 Some other issues I've heard about are related to lab space,

239 00:21:47.619 --> 00:21:53.269 so I know some labs have been had their space taken over and is now a Cove in unit.

240 00:21:53.269 --> 00:21:57.720 Or maybe you have to walk through the code unit to get to the lab.

241 00:21:57.720 --> 00:21:59.529 So is it really feasible to?

242 00:21:59.529 --> 00:22:05.230 Bring out patients into a setting like that and then you know what is the ventilation systems you know.

243 00:22:05.230 --> 00:22:07.930 If you're out in a hotel versus a hospital,

244 00:22:07.930 --> 00:22:10.329 or you know whatever the setting is is,

245 00:22:10.329 --> 00:22:18.160 you know. Do you know what the ventilation system is and is that shared and will that change what you're able to do?

246 00:22:18.160 --> 00:22:20.150 Um, so again, just to summarize,

247 00:22:20.150 --> 00:22:25.109 sort of. What's the right time I think you know what the local levels is.

248 00:22:25.109 --> 00:22:34.380 The number one thing you might be able to change what you're able to do if you do have that viral testing capacity and you have PP availability.

249 00:22:34.380 --> 00:22:38.680 But then there's always, you know just what is the risk management issues.

250 00:22:38.680 --> 00:22:40.339 What happens if you do?

251 00:22:40.339 --> 00:22:41.990 Do you know a patient?

252 00:22:41.990 --> 00:22:45.630 And then they come down with Cove it a week later?

253 00:22:45.630 --> 00:22:52.009 You know, you know, do you feel that you potentially be at risk if something like that would happen?

254 00:22:52.009 --> 00:22:54.539 And then if you're in a hospital,

255 00:22:54.539 --> 00:22:56.339 what are their infection regulations?

256 00:22:56.339 --> 00:22:59.230 You know you may want to use PPA,

257 00:22:59.230 --> 00:23:03.559 but they might say you know you can't or or vice versa.

258 00:23:03.559 --> 00:23:06.450 So I think all those things really matter.

259 00:23:06.450 --> 00:23:09.700 So I'm going to now Passover to doctor Khanna,

260 00:23:09.700 --> 00:23:12.240 Pari and I'm going to.

261 00:23:12.240 --> 00:23:20.859 See if I have. What we need to do for unmuting him?

262 00:23:20.859 --> 00:23:23.509 Uhm, I think you're awesome.

263 00:23:25.140 --> 00:23:27.339 Car and thank you very much.

264 00:23:27.339 --> 00:23:29.549 I'm just going to go quickly.

265 00:23:29.549 --> 00:23:39.599 Like you guys we are dealing with many of the same issues but specifically in the pediatric side because for whatever reason children are much less affected by Kovid then

266 00:23:39.599 --> 00:23:41.279 adults we are dealing with.

267 00:23:41.279 --> 00:23:50.252 The fact that a lot of this sort of resources in space in the hospital is being hoovered up for the care of sick adult patients,

268 00:23:50.319 --> 00:23:57.359 so his car and just said one of our satellite labs is now an adult unit in our main lab at Yale.

269 00:23:57.359 --> 00:23:59.700 New Haven is in a hospital floor.

270 00:23:59.700 --> 00:24:02.210 It is now a cogan floor,

271 00:24:02.210 --> 00:24:10.990 so we are thinking about issues like how can we safely bring in family members in patients without without exposure triage.

272 00:24:10.990 --> 00:24:13.079 Ng is certainly an issue.

273 00:24:13.079 --> 00:24:18.509 We have a high proportion of medically complex patients coming into the lab,

274 00:24:18.509 --> 00:24:22.690 just like like an in lab studies for you guys.

275 00:24:22.690 --> 00:24:25.999 Those patients tend to need studies more,

276 00:24:26.084 --> 00:24:30.170 more urgently, but. They also are higher risk,

277 00:24:30.170 --> 00:24:33.970 so how? What is the best way for us to triage them?

278 00:24:33.970 --> 00:24:39.990 We've actually been thinking a little bit about in our lab about starting to utilize some home sleep testing,

279 00:24:39.990 --> 00:24:41.890 which we've been reluctant to do.

280 00:24:41.890 --> 00:24:45.380 It isn't really recommended by the ASM right now for children,

281 00:24:45.380 --> 00:24:52.039 but at least for older adolescents as a way to sort of short and our wait list heading into this pandemic,

282 00:24:52.039 --> 00:24:54.890 we had a three to four month wait list,

283 00:24:54.890 --> 00:24:58.460 which is only getting longer as were as well.

284 00:24:58.460 --> 00:25:07.720 So on, and we're going to have to kind of re triage every based on the best infection control practices which are really unclear and also urgency.

285 00:25:07.720 --> 00:25:11.150 The only studies we've been running lately are impatient studies,

286 00:25:11.150 --> 00:25:15.609 specifically in the neonatal ICU which is considered to be a clean unit.

287 00:25:15.609 --> 00:25:18.349 We're talking at our hospital about viral testing,

288 00:25:18.349 --> 00:25:21.099 and if you've had one of these done,

289 00:25:21.099 --> 00:25:23.160 it is a deep nasopharyngeal swab,

290 00:25:23.160 --> 00:25:26.589 sort of like if you ever done a pertussis Schwab,

291 00:25:26.589 --> 00:25:32.140 and when we have anxious kids coming into the lab were already worried about the study.

292 00:25:32.140 --> 00:25:34.184 In the setup, is traumatic,

293 00:25:34.240 --> 00:25:38.839 were kind of priming them for a bad experience by swapping their nose,

294 00:25:38.839 --> 00:25:41.809 although we are leaning Tord's at our institution,

295 00:25:41.809 --> 00:25:45.900 doing that, at least in the short term we starting up.

296 00:25:45.900 --> 00:25:48.788 Our lab has a really small footprint,

297 00:25:48.849 --> 00:25:50.369 so we are thinking about,

298 00:25:50.369 --> 00:25:54.089 well, how many patients should we actually bring into study.

299 00:25:54.089 --> 00:25:57.440 We have a shared bathroom in our main lab,

300 00:25:57.440 --> 00:25:59.329 the one that's not occupied.

301 00:25:59.329 --> 00:26:00.980 Bible patients from manage that.

302 00:26:00.980 --> 00:26:10.549 Um, testing for parents is also a thorny area who's going to pay for testing for parents if someone comes into my office and we do a strep test,

303 00:26:10.549 --> 00:26:12.200 we don't check the parents.

304 00:26:12.200 --> 00:26:14.509 We don't usually check the siblings either,

305 00:26:14.509 --> 00:26:21.440 so it's going to kind of come down to one of the players going to say about this from the hospital.

306 00:26:21.440 --> 00:26:23.750 Let us do it. And finally again,

307 00:26:23.750 --> 00:26:27.837 the optics of it. What will happen to patients were already anxious,

308 00:26:27.891 --> 00:26:29.064 have text and full PE.

309 00:26:29.122 --> 00:26:36.809 We want our patients to have a good experience and we get a better sleep study if they're not crying hysterically for half the night.

310 00:26:36.809 --> 00:26:38.549 So we have to balance safety,

311 00:26:38.549 --> 00:26:40.009 but also the patient experience,

312 00:26:40.009 --> 00:26:42.920 and perhaps a way that you don't have to in

313 00:26:42.920 --> 00:26:44.079 a in an adult.

314 00:26:48.460 --> 00:26:54.799 Alright, thank you um and let me see if I can get to the next slide.

315 00:26:54.799 --> 00:26:57.960 We're going to pass off the Doctor Thomas.

316 00:26:57.960 --> 00:27:01.769 I believe I have to unmute.

317 00:27:01.769 --> 00:27:05.549 Um? Let me see if I can find me here.

318 00:27:08.500 --> 00:27:15.140 First, now it's not letting me search for him.

319 00:27:17.619 --> 00:27:36.299 Oh, come on. Not letting me share stuff participants for Robert anymore,

320 00:27:36.650 --> 00:27:44.546 um? See if I can find him.

321 00:27:44.953 --> 00:27:55.700 Sorry. Well, I'm trying to get him

322 00:27:55.700 --> 00:28:08.380 up doctor need as I got you good.

323 00:28:08.380 --> 00:28:10.640 So can you move the slides for me?

324 00:28:10.640 --> 00:28:13.190 I realize I don't have this on my computer,

325 00:28:13.190 --> 00:28:15.829 just tell me when. Alright,

326 00:28:15.829 --> 00:28:18.089 so. The

327 00:28:18.089 --> 00:28:21.240 idea here is to very quickly.

328 00:28:21.240 --> 00:28:25.349 Talk about how we can manage patients who have.

329 00:28:25.349 --> 00:28:30.720 Uh, the whole range of sleep disordered breathing without having titration studies.

330 00:28:30.720 --> 00:28:34.269 Obviously we need some kind of diagnostic assessment.

331 00:28:34.269 --> 00:28:38.430 Zoom here for now that we have at least.

332 00:28:38.430 --> 00:28:40.990 Oh home sleep test. Uh,

333 00:28:40.990 --> 00:28:43.180 an perhaps you wanna diagnostic PSD,

334 00:28:43.180 --> 00:28:46.440 which we managed to get before the.

335 00:28:46.440 --> 00:28:52.200 Covert struck. And the phenotypes of concern are obstruction.

336 00:28:52.200 --> 00:28:56.089 High low gain. And here this in compasses central,

337 00:28:56.089 --> 00:28:57.890 sleep apnea, periodic breathing, complex apnea,

338 00:28:57.890 --> 00:28:59.390 colored. Or do you want?

339 00:28:59.390 --> 00:29:02.319 But you have respiratory control instability?

340 00:29:02.319 --> 00:29:04.609 And of course your hypoventilation.

341 00:29:04.609 --> 00:29:08.829 So you recognize, uh, to the keys to recognize this.

342 00:29:08.829 --> 00:29:10.940 An obstruction is fairly straightforward

343 00:29:10.940 --> 00:29:14.740 where you have. Rim dominant variable cycle events.

344 00:29:14.740 --> 00:29:15.240 If

345 00:29:15.240 --> 00:29:20.289 it's a home study, you would see a V shape.

346 00:29:20.289 --> 00:29:26.690 The saturation. I'll show you pictures of all these very quickly.

347 00:29:26.690 --> 00:29:31.779 High low gain uh is non dominant self similar events.

348 00:29:31.779 --> 00:29:34.559 Oh, periodic breathing in some form of the other.

349 00:29:34.559 --> 00:29:37.599 And the desaturation profile is more like a belt or a band,

350 00:29:37.599 --> 00:29:40.019 because the events are self similar.

351 00:29:40.019 --> 00:29:46.069 Hypoventilation may be harder, but if you have a disproportionate on resolving hypoxia,

352 00:29:46.069 --> 00:29:49.559 assuming one can get home oximetry.

353 00:29:49.559 --> 00:29:53.740 Either the patient does it or is it done by DMA company.

354 00:29:53.740 --> 00:30:01.127 Uh, and uh, at least out here in Boston we have the option of doing home capnometry Not right now,

355 00:30:01.186 --> 00:30:04.259 but certainly once we open up a bit more next slide.

356 00:30:06.579 --> 00:30:10.059 Who? Thanks, very good.

357 00:30:10.059 --> 00:30:14.278 So, uh, whoops, too many.

358 00:30:14.551 --> 00:30:21.069 Yeah. This is OK, so this is an example of high low gain sleep apnea.

359 00:30:21.069 --> 00:30:23.559 Uh, individual events are obstructive.

360 00:30:23.559 --> 00:30:25.119 Uh, as you scold them conventionally,

361 00:30:25.119 --> 00:30:28.500 but when you look at the timing and the morphology of the events,

362 00:30:28.500 --> 00:30:31.940 they're very self similar. There are non REM sleep.

363 00:30:31.940 --> 00:30:35.789 I am on top is a diagnostic part on the bottom.

364 00:30:35.789 --> 00:30:42.440 Is the titration part, where C Pap essentially helps with the obstruction but now exposes the underlying rhythm abnormality.

365 00:30:42.440 --> 00:30:50.460 So this would be a person if you have the diagnostic data would be at high risk of having residual disease.

366 00:30:50.460 --> 00:30:54.920 Next slide. You can get similar information from home sleep.

367 00:30:54.920 --> 00:30:57.349 Study this 2 two samples.

368 00:30:57.349 --> 00:31:05.529 About showing a whoops. About showing I look in the key here is self similar events.

369 00:31:05.529 --> 00:31:12.349 You can see the self similarity in the Platte signal and the timing of events in the snoring.

370 00:31:12.349 --> 00:31:15.180 Pretty much all true. Oh,

371 00:31:15.180 --> 00:31:15.769 next

372 00:31:15.769 --> 00:31:18.259 slide. The

373 00:31:18.259 --> 00:31:24.700 oximetry patterns on top is the V shape desaturations of ram dominant disease.

374 00:31:24.700 --> 00:31:27.400 Uh, essentially nothing else really causes this pattern.

375 00:31:27.400 --> 00:31:29.089 If you see this pattern,

376 00:31:29.089 --> 00:31:32.349 you can be confident that this really is.

377 00:31:32.349 --> 00:31:35.289 A regulated sleep apnea. They may be non room disease.

378 00:31:35.289 --> 00:31:37.049 Lots of snoring and what not.

379 00:31:37.049 --> 00:31:39.579 But this is ram dominant disease.

380 00:31:39.579 --> 00:31:43.660 On the bottom, uh, example is where you have some features of ram,

381 00:31:43.660 --> 00:31:45.230 especially the first study saturation,

382 00:31:45.230 --> 00:31:48.579 but after that you have more like a.

383 00:31:48.579 --> 00:31:50.470 Uh, horizontally self similar belt,

384 00:31:50.470 --> 00:32:00.150 or a bandy saturation? This would be a feature of high loop game with at least some risk of having treatment emergent central apnea.

385 00:32:00.150 --> 00:32:06.067 Next line. This is from,

386 00:32:06.401 --> 00:32:09.627 uh. Watch bad study is showing,

387 00:32:09.712 --> 00:32:12.109 uh, you know, almost pure ram,

388 00:32:12.109 --> 00:32:16.119 dominant sleep apnea with deep V shaped desaturations.

389 00:32:16.119 --> 00:32:18.690 How to then this actual triggering of it'll simulation,

390 00:32:18.690 --> 00:32:21.269 which swings back to sinus rhythm through the night.

391 00:32:21.269 --> 00:32:25.930 So even from a home study we can actually figure out these things.

392 00:32:25.930 --> 00:32:28.210 That makes life so approach to management,

393 00:32:28.210 --> 00:32:30.410 so strategies can be 1.

394 00:32:30.410 --> 00:32:32.309 Uh, you can be reactive by you,

395 00:32:32.309 --> 00:32:38.029 say, well, I'll just start with C Pap and see what happens and if there's trouble I'll take care of it.

396 00:32:38.029 --> 00:32:43.730 Or you can be proactive where you risk phenotype or you risk stratify patients and try to preempt.

397 00:32:43.730 --> 00:32:45.779 Yeah, diagnostic in tracking tools.

398 00:32:45.779 --> 00:32:49.579 You have the visual or mathematical signal analysis.

399 00:32:49.579 --> 00:32:53.190 Uh, if you're gonna be on the cover days for awhile,

400 00:32:53.190 --> 00:32:56.470 there is incentive to actually bring forward into clinical practice.

401 00:32:56.470 --> 00:32:58.759 Mathematical analysis, which has been worked out,

402 00:32:58.759 --> 00:33:01.630 but visually one can make a decent.

403 00:33:01.630 --> 00:33:04.740 A determination the online data.

404 00:33:04.740 --> 00:33:08.430 Uh, can be evaluated as is as an air view,

405 00:33:08.430 --> 00:33:12.380 or. Uh, on core or we can use freeware.

406 00:33:12.380 --> 00:33:16.930 Sleepyhead is now called Oscar open source C Pap analysis report it.

407 00:33:16.930 --> 00:33:19.200 Then you have primary adjunctive therapies.

408 00:33:19.200 --> 00:33:21.480 Of course if you diagnose ram,

409 00:33:21.480 --> 00:33:26.019 dominant OS, AC pad generally works for total appliance or.

410 00:33:26.019 --> 00:33:28.730 You know, hypoglossal nerve stimulation should work.

411 00:33:28.730 --> 00:33:31.160 If you know Halo game sleep apnea,

412 00:33:31.160 --> 00:33:32.890 non supine sleep is important.

413 00:33:32.890 --> 00:33:37.059 You can decide how far you want to go with oxygen loaders.

414 00:33:37.059 --> 00:33:41.640 SF is Olamide. Getting adapter ventilation be quite difficult I suspect,

415 00:33:41.640 --> 00:33:43.910 but certainly it's an option.

416 00:33:43.910 --> 00:33:48.200 Uh, an unvented mask? Maybe home care company will be willing to.

417 00:33:48.200 --> 00:33:50.220 I give a loaner or rent the adapter.

418 00:33:50.220 --> 00:33:54.539 Went later until the lab opens and you get more definite today to.

419 00:33:54.539 --> 00:33:56.210 Life is this big hyperventilation.

420 00:33:56.210 --> 00:34:05.509 Resign says summons on C Pap and has put a sudden hypoxia moving to buy level with a moderate kind of setting or a Webster Wise.

421 00:34:05.509 --> 00:34:12.880 Would be reasonable where you utilize the auto functionality of the volume target ventilators.

422 00:34:12.880 --> 00:34:15.260 If you're persistent, subjective or objective,

423 00:34:15.260 --> 00:34:21.050 sleep fragmentation. One could consider's editors after talking to be able therapy.

424 00:34:21.050 --> 00:34:25.190 Example of what happens when you have a good and bad breathing on C.

425 00:34:25.190 --> 00:34:27.360 Pap on top is. Oh,

426 00:34:27.360 --> 00:34:30.329 you don't agree thing detected.

427 00:34:30.329 --> 00:34:32.710 On the lower left is short cycle,

428 00:34:32.710 --> 00:34:35.940 periodic breathing not detected by the pap device.

429 00:34:35.940 --> 00:34:41.230 And on the right is stable breathing where you'd like to see most of the patients spend most of the nights next line.

430 00:34:42.119 --> 00:34:43.570 Oh, you can use

431 00:34:43.570 --> 00:34:48.289 that space. We use it quite routinely in Boston using about 100 CC.

432 00:34:48.289 --> 00:34:50.829 That space with a non vented mask.

433 00:34:50.829 --> 00:34:54.829 See it goes up at the most wanted to millimeters Mercury,

434 00:34:54.829 --> 00:34:57.320 but it does help stabilize.

435 00:34:57.320 --> 00:35:00.679 Not breathing this before after example here.

436 00:35:00.679 --> 00:35:03.869 Have you done literally thousands of these studies?

437 00:35:03.869 --> 00:35:08.530 Next slide? Estes Olamide a low dose.

438 00:35:08.530 --> 00:35:13.099 We're talking about 120 five 250 milligrams more is not needed.

439 00:35:13.099 --> 00:35:19.369 It can cause it can result in really very good effects when combined with the see pap next slide.

440 00:35:21.519 --> 00:35:31.110 Example of that on top is before Estes Olamide and the same study about an R after taking a single 250 milligram tablets is all my.

441 00:35:31.110 --> 00:35:32.719 I'll be a complete stability.

442 00:35:32.719 --> 00:35:35.619 We have almost well over 300 patients on loaders.

443 00:35:35.619 --> 00:35:37.780 Estes Olamide at Beth Israel.

444 00:35:37.780 --> 00:35:42.369 Uh, and we have a pretty good data which we are putting together.

445 00:35:42.369 --> 00:35:45.190 Of course, with waveforms tracking that this really

446 00:35:45.190 --> 00:35:46.610 makes a huge difference.

447 00:35:49.369 --> 00:35:52.289 And after ventilators, uh, can workout fairly well.

448 00:35:52.289 --> 00:35:55.940 I in a subset of patients with central sleep apnea,

449 00:35:55.940 --> 00:36:03.389 but one must look at the data carefully and this is using sleepyhead software on the upper left panel.

450 00:36:03.389 --> 00:36:06.000 Uh, is uh? Uh, yes,

451 00:36:06.000 --> 00:36:08.809 we working well. The red part.

452 00:36:08.809 --> 00:36:12.909 The red signal is pressure out of the device and there is.

453 00:36:12.909 --> 00:36:21.460 This is a good outcome pressure profile while on the lower right the pressure is flying up and down and you can see a title.

454 00:36:21.460 --> 00:36:25.719 Volume graph is also. Of fairly broadly.

455 00:36:25.719 --> 00:36:28.159 The inspiratory next, but every time variable,

456 00:36:28.159 --> 00:36:33.380 so you can, uh, estimate the efficacy fairly well by looking at this level data.

457 00:36:33.380 --> 00:36:38.250 But you have to go beyond what the manufacturer software shows you next line.

458 00:36:40.710 --> 00:36:48.650 It's OK, it's a pressure cycling with the Phillips says we those little purple blobs are when the device kicks in.

459 00:36:48.650 --> 00:36:58.480 So here you have the device kicking in intermittently and the pressure cycling means the device is responding an it is helping ventilation but often sleep.

460 00:36:58.480 --> 00:37:00.739 Fragmentation remains with such a profile.

461 00:37:03.570 --> 00:37:09.119 Otherwise, may miss events. Whatever algorithm is used to detect can sometimes miss events completely.

462 00:37:09.119 --> 00:37:11.340 This is auto SV is ongoing,

463 00:37:11.340 --> 00:37:15.780 unstable breathing ongoing pressure cycling by the device is not detecting it,

464 00:37:15.780 --> 00:37:19.480 so you have to visually look at it next line.

465 00:37:21.630 --> 00:37:23.420 So this is basically the idea.

466 00:37:23.420 --> 00:37:26.409 You have a data driven approach to sleep disordered breathing.

467 00:37:26.409 --> 00:37:29.110 It doesn't matter where you get the data from.

468 00:37:29.110 --> 00:37:30.900 Weather is a lab study home,

469 00:37:30.900 --> 00:37:32.690 study device variables. It doesn't matter.

470 00:37:32.690 --> 00:37:35.090 But once you establish what the enemy is,

471 00:37:35.090 --> 00:37:37.409 control versus mechanics was asleep.

472 00:37:37.409 --> 00:37:40.489 Individually or in combination with the tools we have now,

473 00:37:40.489 --> 00:37:42.650 it takes extra effort tracking these patients.

474 00:37:42.650 --> 00:37:44.190 I will tell you that,

475 00:37:44.190 --> 00:37:46.030 but you can actually provide them.

476 00:37:46.030 --> 00:37:49.730 You know, pretty good. It won't be quite as good as lab,

477 00:37:49.730 --> 00:37:52.159 but you know pretty good management.

478 00:37:52.159 --> 00:37:53.079 I think that's the last

479 00:37:53.079 --> 00:37:59.349 slide. Yeah. Thank you doctor Thomas,

480 00:37:59.442 --> 00:38:04.210 um doctor. Noon as I think you can unmute yourself,

481 00:38:04.210 --> 00:38:07.804 yes, thank you. Hum so just to uh,

482 00:38:07.878 --> 00:38:14.320 first of all, thank you again for inviting me to participate and just to throw it out there to remind everybody.

483 00:38:14.320 --> 00:38:16.460 Yes, I do work for res Med,

484 00:38:16.460 --> 00:38:20.730 but my goal is to not discuss res Med products or therapies at all.

485 00:38:20.730 --> 00:38:24.389 It really just to give you a generic sort of manufacturers perspective.

486 00:38:24.389 --> 00:38:26.519 For us this began in late December,

487 00:38:26.519 --> 00:38:31.400 so we've been dealing with the code in 19 crisis since it broke out in China,

488 00:38:31.400 --> 00:38:37.639 and we've seen how a lot of the supply chain and manufacturing issues have evolved over the last four months.

489 00:38:37.639 --> 00:38:41.019 And looking at it primarily from AUS lens,

490 00:38:41.019 --> 00:38:45.269 now I just go through some of these bullet points.

491 00:38:45.269 --> 00:38:57.519 The supply chain issues cannot be minimized as you know there is a global demand for devices right now for mechanical ventilation.

492 00:38:57.519 --> 00:39:14.489 And also about Disposables and things which effects the sleep side of this equation because you've taken a backseat a little bit to the acute phase of the.

493 00:39:14.489 --> 00:39:25.530 10 dinner so we are dealing with supply chain issues that are everything from raw materials to components to air freight and then dealing with a demand from the world.

494 00:39:25.530 --> 00:39:32.150 That is saying we need you to make less pap devices and the bilevel devices that you're making.

495 00:39:32.150 --> 00:39:36.199 We need them focus on hospitals and kind of cute response.

496 00:39:36.199 --> 00:39:39.710 So these are there are very real issues.

497 00:39:39.710 --> 00:39:45.710 Um, hopefully now that most of the developed world is either nearing or past their peak,

498 00:39:45.710 --> 00:39:52.090 and we're starting to understand how this pandemic is developing in terms of subsequent or second waves,

499 00:39:52.090 --> 00:39:58.090 where the countries that are going to have their first waves or emerging places like India,

500 00:39:58.090 --> 00:39:59.960 Indonesia, Brazil, Mexico, Nigeria, etc.

501 00:39:59.960 --> 00:40:07.460 and I think the global manufacturing footprint has a better handle on some of the supply chain issues going forward.

502 00:40:07.460 --> 00:40:16.550 We also anticipate that the need for noninvasive and invasive ventilators The demand will start to drop precipitously over the next month or so,

503 00:40:16.550 --> 00:40:20.360 so it should improve supply chain for sleep related devices.

504 00:40:20.360 --> 00:40:28.360 The second point here question how will current and future needs for non vented masks filters another circuit components be met?

505 00:40:28.360 --> 00:40:39.789 I think there is global recognition that the way we conduct business going forward within healthcare will be permanently altered and a part of that is the need for the

506 00:40:39.789 --> 00:40:44.010 accommodations. That car in discussed at the beginning of this conference.

507 00:40:44.010 --> 00:40:47.269 Everything from the way that you.

508 00:40:47.269 --> 00:40:55.690 That outfit your lab to the way that you ratio text to patients to the pee pee in isolation capabilities and circuit configurations.

509 00:40:55.690 --> 00:41:04.110 Doctor Krieger as was discussed and others have worked on a variety of different circuit configurations that help minimize the spread of droplets.

510 00:41:04.110 --> 00:41:15.239 And so I think all of the manufacturers are acutely focused on the fact that in a month or two when the demand for ventilator starts to drop off.

511 00:41:15.239 --> 00:41:22.670 The need for supplies and disposables going forward will will remain at a very high and elevated demand,

512 00:41:22.670 --> 00:41:25.980 especially beyond coded patients and beyond the hospital.

513 00:41:25.980 --> 00:41:30.929 It's sleep labs procedure all sorts of procedure rooms and procedural areas.

514 00:41:30.929 --> 00:41:36.300 Outpatient facilities that are going to demand these types of supplies in Disposables.

515 00:41:36.300 --> 00:41:47.050 And so we are seeing the supply chain ramp up for a sustained and potentially permanent delivery of higher levels of non vented masks abab filters.

516 00:41:47.050 --> 00:41:50.079 Um, in circuit exhalation valves,

517 00:41:50.079 --> 00:41:53.909 events, and things like that.

518 00:41:53.909 --> 00:41:58.289 The third bullet. How can remote patient management be optimized with current platform?

519 00:41:58.289 --> 00:42:06.039 So you just heard doctor Thomas talking about the management of patients when you're unable to rely on and in lab sleep test.

520 00:42:06.039 --> 00:42:14.130 and I think across all of Medison we're going to see the exception to the acceptance of remote interactions with patients continue to rise.

521 00:42:14.130 --> 00:42:17.755 I was on a web and are just a week ago,

522 00:42:17.818 --> 00:42:23.230 I believe, where they showed that it most health systems in the US was single digits.

523 00:42:23.230 --> 00:42:28.019 The number of. A percentage of patient encounters that happened remotely.

524 00:42:28.019 --> 00:42:35.530 It is now more than half of routine patient encounters are happening in some way remotely,

525 00:42:35.530 --> 00:42:38.340 either via email, online patient portals,

526 00:42:38.340 --> 00:42:41.159 video visits, remote management, using software.

527 00:42:41.159 --> 00:42:44.230 All sorts of different approaches to remote patient management.

528 00:42:44.230 --> 00:42:53.909 I think overall the patients in the consumers have grown accustomed to a world of technology that allows them to connect instantly with a lot of different services,

529 00:42:53.961 --> 00:42:55.382 and to do things online,

530 00:42:55.445 --> 00:43:05.440 and I think now in the face of this crisis that they many patients have seen how effective remote management can be an remote engagement with their providers.

531 00:43:05.509 --> 00:43:08.440 Can be we're going to see maybe a drop off,

532 00:43:08.440 --> 00:43:12.000 but it will never drop back to the single digits.

533 00:43:12.000 --> 00:43:16.429 The health system where I used to work before I joined industry.

534 00:43:16.429 --> 00:43:20.489 I stay in contact with a lot of my colleagues there.

535 00:43:20.489 --> 00:43:28.610 They were doing a few 100 video visits a week and now they're doing thousands a week and it continues to climb.

536 00:43:28.610 --> 00:43:39.679 So I think within Sleep Medicine there is a lot of opportunity to think about the future and how home sleep testing in lab sleep testing and remote patient management

537 00:43:39.679 --> 00:43:43.010 come together to virtualize care where it makes sense.

538 00:43:43.010 --> 00:43:50.550 To move Karen, move the things we do closer to the patient and then use the data as doctor Thomas mentioned,

539 00:43:50.550 --> 00:43:54.139 the more data and the more data sources you get,

540 00:43:54.139 --> 00:43:57.019 the better that you can manage those patients.

541 00:43:57.019 --> 00:44:01.059 Also, sorry I'm seeing some questions coming up for me in the chat,

542 00:44:01.059 --> 00:44:03.860 so I will get to those in a second.

543 00:44:03.860 --> 00:44:06.969 Let me just get through these last couple bullet points.

544 00:44:06.969 --> 00:44:15.989 I think I just mentioned data data from connected path devices data from our patients from other modes of care as they enroll in digital health platforms going forward.

545 00:44:15.989 --> 00:44:18.480 As more and more patients where wearable devices,

546 00:44:18.480 --> 00:44:20.969 we're going to have a constellation of data.

547 00:44:20.969 --> 00:44:27.869 We're starting to see around the world governments implement things like contact tracing and tracking of patients who test positive for kovid.

548 00:44:27.869 --> 00:44:30.630 And the resistance to sharing personal information,

549 00:44:30.630 --> 00:44:33.780 location data healthcare information is actually dropping precipitously.

550 00:44:33.780 --> 00:44:36.139 You see in Australia, for example,

551 00:44:36.139 --> 00:44:39.300 the government lawsuit launched a contact tracing app.

552 00:44:39.300 --> 00:44:43.630 They were expecting half a million signups in the first week.

553 00:44:43.630 --> 00:44:47.652 They got 1.6 million signups in the first 5 hours,

554 00:44:47.731 --> 00:44:58.954 so we're going to have opportunities in Sleep Medicine to virtualize the Karen to stay connected with patients more than we ever have before as the virtualization of healthcare gains

555 00:44:59.016 --> 00:45:05.840 greater acceptance. I think we talked about resupply a little bit when we talked about supply chain.

556 00:45:05.840 --> 00:45:13.750 I believe that all of the manufacturers of the supplies in the disposables use in respiratory care on the outpatient side,

557 00:45:13.750 --> 00:45:20.159 especially around sleep. Madison are ramping up for a world where higher levels of supplies and disposables,

558 00:45:20.159 --> 00:45:22.420 especially around non vented Masson filters.

559 00:45:22.420 --> 00:45:25.440 As I mentioned are going to be required.

560 00:45:25.440 --> 00:45:29.960 And then Lastly we've seen some alterations to payment and reimbursement policy,

561 00:45:29.960 --> 00:45:34.440 the ability to. Prescribed devices without a sleep test for example,

562 00:45:34.440 --> 00:45:40.679 and still expect reimbursement is one thing that's changed temporarily under the code 19 crisis.

563 00:45:40.679 --> 00:45:44.420 We've seen some relaxation around Telemonitoring and telemedicine codes.

564 00:45:44.420 --> 00:45:49.409 An reimbursement policy? How much of that will persist after the fact?

565 00:45:49.409 --> 00:45:52.739 How much will the New World of Medicine.

566 00:45:52.739 --> 00:46:02.320 That becomes increasingly virtualized also adopt payment and reimbursement policies that make it more likely that we can sustain those types of policies.

567 00:46:02.320 --> 00:46:05.289 I think in the end from the manufacturers perspective,

568 00:46:05.289 --> 00:46:15.190 right now everybody is. I would say mostly head down head down trying to deal with the global demand for devices mostly on the the by level and the invasive

569 00:46:15.190 --> 00:46:25.090 vent side. But we will see that demand start to decrease in the coming weeks and months and we will have to prepare ourselves for this new world that you

570 00:46:25.090 --> 00:46:31.690 will be working in a world that will require the types of disposables that we didn't use more regularly before.

571 00:46:31.690 --> 00:46:35.679 And that will allow us to rely on virtualization and patient data.

572 00:46:35.679 --> 00:46:39.750 To do more with these patients than we ever did before,

573 00:46:39.750 --> 00:46:41.619 and then just very quickly,

574 00:46:41.677 --> 00:46:44.949 there are a couple of questions it came through.

575 00:46:44.949 --> 00:46:51.750 So someone asked to talk about device shortages and then supply for hospital level equipment not expected to rise.

576 00:46:51.750 --> 00:46:58.550 So let me add about the first one yet so we are there will be shortages for the next,

577 00:46:58.550 --> 00:47:06.070 probably several weeks, months or more as the global manufacturing footprint is almost exclusively focused on delivering vents for hospitalized patients.

578 00:47:06.070 --> 00:47:07.860 Again, both noninvasive and invasive.

579 00:47:07.860 --> 00:47:15.800 But what I've heard as early as late as this morning when I was on a call with some folks in Europe.

580 00:47:15.800 --> 00:47:22.179 They are modeling that the drop off in demand prevents will be pretty sudden happened within weeks or a month.

581 00:47:22.179 --> 00:47:24.409 I think to answer the second question,

582 00:47:24.409 --> 00:47:29.840 what I have seen from my perspective is that this is obviously a pandemic of hot spots.

583 00:47:29.840 --> 00:47:32.070 The virus doesn't understand Geo political boundaries.

584 00:47:32.070 --> 00:47:41.000 The virus just understands there are a lot of humans and they are allowing me to move between them because they are spreading droplets and touching each other.

585 00:47:41.000 --> 00:47:46.420 And so when you look at northern Italy it looks very different than the rest of Italy.

586 00:47:46.420 --> 00:47:49.619 When you look at the New York City Metropolitan area.

587 00:47:49.619 --> 00:47:58.960 It looks very different than other parts of the United States and what we've seen is there was a frenzy of acquisition of Ventilators,

588 00:47:58.960 --> 00:48:04.789 and we have probably preloaded the system with enough devices or hospitals in most cases.

589 00:48:04.789 --> 00:48:11.019 Again, hotspots excluded where any second or subsequent waves will not create another spike in demand.

590 00:48:11.019 --> 00:48:20.309 There may be small regional or localized spikes in demand as a place like Mexico or Brazil may or may not blow up.

591 00:48:20.309 --> 00:48:27.139 But we have an opportunity for some of the places that overstocked to actually send ventilators to areas that need them.

592 00:48:27.139 --> 00:48:34.610 We are seeing FEMA in the US already talk about sending some of the 100,000 plus ventilators that they've ordered to other countries.

593 00:48:34.610 --> 00:48:39.159 We know the World Health Organization is working on getting devices to other countries,

594 00:48:39.159 --> 00:48:41.760 and we even saw here in the US,

595 00:48:41.760 --> 00:48:45.340 California bought too many ventilators and sent something to New York.

596 00:48:45.340 --> 00:48:51.840 So I believe within the next few weeks we will start to see the supply of devices start to equalize.

597 00:48:51.840 --> 00:48:55.219 I think one or two more questions may have just come through.

598 00:48:57.480 --> 00:48:59.289 Uh, is the

599 00:48:59.289 --> 00:49:03.469 supply. HST

600 00:49:03.469 --> 00:49:06.280 being delivered to avoid patient contact.

601 00:49:07.269 --> 00:49:08.349 Um DMV orders

602 00:49:08.349 --> 00:49:09.780 and 90% of requirements

603 00:49:09.780 --> 00:49:16.599 will be accepted as, so we don't answer the last question first was around some of the reimbursement policy.

604 00:49:16.599 --> 00:49:19.840 I don't know if we have final answers yet,

605 00:49:19.840 --> 00:49:24.860 but I believe that there are a lot of different stakeholders that patient groups,

606 00:49:24.860 --> 00:49:35.630 provider groups, even some of the industry groups trying to work with government entities and the payment and policy folks to understand which policies make sense to persist going forward.

607 00:49:35.630 --> 00:49:38.219 I think there's probably consensus that greater.

608 00:49:38.219 --> 00:49:40.079 Allowance for telemedicine. Telehealth Telemonitoring,

609 00:49:40.079 --> 00:49:50.869 remote patient engagement. Those are the types of reimbursement policies that probably should persist whether or not we're going to change payment or reimbursement policy around in lab tests.

610 00:49:50.869 --> 00:49:53.099 Home sleep testing versus no testing.

611 00:49:53.099 --> 00:49:59.420 I think it's way too early to tell if that if that policy is going to change,

612 00:49:59.420 --> 00:50:04.630 and then sorry the other question was prepared for resurgence in September or October.

613 00:50:04.630 --> 00:50:08.389 I think if we were reading the tea leaves correctly.

614 00:50:08.389 --> 00:50:19.010 As I said, the systems have been preloaded with a lot of in hospital capable ventilators and so to prepare for any second or subsequent waves is really going to

615 00:50:19.010 --> 00:50:22.550 be around personnel facility pee pee in procedures by then.

616 00:50:22.550 --> 00:50:32.460 Hopefully the supply chain issues will have been hammered out and manufacturers will have returned to the normal mix where they're probably still making more ventilators than normal.

617 00:50:32.460 --> 00:50:36.360 But back up to speed with the numbers of pap devices,

618 00:50:36.360 --> 00:50:40.449 disposables and other supplies that they were able to make.

619 00:50:40.449 --> 00:50:48.340 So hopefully that answers most of those questions and I'm happy to stay on and continue with the discussion.

620 00:50:48.340 --> 00:50:49.170 Thank you

621 00:50:49.170 --> 00:50:51.469 so. I have a

622 00:50:51.469 --> 00:50:57.269 question. Check first it is doctor white here from restaurants or.

623 00:50:57.269 --> 00:51:01.780 I'm here, would you like to say something first?

624 00:51:01.780 --> 00:51:03.840 Share questions,

625 00:51:03.840 --> 00:51:09.532 yeah? Very brief afternoon afternoon as it was interesting on the around the 1st of March.

626 00:51:09.588 --> 00:51:14.760 I contacted a colleague of mine in North northern Italy asking how things were going again.

627 00:51:14.760 --> 00:51:17.309 Stefano Nabhani Rollback an amazing email it goes.

628 00:51:17.309 --> 00:51:19.539 This is David. It is apocalypse now.

629 00:51:19.539 --> 00:51:23.690 Words cannot describe what's happening here and he sent me a few pictures.

630 00:51:23.690 --> 00:51:32.222 He said we don't have enough pap machines which is flying by the seat of our pants and it was a very daunting sort of moment.

631 00:51:32.302 --> 00:51:36.329 So we have in Phillips we said Gosh what can we do?

632 00:51:36.329 --> 00:51:42.860 And we very quickly flipped over RC Pap Machines intimate making a Bipap St device that could be a ventilator on the lies,

633 00:51:42.860 --> 00:51:44.280 with doctors saying we need.

634 00:51:44.280 --> 00:51:47.646 We got to where we could crank out 5000 ventilators a day.

635 00:51:47.733 --> 00:51:49.452 It was a low end ventilator.

636 00:51:49.510 --> 00:51:52.519 I'll tell you about it when they could do 5000 today.

637 00:51:52.519 --> 00:51:55.070 But to do that we had to shut down,

638 00:51:55.070 --> 00:52:01.320 see production completely. Standard C pap devices for a short period of time that can switch back and forth on very quickly.

639 00:52:01.320 --> 00:52:05.300 and I agree with documented that this demand from inhalation just gone way down.

640 00:52:05.300 --> 00:52:07.860 I mean, it's just. It's nothing like it was.

641 00:52:07.860 --> 00:52:12.809 A month ago, so I think everybody can get back to where we're producing reasonable numbers of C.

642 00:52:12.809 --> 00:52:17.210 Pap device is obviously demand for cpac device is going down is the lab so inactive.

643 00:52:17.210 --> 00:52:22.710 S at the DMV's the only other point I want to make is I think I think we're going to

644 00:52:22.710 --> 00:52:25.199 have enough. Supplies and

645 00:52:25.199 --> 00:52:27.840 accessories to for you guys to practice careful,

646 00:52:27.840 --> 00:52:29.820 Medison Mania. Need non vented masks,

647 00:52:29.820 --> 00:52:32.130 you need exhalation ports. You need filters.

648 00:52:32.130 --> 00:52:41.699 Insert for that and I think it for in lab situation to be doing a see pap titration with a vented mask and what not is not very wise.

649 00:52:41.699 --> 00:52:48.300 Even if you don't know if the patient has covert at this particular time you only use the reasonable care.

650 00:52:48.300 --> 00:52:51.599 Make sure that air is filtered on the exhalation side,

651 00:52:51.599 --> 00:52:56.269 obviously with the filter and we think you're going to be able to have.

652 00:52:56.269 --> 00:53:04.070 Those resources, the last comment I'll make is that I was really a lot of capability in terms of managing apnea patients.

653 00:53:04.070 --> 00:53:06.440 Remotely, once you get on my C pap device,

654 00:53:06.440 --> 00:53:10.650 you can look at every breath they take is Robert Thomas was talking to us about.

655 00:53:10.650 --> 00:53:12.489 You can see exactly what's going on.

656 00:53:12.489 --> 00:53:14.059 Auto titrations not meeting your needs.

657 00:53:14.059 --> 00:53:15.909 You can adjust the pressures as necessary,

658 00:53:15.909 --> 00:53:22.219 but not getting him on the initial pap device may be harder and you have to use home home testing and things like that.

659 00:53:22.219 --> 00:53:25.639 But once you get him out there is a lot of information available.

660 00:53:25.639 --> 00:53:28.269 I think to try to help you manage those patients.

661 00:53:28.269 --> 00:53:30.630 So I'll stop there, such as you can ask

662 00:53:30.630 --> 00:53:34.820 questions. Doctor krieger, I think you had a question.

663 00:53:34.820 --> 00:53:38.610 Yeah, uh, so this is for David and Carlos.

664 00:53:38.610 --> 00:53:51.309 So one of our challenges is to have a diagnosis and you think your companies can make a pack device that can actually create a split night study where for

665 00:53:51.407 --> 00:53:53.809 two hours or three hours whatever,

666 00:53:53.809 --> 00:54:01.869 there's the minimum amount of pressure which would be about four San San meters of water pressure and then.

667 00:54:01.869 --> 00:54:04.750 Actually do a titration. Bye bye.

668 00:54:04.750 --> 00:54:07.150 Going into an auto mode.

669 00:54:08.730 --> 00:54:11.619 I'll call me first. You could certainly do that

670 00:54:11.619 --> 00:54:18.679 there. I think that part of the problem is it 4 centimeters of water pressure will treat a moderate amount of atoms.

671 00:54:18.679 --> 00:54:25.099 May be hard to get a handle on exactly what the initial severity was with four centimeters or water pressure.

672 00:54:25.099 --> 00:54:28.630 Obviously getting an auto titration thereafter is a fairly straightforward operations.

673 00:54:28.630 --> 00:54:30.239 Devices can certainly do that.

674 00:54:30.239 --> 00:54:32.809 Why would you want to do that though,

675 00:54:32.809 --> 00:54:38.900 instead of just doing a home test and then went straight to attach to an auto tax rating device

676 00:54:38.900 --> 00:54:41.164 mayor? Well, yeah, I is it.

677 00:54:41.297 --> 00:54:42.489 I think it's a

678 00:54:42.489 --> 00:54:44.610 matter of logistics. An overall costs.

679 00:54:44.610 --> 00:54:48.489 I think at the end of the day work pretty good.

680 00:54:48.489 --> 00:54:53.079 I think at predicting which patients are are going to be a problem.

681 00:54:53.079 --> 00:54:59.780 I mean right now there have been several patients where I've actually prescribed cpac with no test at all.

682 00:54:59.780 --> 00:55:06.489 Just, you know, an I'm keeping my fingers crossed that the insurance companies are going to pay for this,

683 00:55:06.489 --> 00:55:09.480 and so far I haven't had any blowback.

684 00:55:09.480 --> 00:55:12.869 But I think to have an apnea index,

685 00:55:12.869 --> 00:55:14.989 even if it's at a,

686 00:55:14.989 --> 00:55:20.929 you know, sort of a lowish pap pressure would be way better than than

687 00:55:20.929 --> 00:55:31.389 nothing. You suggesting you only have one visit to the home to as opposed to getting the getting the HST device there and then get it back to you and

688 00:55:31.389 --> 00:55:34.139 then? Actually having to get the see pap out there.

689 00:55:34.139 --> 00:55:37.849 Yeah, that might. I don't think that would be actually very hard to do,

690 00:55:37.849 --> 00:55:39.170 but it's not something I

691 00:55:39.170 --> 00:55:40.780 think we thought about a lot.

692 00:55:40.780 --> 00:55:43.130 Yeah, just to echo, it's not difficult to do.

693 00:55:43.130 --> 00:55:46.260 It would be simple to do I think what what you know.

694 00:55:46.260 --> 00:55:48.869 As any company, I can't speak for the commercial sign,

695 00:55:48.869 --> 00:55:55.139 but as any company they would want to know that there's a market for it and maybe in the in the world going forward.

696 00:55:55.139 --> 00:56:01.400 As I mentioned, as as care moves closer and closer to the patient and we can virtualize things like diagnostics and titration more effectively.

697 00:56:01.400 --> 00:56:04.139 There may be a market for that so.

698 00:56:04.139 --> 00:56:05.130 Good question.

699 00:56:07.760 --> 00:56:09.590 So please everybody if

700 00:56:09.590 --> 00:56:18.730 you have messages you can send in a chat um address to to everyone and we can start reading mof.

701 00:56:18.730 --> 00:56:28.329 One question I do see right now is our providers billing for remote patient monitoring for managing patients with sleep apnea.

702 00:56:28.329 --> 00:56:31.449 Designing. My panelists want to.

703 00:56:31.449 --> 00:56:35.309 Training on that. So my understanding about

704 00:56:35.309 --> 00:56:37.980 I haven't used it is

705 00:56:37.980 --> 00:56:41.710 that one person of month can bill.

706 00:56:41.710 --> 00:56:45.989 For that I believe they have to spend.

707 00:56:45.989 --> 00:56:50.789 I think it might be 30 minutes to bill,

708 00:56:50.789 --> 00:57:01.500 so it's and if someone from like diabetes bills for remote patient monitoring than than you can't as asleep provider.

709 00:57:01.500 --> 00:57:08.630 I think it is potentially something if if we are doing more sort of full reviews of.

710 00:57:08.630 --> 00:57:14.599 You know the actual waveform data and using it it sort of in lieu of sleep studies.

711 00:57:14.599 --> 00:57:17.409 There may be something to look into there.

712 00:57:22.480 --> 00:57:24.349 I have another question, why

713 00:57:24.349 --> 00:57:30.349 is it AM are the only one with a disposable home sleep study device?

714 00:57:30.349 --> 00:57:31.449 I have

715 00:57:31.449 --> 00:57:34.572 a an answer to that one.

716 00:57:34.672 --> 00:57:44.039 Yeah, so I've seen another device that is available in other parts of the world and is trying to get FDA approval.

717 00:57:44.039 --> 00:57:47.000 Currently that is a disposable wearable device,

718 00:57:47.000 --> 00:57:55.597 uses a similar approach as the peripheral arterial tonometry that the watch pad device uses in combination with other channels,

719 00:57:55.664 --> 00:57:57.980 it's. I don't remember the name of the company,

720 00:57:57.980 --> 00:58:04.739 but it's, uh. It's it's being used in other parts of the world I've I've seen it used in Asia and actually tried it one night myself.

721 00:58:05.409 --> 00:58:09.860 I'll also comment that we acquired a company about a year ago that has a disposable,

722 00:58:09.860 --> 00:58:15.139 basically six sticks on the floor and has little can I go into the nose to get nasal pressure?

723 00:58:15.139 --> 00:58:17.090 You can get effort from venous pulsations.

724 00:58:17.090 --> 00:58:21.809 You get spo two reflectance and you can get ahead position and so it won't be available.

725 00:58:21.809 --> 00:58:24.039 Probably for most of it another year unfortunately.

726 00:58:24.039 --> 00:58:29.039 But there are others coming out so that I think that would need to be pretty common commodity.

727 00:58:29.929 --> 00:58:34.139 And someone just said in the chat it is the night owl.

728 00:58:34.139 --> 00:58:35.900 It's made by a company.

729 00:58:35.900 --> 00:58:38.710 It just reminded me. Echo sense night owl,

730 00:58:38.710 --> 00:58:44.670 small fingertip. The device that does spo two derives P-80 and then has a 3 axis accelerometer.

731 00:58:46.400 --> 00:58:48.219 And this is in dear,

732 00:58:48.219 --> 00:58:50.409 I just want to jump in.

733 00:58:50.409 --> 00:58:52.940 Mayor said earlier identifying the bread and butter,

734 00:58:52.940 --> 00:58:55.780 obstructive sleep apnea patient and starting empiric C pap.

735 00:58:55.780 --> 00:58:58.309 I think that something that we could do.

736 00:58:58.309 --> 00:59:05.579 The question becomes, what do we do with these more complex patients that have been waiting in the wings for labs to reopen?

737 00:59:05.579 --> 00:59:08.420 And you know, there are the obesity hyper-ventilate yrs.

738 00:59:08.420 --> 00:59:16.949 They're the ones with BMI is of 50 and 60 and you have no idea what their pressure requirements are going to be or their oximetry requirements.

739 00:59:16.949 --> 00:59:21.699 An while we're waiting like what's the best way to offer some sort of therapy.

740 00:59:21.699 --> 00:59:28.500 Ann, is there a way to integrate diagnostics and therapeutics into one unit with these disposable elements?

741 00:59:28.500 --> 00:59:30.900 and I know the res Med,

742 00:59:30.900 --> 00:59:33.300 and I believe restaurants as well.

743 00:59:33.300 --> 00:59:37.300 Has these have these modular units that can accommodate you,

744 00:59:37.300 --> 00:59:39.699 know, unintended testing? The question is,

745 00:59:39.699 --> 00:59:45.699 can that be expanded to include CO2 monitoring an and also allow that disposable capability?

746 00:59:48.389 --> 00:59:49.010 That's going

747 00:59:49.010 --> 00:59:51.510 to be hard to do all of that.

748 00:59:51.510 --> 00:59:53.380 I mean, none of these devices,

749 00:59:53.380 --> 00:59:58.063 obviously themselves are disposable, and CO2 testing is to get an entire was certainly affected.

750 00:59:58.097 --> 00:59:59.436 Separate separate devices. For us,

751 00:59:59.498 --> 01:00:04.610 you have to put that in the home and believe in the home indefinitely and whatnot.

752 01:00:04.610 --> 01:00:06.800 That would be an or you getting,

753 01:00:06.800 --> 01:00:12.190 you know, realistic numbers from Intel that transcutaneous or entitle and whatnot so itself.

754 01:00:12.190 --> 01:00:13.480 That you know if this thing persists,

755 01:00:13.480 --> 01:00:19.000 I think we're going to have to think hard about some of that stuff and try to get to where we can do more and more and more than Home

756 01:00:19.000 --> 01:00:21.980 Buttom. Right now I think what you're describing,

757 01:00:21.980 --> 01:00:25.710 at least in a hypo ventilating that you're trying to attach rate.

758 01:00:25.710 --> 01:00:28.820 You might even if that's if that's the end point,

759 01:00:28.820 --> 01:00:32.860 you might even be better using a vaps truck type device you know,

760 01:00:32.860 --> 01:00:36.909 pick your title volumes and everything based on ideal body weights and whatnot,

761 01:00:36.909 --> 01:00:39.079 rather than trying to do SEO Twos,

762 01:00:39.079 --> 01:00:40.949 and you're likely to get closer

763 01:00:40.949 --> 01:00:41.260 than

764 01:00:41.260 --> 01:00:42.809 you are just guessing otherwise,

765 01:00:42.809 --> 01:00:45.900 yeah. Read it. Symmetry.

766 01:00:46.550 --> 01:00:49.280 Knock, knock.

767 01:00:49.280 --> 01:00:51.219 Mission. Basically,

768 01:00:51.219 --> 01:00:55.639 for Wolf, can I jump in for one quick second?

769 01:00:55.639 --> 01:01:07.670 Just wanted to support what doctor White was saying an emphasize the new guidelines from the ATF on obesity hypoventilation that emphasize the fact that an Ivy should be started

770 01:01:07.670 --> 01:01:12.079 initially and that after three months of therapy on an Ivy,

771 01:01:12.079 --> 01:01:16.489 is the right time to look and see in the lab.

772 01:01:16.489 --> 01:01:25.730 If we can take a step back to C Pap and those initial N Ivy settings are most easily done with that therapy.

773 01:01:25.730 --> 01:01:26.590 Shooting for

774 01:01:26.590 --> 01:01:32.179 both prolonged inspiratory time so that we can do good lung volume recruitment

775 01:01:32.179 --> 01:01:35.025 and looking at shooting for eight PCs,

776 01:01:35.090 --> 01:01:42.070 Portillo ideal body weight and that can be done on a variety of devices right now,

777 01:01:42.070 --> 01:01:49.809 but if you haven't, I'd recommend pulling that relatively new ATF guidelines 'cause it does go through all

778 01:01:49.809 --> 01:01:53.690 of that. Thanks

779 01:01:53.690 --> 01:01:55.170 Lisa. Lisa,

780 01:01:55.170 --> 01:02:01.059 can you find that guideline and put it into the chat of this if you can?

781 01:02:02.760 --> 01:02:03.059 Yeah,

782 01:02:03.059 --> 01:02:04.570 sure, no problem. I'll just

783 01:02:04.570 --> 01:02:18.009 take a minute, yeah? What one comment from one person was issues related to staff being worried about having face to face contact and especially if they are older age

784 01:02:18.088 --> 01:02:21.079 or have underlying medical conditions.

785 01:02:21.079 --> 01:02:28.199 And so you know one comment is that might affect some more experienced staff members.

786 01:02:28.199 --> 01:02:32.949 So whether anyone has any comments or experiences with that?

787 01:02:38.920 --> 01:02:39.429 Yeah,

788 01:02:39.429 --> 01:02:40.449 we would

789 01:02:40.449 --> 01:02:52.210 encourage that employers have a policy of encouraging sick employees to stay at home and also providing accommodations for those who need them.

790 01:02:52.210 --> 01:02:54.250 There were, you know,

791 01:02:54.250 --> 01:02:56.289 we had OSHA and

792 01:02:56.289 --> 01:03:01.400 workers comp and workplace accommodation rules prior to the pandemic,

793 01:03:01.400 --> 01:03:04.530 and I think that, uh.

794 01:03:04.530 --> 01:03:09.309 In many places those have been bent in order to accommodate overwhelming demand.

795 01:03:09.309 --> 01:03:20.349 Uhm, but on some level I think employers need to be looking at what's happening with their workforce and who needs to have an exemption versus who doesn't and what

796 01:03:20.349 --> 01:03:22.559 sort of accommodations would be appropriate.

797 01:03:24.780 --> 01:03:27.750 So the traditional sleep lab has.

798 01:03:27.750 --> 01:03:30.539 Pretty much use the. Next bed,

799 01:03:30.539 --> 01:03:33.429 next deck, next patient approach.

800 01:03:33.429 --> 01:03:38.380 We may have to. Streamline a bit more better match.

801 01:03:38.380 --> 01:03:42.989 The technician that type of study with the patient.

802 01:03:42.989 --> 01:03:47.619 And, uh. You know if the virus hangs around,

803 01:03:47.619 --> 01:03:51.039 it is inevitable that. By coincidence or otherwise,

804 01:03:51.039 --> 01:03:55.449 that a patient will come to the sleep lab and.

805 01:03:55.449 --> 01:03:58.719 You know, a few days later will have colored.

806 01:03:58.719 --> 01:04:05.179 And then, uh, only a weidel genetic analysis will tell us Whether.

807 01:04:05.179 --> 01:04:06.789 You know where they got it from?

808 01:04:06.789 --> 01:04:08.400 Was it community was in the lab?

809 01:04:08.400 --> 01:04:11.949 The whole thing is going to get kind of messy.

810 01:04:11.949 --> 01:04:15.690 But that's something we have to be ready for.

811 01:04:15.690 --> 01:04:22.000 And, uh. Uh, what we do out here in Boston is for the most complicated patience.

812 01:04:22.000 --> 01:04:24.679 Uh, we have a physician guiding the titration,

813 01:04:24.679 --> 01:04:28.030 then it doesn't really matter who exactly the technician is.

814 01:04:28.030 --> 01:04:33.650 You can have the youngest technicians as long as they can put the leads on.

815 01:04:33.650 --> 01:04:35.900 You can still guide them through.

816 01:04:35.900 --> 01:04:43.110 I will let it figure out ways to keep it safe and keep it good.

817 01:04:43.110 --> 01:04:43.550 Is

818 01:04:43.550 --> 01:04:49.679 there any comments from our ASM folks about where they see recommendations going up?

819 01:04:49.679 --> 01:05:00.630 Especially really just sort of watch doctor Thomas talked about in terms of trying to use some of these non study ways to manage patients.

820 01:05:00.630 --> 01:05:04.130 Is that something you think ASM might look?

821 01:05:04.130 --> 01:05:08.110 Try to put out guidelines related to.

822 01:05:08.110 --> 01:05:10.849 So this is Shannon. So first

823 01:05:10.849 --> 01:05:15.880 of all, I think you to doctor Thomas for that overview,

824 01:05:15.880 --> 01:05:29.199 which was concise and really shows how well positioned the sleep field can be compared to other fields of Medicine for being able to roll out really advanced.

825 01:05:29.199 --> 01:05:34.230 Mechanisms for a remote monitoring of patients and diagnostics of patients.

826 01:05:34.230 --> 01:05:40.170 So I think that sleep may be better positioned than some other fields,

827 01:05:40.170 --> 01:05:44.170 and I. I can't speak on behalf of the Academy,

828 01:05:44.170 --> 01:05:54.570 but I certainly think that there's a lot of will to be able to deliver the best possible care for our patients in the safest possible way.

829 01:05:54.570 --> 01:05:56.489 There was an interesting Lee,

830 01:05:56.489 --> 01:05:58.800 and again, I'm just a point.

831 01:05:58.800 --> 01:06:10.349 Others on the call to our reference health policy update that was sponsored by the Academy yesterday that reviewed a lot of not just some of the changes from CMS

832 01:06:10.349 --> 01:06:18.840 and other federal programs. But also some of the things that we might be able to incorporate into our practice longer term.

833 01:06:18.840 --> 01:06:24.519 So earlier someone had a question about remote patient monitoring and those codes for for billing,

834 01:06:24.519 --> 01:06:27.010 for example, are included on that webinars,

835 01:06:27.010 --> 01:06:35.170 so I would certainly certainly point you to the direction of the ASM website to be able to review some of those things.

836 01:06:37.469 --> 01:06:44.179 Yeah, so um, one of the other things going forward is going to be weather.

837 01:06:44.179 --> 01:06:46.409 Once this is all over.

838 01:06:46.409 --> 01:06:59.820 Whether CMS what they're going to do with the waivers that are that are available right now to us because some of the some of the hoops that CMS mandated

839 01:06:59.820 --> 01:07:04.289 which most insurance companies have picked up in my opinion,

840 01:07:04.289 --> 01:07:07.579 were insane increase costs. An actually chased.

841 01:07:07.579 --> 01:07:10.739 Young Fellows away from the sleep field.

842 01:07:10.739 --> 01:07:13.909 In other words, we were seeing patients,

843 01:07:13.909 --> 01:07:17.980 you know, for the 31 to 90 day followup,

844 01:07:17.980 --> 01:07:20.239 an most of those were,

845 01:07:20.239 --> 01:07:23.400 like, frankly, boring patients didn't like it.

846 01:07:23.400 --> 01:07:27.469 Doctors didn't like it and and it was really,

847 01:07:27.469 --> 01:07:38.369 really getting to. Everybody's as sort of anxiety and and I think the insurance industry in CMS needs to recognize that some of the.

848 01:07:38.369 --> 01:07:44.340 Some of the the waivers that that are in place right now are actually pretty good.

849 01:07:44.340 --> 01:07:49.679 In In other words, we don't need to go back to the way the way the way things were,

850 01:07:49.679 --> 01:07:55.000 and I don't know whether The Academy Is going to lobby them to let them know that.

851 01:07:55.000 --> 01:08:03.347 Things really are better now in terms of managing some of the patients video calls for example,

852 01:08:03.425 --> 01:08:06.860 or fabulous. Most patients really like them.

853 01:08:08.070 --> 01:08:13.190 Right, I think that if there can be a silver lining to the situation,

854 01:08:13.190 --> 01:08:17.220 it's learning how to provide more effective care on all fronts.

855 01:08:17.220 --> 01:08:19.420 Cost effective, more patient centered care.

856 01:08:19.420 --> 01:08:22.340 I mean, we can learn from those things,

857 01:08:22.340 --> 01:08:31.489 and I think there is at least some will to be able to retain those things that have made a positive difference in our practice.

858 01:08:31.489 --> 01:08:35.890 and I hope the Academy will advocate in that direction as well.

859 01:08:39.060 --> 01:08:47.770 So some other questions that I see here as anyone converted their sleep testing rooms to negative pressure rooms or gotten quote sort logistics and cost.

860 01:08:47.770 --> 01:08:50.789 I'm not sure that any of our panelists have,

861 01:08:50.789 --> 01:08:57.899 but any comments there. Um?

862 01:08:57.899 --> 01:09:06.079 And can you speak to mitigation risk strategies for text when adjusting face mask for leaks during a titration study?

863 01:09:07.899 --> 01:09:08.329 Most

864 01:09:08.329 --> 01:09:11.319 most places are not doing titration studies.

865 01:09:11.319 --> 01:09:13.319 At least we're not is.

866 01:09:13.412 --> 01:09:17.319 I don't know if anybody else is right now.

867 01:09:18.729 --> 01:09:22.270 We also are not at Penn.

868 01:09:22.270 --> 01:09:34.210 I think that, uhm. The one place you can look to for guidance is certainly the CDC website and also what's being done in hospitals with respiratory therapists or having

869 01:09:34.210 --> 01:09:37.949 to go in and work with some of these patients.

870 01:09:37.949 --> 01:09:47.300 That's our best available guidance right now and a lot of sleep labs are actually not equipped to provide negative pressure because their windowless rooms.

871 01:09:47.300 --> 01:09:50.670 There's really no outlet to let the pressure out.

872 01:09:52.750 --> 01:09:57.010 In the real problem is we don't know whether these patients are coded positive or not,

873 01:09:57.010 --> 01:10:00.199 and really the only way you could do that in that circumstance,

874 01:10:00.199 --> 01:10:04.720 'cause you're obviously going if you're adjusting their master going to get exposed to the exhaled air.

875 01:10:04.720 --> 01:10:11.899 Only thing you can possibly do is wear PE and how much PP you wear in that situation would have to be decided on by the lab.

876 01:10:12.489 --> 01:10:17.489 I. I'm glad too, depending on your practice situation,

877 01:10:17.489 --> 01:10:22.350 it might be a good time to get in contact with your colleagues.

878 01:10:22.350 --> 01:10:29.829 An ambulatory surgery centers. They're dealing with many of the same issues their patients are coming in from the community,

879 01:10:29.829 --> 01:10:32.449 and they will be undergoing airway procedures,

880 01:10:32.449 --> 01:10:34.319 outpatient airway procedures as well,

881 01:10:34.319 --> 01:10:36.939 and so at least in Northern California.

882 01:10:36.939 --> 01:10:41.430 I feel that the movement forward on how to deal with testing,

883 01:10:41.430 --> 01:10:44.220 for example, and symptoms screening is.

884 01:10:44.220 --> 01:10:46.010 Also happening in those venues,

885 01:10:46.010 --> 01:10:49.949 and it's useful to be able to sort of cross pollinate.

886 01:10:50.949 --> 01:10:57.069 Yeah, I think that an understanding this covert status of individual patients is going to be really important,

887 01:10:57.069 --> 01:10:58.770 so we've had you know,

888 01:10:58.770 --> 01:11:01.489 up front screening for symptoms and temperature checks,

889 01:11:01.489 --> 01:11:07.609 but now we also have the status of testing results and whether the tests were negative or not,

890 01:11:07.609 --> 01:11:09.649 the person have a known exposure,

891 01:11:09.649 --> 01:11:12.029 not do they have symptoms or not.

892 01:11:12.029 --> 01:11:22.229 So I think that the first thing to do before even talking about reopening a lab and having a tech come in contact with the patient is understanding What is

893 01:11:22.229 --> 01:11:32.069 this status. The testing status of the patient and of the end of the technologist with the understanding that you know what Karen said earlier that patients are most likely

894 01:11:32.069 --> 01:11:39.239 to shed virus in the one to three days before they develop symptoms and so it's a big challenge that you know,

895 01:11:39.239 --> 01:11:42.500 we don't want and we certainly don't want the same.

896 01:11:42.500 --> 01:11:44.460 Tech then going into multiple rooms.

897 01:11:44.460 --> 01:11:51.189 So there are lot of safeguards that would need to be put in place you offer one to one.

898 01:11:51.189 --> 01:11:54.140 Text patient do you leave downtime between studies?

899 01:11:54.140 --> 01:12:01.149 The room has a chance to just sit for 72 hours the way that home studies are being done.

900 01:12:01.149 --> 01:12:07.119 Right now there are a lot of logistics to consider before resumption of services.

901 01:12:07.119 --> 01:12:12.250 Yes, so clearly the background prevalence in that community and.

902 01:12:12.250 --> 01:12:14.090 Yeah.

903 01:12:14.609 --> 01:12:15.010 One

904 01:12:15.010 --> 01:12:24.590 of our missions is to improve the sleep of of society and one and I've been asked to give lectures to groups because insomnia,

905 01:12:24.590 --> 01:12:26.579 weird dreams, post traumatic stress.

906 01:12:26.579 --> 01:12:29.770 Nightmares are really common up there right now,

907 01:12:29.770 --> 01:12:40.939 and I suspect that in the next few years we're going to be seeing a lot of chronic sleep issues related to what is going on right now.

908 01:12:40.939 --> 01:12:46.140 And that's something that we as a field are going to have to.

909 01:12:46.140 --> 01:12:51.770 Deal with and we're still gonna have to deal with patients with Narc with narcolepsy.

910 01:12:51.770 --> 01:13:00.770 I had, you know we actually are continuing to to do PS GS and MSL teasing patients like that and we had one yesterday.

911 01:13:00.770 --> 01:13:04.194 In other words, we've been focusing on on sleep apnea,

912 01:13:04.247 --> 01:13:07.064 sleep breathing disorders, but the reality is,

913 01:13:07.140 --> 01:13:12.770 there's a. There's a much bigger mission that we in the sleep community actually haven't.

914 01:13:12.770 --> 01:13:13.520 We must

915 01:13:13.520 --> 01:13:14.640 not forget that.

916 01:13:15.340 --> 01:13:25.670 I agree with that mirror an we also we have technologies available that were not embraced before because the reimbursement protocols made them unviable's with things like Actigraphy,

917 01:13:25.670 --> 01:13:30.470 an even PV TS which are available through mobile apps and on websites.

918 01:13:30.470 --> 01:13:40.060 If some of those could be brought into production into practice that we have objective data when we assess our patients that avoids reliance on laboratories.

919 01:13:40.060 --> 01:13:45.970 I think that we need to really think outside the box in terms of patient assessments.

920 01:13:48.170 --> 01:13:50.310 In one uh, next question,

921 01:13:50.310 --> 01:13:54.579 uh, we didn't touch on home sleep studies um earlier,

922 01:13:54.579 --> 01:13:56.710 for the sake of time,

923 01:13:56.710 --> 01:13:59.270 but obviously that's a big issue.

924 01:13:59.270 --> 01:14:03.119 and I know in our lab we're mailing out,

925 01:14:03.119 --> 01:14:05.680 we don't have the disposable studies.

926 01:14:05.680 --> 01:14:09.520 We're mailing out ours with a 72 hour wait,

927 01:14:09.520 --> 01:14:15.500 which basically makes it take about 2 weeks for one study to get one.

928 01:14:15.500 --> 01:14:18.539 You know, one test per per device.

929 01:14:18.539 --> 01:14:27.739 So that that you know if we are ramping up those studies because that's what we can do I think we we definitely start hitting supply side issues.

930 01:14:27.739 --> 01:14:34.500 Based on that, I know we asked to buy some more devices and then there were none to be had.

931 01:14:34.500 --> 01:14:43.630 So if there's any comments on what to do with the homes and and as we potentially see more patients for quite a while using home studies,

932 01:14:43.630 --> 01:14:45.319 how to meet that demand?

933 01:14:46.319 --> 01:14:49.449 Doctor Johnson this is Irene from somewhere.

934 01:14:51.569 --> 01:14:56.180 I hello so I wanted to talk about um,

935 01:14:56.180 --> 01:15:00.789 since we're on the home seat testing at somewhere.

936 01:15:00.789 --> 01:15:03.350 I'm not sure everybody knows,

937 01:15:03.350 --> 01:15:08.979 but we are a middleware platform and we integrate with home.

938 01:15:08.979 --> 01:15:13.590 See tests we integrated with Airview an encore anywhere.

939 01:15:13.590 --> 01:15:25.090 So what we have. Seen from our somewhere users is that one of the things that they do is they use watch pads.

940 01:15:25.090 --> 01:15:34.520 The watch pad device and because we have an integration with them are as well from a workflow standpoint,

941 01:15:34.520 --> 01:15:49.630 this model actually works, so when you register a patient in your AMR it comes into somewhere and then we push the demographics to the device itself at that point.

942 01:15:49.630 --> 01:15:52.689 Um, in this model, UM,

943 01:15:52.689 --> 01:15:55.750 one of our health system.

944 01:15:55.750 --> 01:16:06.149 What they do now is that Itamar will actually Itamar will actually take care of the shipping,

945 01:16:06.149 --> 01:16:09.829 and they would ship the devices.

946 01:16:09.829 --> 01:16:16.689 We have the sleep centers and then at that point once the device comes back to,

947 01:16:16.689 --> 01:16:21.409 you know their their clinic and this is again from Itamar.

948 01:16:21.409 --> 01:16:26.130 This is just what we do with for a health system.

949 01:16:26.130 --> 01:16:33.000 Once the study is back then it goes into the physicians Q to review the tests,

950 01:16:33.000 --> 01:16:37.289 finalize the study annuar, move on to the next patient,

951 01:16:37.289 --> 01:16:40.300 right? So that's for the watch pads.

952 01:16:40.300 --> 01:16:45.800 Devices now we're about to integrate with the watch pad one direct.

953 01:16:45.800 --> 01:16:54.960 I'm sorry the watch Patton one and so the integration is going to be again from the EMR to somewhere,

954 01:16:54.960 --> 01:16:57.250 somewhere, will or E tomorrow.

955 01:16:57.250 --> 01:17:01.369 Will ship advice on behalf of the sleep center,

956 01:17:01.369 --> 01:17:04.569 then it goes into the physicians inbox.

957 01:17:04.569 --> 01:17:06.859 Once a study as collected.

958 01:17:06.859 --> 01:17:12.220 So we've seen that we've seen other health system that are.

959 01:17:12.220 --> 01:17:24.010 The same following the same model and for non disposable disposable devices such as the Knox or the Alice Night 1 device.

960 01:17:24.010 --> 01:17:29.909 If the sleep center have the devices or the inventory again,

961 01:17:29.909 --> 01:17:36.880 there's no patient contact. You will use the shipping module within the platform.

962 01:17:36.880 --> 01:17:42.810 Send it out with video or do a telemedicine or Telehealth.

963 01:17:42.810 --> 01:17:50.274 Just to make sure that the patient is actually using it or or educate them.

964 01:17:50.371 --> 01:18:00.020 Then once the devices back they ship it back and at that point it goes to the position for a review.

965 01:18:00.020 --> 01:18:08.510 So that's what we've been doing from from somewhere and a lot of our customers are.

966 01:18:08.510 --> 01:18:12.239 Are following this model today and at the same time.

967 01:18:12.239 --> 01:18:14.479 Once you know they died once,

968 01:18:14.479 --> 01:18:17.090 if the patient is positive auto pap,

969 01:18:17.090 --> 01:18:22.680 you know the order for auto pad and because we have an integration with both,

970 01:18:22.680 --> 01:18:26.409 you'll be able to see not only the diagnostic study,

971 01:18:26.409 --> 01:18:30.140 but you'll be able to see their compliance in somewhere.

972 01:18:32.270 --> 01:18:36.350 Thank you in any any of our other panelists with comments about the home sleep studies.

973 01:18:39.140 --> 01:18:39.600 No,

974 01:18:39.600 --> 01:18:46.121 there there was a really good question about risk of infection to bed partners,

975 01:18:46.194 --> 01:18:50.279 which is a higher up and and what what?

976 01:18:50.279 --> 01:19:04.197 Our recommendations and I've had some patients like this an basically if the patient has a mild to moderate OSA and has Cove is coughing a little bit of Wheezing,

977 01:19:04.274 --> 01:19:07.270 maybe headache, fever, but. Other than that,

978 01:19:07.270 --> 01:19:12.470 there OK? Let's say they haven't hi less than than 15 or 10.

979 01:19:12.470 --> 01:19:20.539 I tell them not to use the C Pap unless there's something to get rid of the viruses.

980 01:19:20.539 --> 01:19:23.789 And so that may be the best approach.

981 01:19:23.789 --> 01:19:28.659 And if the patients are a little bit more severe and Robert,

982 01:19:28.659 --> 01:19:31.100 Thomas and I had talked about,

983 01:19:31.100 --> 01:19:35.970 this is maybe those patients that they become a little bit oxic.

984 01:19:35.970 --> 01:19:39.472 You might be able to order oxygen for them,

985 01:19:39.546 --> 01:19:43.729 because what we really don't know in the home setting,

986 01:19:43.804 --> 01:19:50.609 how dangerous the current C Pap Circuit start to bed partners and other people in the home.

987 01:19:50.695 --> 01:19:54.569 Really sick they should be going to hospital.

988 01:19:54.569 --> 01:19:54.909 Yeah,

989 01:19:54.909 --> 01:19:56.600 that's exactly what we recommended.

990 01:19:56.600 --> 01:19:58.289 Mirror in the ASM statement,

991 01:19:58.289 --> 01:20:01.670 which was basically a risk benefit analysis to look at.

992 01:20:01.670 --> 01:20:05.390 What is the risk of transmission to others in the household?

993 01:20:05.390 --> 01:20:15.529 Is the patient able to self isolate and or they living in close quarters in a multi unit dwelling with a lot of vulnerable people nearby and so forth and

994 01:20:15.529 --> 01:20:20.260 then the other piece of it is how danger is it for the dangerous?

995 01:20:20.260 --> 01:20:23.640 Is it for them to stop the see pap therapy?

996 01:20:23.640 --> 01:20:26.779 So if it's? You know somebody with a lethal arrhythmia,

997 01:20:26.779 --> 01:20:31.189 or, uhm, you know an older person at risk of falling down and hurting themselves.

998 01:20:31.189 --> 01:20:35.010 If they miss a few nights of their C Pap and so forth,

999 01:20:35.010 --> 01:20:40.600 and that those decisions are best made on an individual case by case basis rather than a blanket policy.

1000 01:20:40.600 --> 01:20:42.649 But the physician be involved in that,

1001 01:20:42.649 --> 01:20:45.500 that type of decision making.

1002 01:20:45.500 --> 01:20:50.720 So the really severe ones with profound hypoxia who need to have some kind of treatment,

1003 01:20:50.720 --> 01:20:52.350 if they can save, isolate,

1004 01:20:52.350 --> 01:20:54.949 and find a way to continue their treatment,

1005 01:20:54.949 --> 01:21:01.470 that would be great. And then the milder ones who have to stop for awhile if they get very symptomatic,

1006 01:21:01.470 --> 01:21:03.430 then consider other options prevent therapy,

1007 01:21:03.430 --> 01:21:05.060 position treatment and so forth.

1008 01:21:07.430 --> 01:21:10.300 So I have not had any patient need it yet,

1009 01:21:10.300 --> 01:21:12.920 but if anyone son event later.

1010 01:21:12.920 --> 01:21:14.489 And I love so covered.

1011 01:21:14.489 --> 01:21:18.869 I think that person should be admitted because you just can't take a risk.

1012 01:21:19.430 --> 01:21:22.189 Yeah, so um, we had a,

1013 01:21:22.189 --> 01:21:25.409 uh, a patient with obesity hypoventilation syndrome,

1014 01:21:25.409 --> 01:21:27.761 who had very severe kovid,

1015 01:21:27.845 --> 01:21:33.039 was in the hospital, and after about 1314 days he was on.

1016 01:21:33.130 --> 01:21:41.510 He was being ventilated and after about 13 or 414 days when things look like they got better,

1017 01:21:41.510 --> 01:21:45.189 he was excavated and then he stopped breathing.

1018 01:21:45.189 --> 01:21:48.409 An basically died. And so you know,

1019 01:21:48.409 --> 01:21:50.630 people who are. Immensely obese.

1020 01:21:50.630 --> 01:21:54.849 Uhm, you know, excavating them is a huge big deal.

1021 01:21:54.942 --> 01:21:58.140 And it's, you know their Airways at risk.

1022 01:21:58.140 --> 01:22:07.377 It's all in the flame you pulled out the ET tube and they are in really bad clinical situation at that point.

1023 01:22:07.457 --> 01:22:13.149 And maybe they should instantly be started on an Ivy that I'm not sure

1024 01:22:13.149 --> 01:22:13.989 of yet.

1025 01:22:16.739 --> 01:22:30.720 I see a another question about um homesick testing specifically with pediatric population anymore comments about whether it's time specially for older kids to start doing home sleep studies on

1026 01:22:30.720 --> 01:22:38.380 any of them. So

1027 01:22:38.380 --> 01:22:43.529 coming from a person who does not do pediatric sleep medicines basically.

1028 01:22:43.529 --> 01:22:45.979 Oh, I think it's just a.

1029 01:22:45.979 --> 01:22:49.640 It's time that it ever since.

1030 01:22:49.640 --> 01:22:52.319 Do home sleep testing. It clearly will be kid,

1031 01:22:52.319 --> 01:22:54.989 so are not appropriate. But uh,

1032 01:22:54.989 --> 01:22:58.479 the technologies become good enough to at least rule in.

1033 01:22:58.479 --> 01:23:03.359 You may not be able to rule out as well that I accept that.

1034 01:23:03.359 --> 01:23:08.390 Clearly you can rule in someone who has substantial sleep disordered breathing.

1035 01:23:08.390 --> 01:23:10.899 After the first few years of life,

1036 01:23:10.899 --> 01:23:14.989 as long as. Be smaller and more compact devices.

1037 01:23:14.989 --> 01:23:19.590 Stick onto you and give you the data you want.

1038 01:23:19.590 --> 01:23:27.170 I think it's just the formula recommendations that PS is the gold standard and it should be gold all the time.

1039 01:23:27.170 --> 01:23:32.819 I think it's, uh, interfering with the forward movement of the pediatric sleep areas.

1040 01:23:32.819 --> 01:23:37.239 That's my personal opinion, but like I said I do not practice pediatric,

1041 01:23:37.239 --> 01:23:37.579 which

1042 01:23:37.579 --> 01:23:43.020 I agree with that and I will also chime in as somebody who doesn't practice Pediatrics.

1043 01:23:43.020 --> 01:23:52.199 That one of the things we may need to be looking at is what should the diagnostic criteria before qualifying an event as a hypothenar napping on?

1044 01:23:52.199 --> 01:23:55.600 Do we still stick with the Medicare rule of 4%

1045 01:23:55.600 --> 01:24:03.439 and should that apply to young children who may not have those BMI's and whose events may be more related to tonsillar hypertrophy?

1046 01:24:03.439 --> 01:24:06.630 Recognizing there's a higher prevalence of obesity and so forth,

1047 01:24:06.630 --> 01:24:08.229 but our 2% in 3%

1048 01:24:08.229 --> 01:24:11.420 and 1% events still significant and contributing to daytime functioning.

1049 01:24:11.420 --> 01:24:17.800 So I think we need to move away from the formulaic approach and be much more patient centered when we

1050 01:24:17.800 --> 01:24:18.750 when we move

1051 01:24:18.750 --> 01:24:21.630 in that direction. I just

1052 01:24:21.630 --> 01:24:28.289 wanted to add a someone who does practice in Pediatrics that I agree in particular with those comments,

1053 01:24:28.289 --> 01:24:31.619 but also what doctor kind of Harry mentioned earlier,

1054 01:24:31.619 --> 01:24:42.720 which is, you know, Pediatrics is zero to 18 and and not every pediatric patient is the same and there can be a lot of complex clinical complexity with some

1055 01:24:42.720 --> 01:24:51.229 patients, but I think that in particular looking at the adolescent age group and understanding what the role of home testing could be,

1056 01:24:51.229 --> 01:24:59.869 especially in consideration of. Sleep patterns of adolescents and things like that that this could be a great place to start I also agree with doctor Thomas.

1057 01:24:59.869 --> 01:25:03.279 You may not be able to rule out an ever melody,

1058 01:25:03.279 --> 01:25:09.479 but you certainly can start to use home testing to rule in or understand more about sleep in that population.

1059 01:25:11.109 --> 01:25:16.960 I'm almost concerned that we're gonna start doing this and then the insurers aren't going to pay for it.

1060 01:25:16.960 --> 01:25:18.500 Um, in Pediatrics. I mean,

1061 01:25:18.500 --> 01:25:20.659 we all know how perverse they are.

1062 01:25:20.659 --> 01:25:22.199 Maybe I'm wrong about this,

1063 01:25:22.199 --> 01:25:26.050 but Our wear off and doing things like repeats,

1064 01:25:26.050 --> 01:25:31.313 sleep studies to re up children see Pap prescriptions if their adherence isn't perfect,

1065 01:25:31.377 --> 01:25:38.100 which is really the cost benefit of that is so low we know they have established sleep apnea we.

1066 01:25:38.100 --> 01:25:42.840 I'm always leery of using adult criterion kids because we run into this.

1067 01:25:42.840 --> 01:25:45.760 For example all the time with adherence data.

1068 01:25:45.760 --> 01:25:53.140 You're taking a child with Down syndrome and expecting them to be as inherent in the first couple of months.

1069 01:25:53.140 --> 01:25:59.960 As like a 60 year old engineer and the home care company will take away the machine.

1070 01:25:59.960 --> 01:26:02.760 Uh, if they can't hit those criteria,

1071 01:26:02.760 --> 01:26:07.180 I worry with ages T we're going to get some pushback,

1072 01:26:07.180 --> 01:26:11.010 weirdly enough. Yes,

1073 01:26:11.010 --> 01:26:17.869 someone who takes care of those Down syndrome patients once they age out and reached the adult population.

1074 01:26:17.869 --> 01:26:23.579 I completely agree with you and we need some some real help with paper guidelines.

1075 01:26:23.579 --> 01:26:24.350 Glass half

1076 01:26:24.350 --> 01:26:30.819 full though at times like these require creativity to be able to take care of our patients.

1077 01:26:30.819 --> 01:26:41.880 and I think we can as a field show that we can provide value to patients and a wider variety of settings and I think it's on us as.

1078 01:26:41.880 --> 01:26:44.449 As the sleep experts to be able to do that.

1079 01:26:45.050 --> 01:26:47.109 Yeah, I agree with that.

1080 01:26:47.109 --> 01:26:51.279 I mean, we need to advocate for our patients in the way these policies are created.

1081 01:26:51.279 --> 01:26:58.039 And that's that's what the ASM is trying to do during the pandemic as well.

1082 01:26:58.039 --> 01:26:58.460 And

1083 01:26:58.460 --> 01:27:06.500 I see some questions about cobra testing prior to sleep studies with comments of doing it two days before,

1084 01:27:06.500 --> 01:27:09.039 four days before needing rapid testing.

1085 01:27:09.039 --> 01:27:19.189 You know, I think there from my standpoint when I've heard in my institution is the debate of if you get it early enough,

1086 01:27:19.189 --> 01:27:28.069 do you get a chance to test another person and actually fill the bad versus if you wait till last minute?

1087 01:27:28.069 --> 01:27:32.789 So appreciate anyone else's comment about what would their ideal be.

1088 01:27:32.789 --> 01:27:36.579 Or what are they doing as related to testing?

1089 01:27:41.090 --> 01:27:46.359 My personal choice is that it gets done a rapid test before the sleep study.

1090 01:27:46.359 --> 01:27:50.470 Sure, some some we will lose a few studies because.

1091 01:27:50.470 --> 01:27:56.939 Is, uh. Surprise positive. But if it's you know how many days before can you do?

1092 01:27:56.939 --> 01:27:59.550 Just think of the burden to the.

1093 01:27:59.550 --> 01:28:03.460 To the patient, where would they test it?

1094 01:28:03.460 --> 01:28:09.920 Peace PS office. Now if there is not if when there is ultimately do-it-yourself home test,

1095 01:28:09.920 --> 01:28:13.680 which is accurate, that would be the solution.

1096 01:28:13.680 --> 01:28:19.079 But we are going to be in this intermediate grey zone where that is not going to be available and.

1097 01:28:19.079 --> 01:28:25.359 We have to make some decision as to how inconvenient the whole process will be.

1098 01:28:25.359 --> 01:28:29.199 For the moment, I'm thinking that it gets done.

1099 01:28:29.199 --> 01:28:32.539 When they come in, and perhaps if it's a diagnostic study,

1100 01:28:32.539 --> 01:28:35.350 it can continue. One

1101 01:28:35.350 --> 01:28:39.319 other issue I think would testing is is how is you know?

1102 01:28:39.319 --> 01:28:41.640 Is it completely paid for by insurance?

1103 01:28:41.640 --> 01:28:44.949 Is it rolled into the sleep study payment you know?

1104 01:28:44.949 --> 01:28:47.270 Is there any issues related to that?

1105 01:28:47.270 --> 01:28:50.909 Are people going to get a bill for $500 or something?

1106 01:28:50.909 --> 01:28:54.979 You know something? Just for that that test night I I don't know

1107 01:28:54.979 --> 01:28:58.350 if it's a role in that would be really really hard

1108 01:28:58.350 --> 01:29:00.489 to do. Yeah, I I mean so.

1109 01:29:00.489 --> 01:29:04.489 A lot of what we're discussing now is is sort of.

1110 01:29:04.489 --> 01:29:06.909 The failure of American Medison,

1111 01:29:06.909 --> 01:29:21.399 just like there was a failure to deal with this pandemic and see Ms has been has been telling doctors how to practice and how to build an doctors have

1112 01:29:21.399 --> 01:29:27.859 sort of lost the. You know they're not controlling Medison anymore.

1113 01:29:27.859 --> 01:29:31.720 CMS is defining diseases. It's defining what tests you can.

1114 01:29:31.720 --> 01:29:34.810 You can do. This is this is a.

1115 01:29:34.810 --> 01:29:44.069 This is a really big problem in the US and maybe one of the outcomes of all of this is going to be you-know-what.

1116 01:29:44.069 --> 01:29:46.390 Maybe we should trust our doctors.

1117 01:29:46.390 --> 01:29:50.250 Maybe we should trust them in terms of running things.

1118 01:29:50.250 --> 01:29:57.914 I actually had a long discussion about this about a year ago with our representative in Congress about this issue,

1119 01:29:57.970 --> 01:30:00.154 where where. Congress, you know,

1120 01:30:00.260 --> 01:30:05.372 runs CNS and a lot of the rules about diagnosis and treatment.

1121 01:30:05.458 --> 01:30:14.449 They call the shots for the whole country an that I think in the long run is not gonna be a good thing.

1122 01:30:15.279 --> 01:30:18.079 If I can just chime in real quick,

1123 01:30:18.079 --> 01:30:28.579 I think this is a really interesting discussion around how we can take control of the field of the industry in a way that's meaningful and just to Harken back

1124 01:30:28.579 --> 01:30:34.880 to the comments I made earlier that the world has changed and which of those changes can persist.

1125 01:30:34.880 --> 01:30:39.779 This is a really good time's like Doctor Krieger was saying to think about.

1126 01:30:39.779 --> 01:30:42.930 First and foremost what is best for the patient.

1127 01:30:42.930 --> 01:30:46.090 And then Secondly, what's best for our health system.

1128 01:30:46.090 --> 01:30:49.109 For its viability today and for its long-term viability,

1129 01:30:49.109 --> 01:30:54.130 I have the privilege of not just managing the medical affairs function at res Med,

1130 01:30:54.130 --> 01:30:56.140 but also managing our government affairs,

1131 01:30:56.140 --> 01:31:01.500 and I've had the pleasure of working with a lot of the folks on this call.

1132 01:31:01.500 --> 01:31:03.180 I heard Lisa Wolf earlier,

1133 01:31:03.180 --> 01:31:09.210 for example, chime in on some of these payment policy and reimbursement issues that just don't make sense.

1134 01:31:09.210 --> 01:31:11.220 And maybe, after all of this,

1135 01:31:11.220 --> 01:31:16.789 There's an opportunity for everyone from patient to provider to industry to come together and help.

1136 01:31:16.789 --> 01:31:19.369 Make the changes that are that makes sense.

1137 01:31:19.369 --> 01:31:27.739 Stick those that don't revisit them and start to craft a healthcare system that works for the good of the patients in ways that hasn't before.

1138 01:31:27.739 --> 01:31:32.569 This. Maybe this is an opportunity to sort of reset the playing field a bit.

1139 01:31:37.189 --> 01:31:40.220 I agree with that. I think that's a great point,

1140 01:31:40.220 --> 01:31:48.100 and one of the other things is pandemic has done is really bring to the surface all the different ways our health care system hasn't worked,

1141 01:31:48.100 --> 01:31:54.159 including all the disparities on the rates at with patients are dying who are from marginalized groups lower socioeconomic strata.

1142 01:31:54.159 --> 01:31:57.789 We really do need to create a system that benefits you know,

1143 01:31:57.789 --> 01:31:59.980 the greatest good for the greatest number,

1144 01:32:00.033 --> 01:32:01.729 which is what this pandemic has,

1145 01:32:01.729 --> 01:32:02.949 has brought to light.

1146 01:32:07.260 --> 01:32:08.989 I see a question. Here.

1147 01:32:08.989 --> 01:32:13.609 Is any sleep labs in Massachusetts currently doing in lab testing?

1148 01:32:13.609 --> 01:32:17.029 We're not open for in lab testing right now,

1149 01:32:17.029 --> 01:32:20.829 although working on are planning to try to be ready.

1150 01:32:20.829 --> 01:32:23.869 Once Massachusetts as sort of ready for that,

1151 01:32:23.869 --> 01:32:28.430 but I've heard of some private places in Connecticut over our border.

1152 01:32:28.430 --> 01:32:30.329 Do you know of any

1153 01:32:30.329 --> 01:32:32.609 doctor Thomas? No, just home testing.

1154 01:32:32.609 --> 01:32:35.270 I know that if anyone doing leftists,

1155 01:32:35.270 --> 01:32:39.449 so in so at Yale were still doing in lab testing,

1156 01:32:39.449 --> 01:32:43.250 but we're fairly careful about who we do it on.

1157 01:32:43.250 --> 01:32:47.029 And so. When, when, when a patient's name comes on,

1158 01:32:47.029 --> 01:32:54.529 we will frequently look at the referral in a lot of detail and sometimes will call up the patient than,

1159 01:32:54.529 --> 01:33:00.159 say, look, do you really want to come in for a sleep test right now,

1160 01:33:00.159 --> 01:33:04.279 or would you rather wait an most patients would rather wait,

1161 01:33:04.279 --> 01:33:05.409 they don't want

1162 01:33:05.409 --> 01:33:07.279 to come in right now,

1163 01:33:07.279 --> 01:33:09.295 so. The end of the day.

1164 01:33:09.372 --> 01:33:11.877 It's the patient who's going to decide.

1165 01:33:11.962 --> 01:33:13.420 That's what we're

1166 01:33:13.420 --> 01:33:17.170 doing here. I don't know what's happening in other parts of the state.

1167 01:33:19.159 --> 01:33:24.500 And I see a number of comments about Um PPD choice.

1168 01:33:24.500 --> 01:33:28.380 Um Kaya, 90 fives and just messing gloves.

1169 01:33:28.380 --> 01:33:32.260 Uhm? And whether or not to use gowns,

1170 01:33:32.260 --> 01:33:35.170 any any comments on on PPY?

1171 01:33:35.840 --> 01:33:40.399 I think you're dealing with a titration,

1172 01:33:40.399 --> 01:33:44.979 and 95 is probably wise.

1173 01:33:44.979 --> 01:33:51.979 But for a diagnostic, perhaps just ask gloves.

1174 01:33:51.979 --> 01:33:54.359 It's more gut. I don't have data obviously.

1175 01:33:54.949 --> 01:33:57.439 Yes, and we were with the Academy.

1176 01:33:57.439 --> 01:34:01.640 We were pretty conservative with our recommendations as well that.

1177 01:34:01.640 --> 01:34:06.956 Because with C Pap, it's not just whether there's appreciable leak.

1178 01:34:07.033 --> 01:34:11.369 It's that we accept 2240 liters per minute of air as OK,

1179 01:34:11.369 --> 01:34:17.710 and so there's definitely if that patient is presymptomatic and has the potential for transmission,

1180 01:34:17.710 --> 01:34:29.796 then we're looking at probably viral dispersion distances that exceed the six foot limit and then having to get in there and actually adjust the mass can be really in

1181 01:34:29.876 --> 01:34:32.520 close proximity with the patient.

1182 01:34:32.520 --> 01:34:35.097 I think is a. Uhm,

1183 01:34:35.153 --> 01:34:37.500 you know it's it's a dangerous proposition.

1184 01:34:37.500 --> 01:34:39.470 And so if the studies apps.

1185 01:34:39.470 --> 01:34:43.409 This is why we advocated for lab closure for Pap Titration Studies.

1186 01:34:43.409 --> 01:34:53.920 And if their resume than they need to be done with a lot of caution and absolutely with I mean it would be great if negative pressure rooms were available.

1187 01:34:53.920 --> 01:34:59.729 Along with the a 95 masks and with face Shields and gallons in the full,

1188 01:34:59.729 --> 01:35:03.979 but unfortunately we're in an environment where that's not uniformly available.

1189 01:35:05.189 --> 01:35:08.770 And what if we do have negative testing?

1190 01:35:08.770 --> 01:35:15.090 Negative pressure rooms. Now if you have a negative viral test done that day or the negative,

1191 01:35:15.090 --> 01:35:16.210 this data that

1192 01:35:16.210 --> 01:35:22.159 you hold it right so that in the clinical environment you can have a negative test.

1193 01:35:22.159 --> 01:35:27.909 That's a false negative, and those rates can be anywhere from 20 to 33%.

1194 01:35:27.909 --> 01:35:33.619 Um? So a single negative test is probably not sufficient to rule it out,

1195 01:35:33.619 --> 01:35:36.380 especially if the person has other risk factors.

1196 01:35:36.380 --> 01:35:39.479 If there's symptomatic. If they had a known contact,

1197 01:35:39.479 --> 01:35:42.930 and so at least two negative tests in a row,

1198 01:35:42.930 --> 01:35:48.800 and I believe the CDC says at least 24 hours apart along with an absence of symptoms,

1199 01:35:48.800 --> 01:35:51.560 certainly being afebrile and not reporting known Contacts,

1200 01:35:51.560 --> 01:35:53.279 and they're not in quarantine,

1201 01:35:53.279 --> 01:35:54.560 etc. Although

1202 01:35:54.560 --> 01:35:59.069 I would say that you know that's in general for the hospitalise patients,

1203 01:35:59.069 --> 01:36:02.890 so if you have a person at home who you ask,

1204 01:36:02.890 --> 01:36:04.619 have you had any fever?

1205 01:36:04.619 --> 01:36:07.050 Have you had any symptoms you know?

1206 01:36:07.050 --> 01:36:09.130 Do you know anyone around you?

1207 01:36:09.130 --> 01:36:16.770 You know that is particularly sick and they answered no to all those screening questions and then you have a negative test,

1208 01:36:16.770 --> 01:36:19.539 and when they show up at your door,

1209 01:36:19.539 --> 01:36:21.970 your checking for fever one more time?

1210 01:36:21.970 --> 01:36:24.800 You know in that population that should be.

1211 01:36:24.800 --> 01:36:26.579 Low risk, you know what?

1212 01:36:26.579 --> 01:36:33.699 What can you do? and I think some of the answer goes back to what is the community transmission rate.

1213 01:36:33.699 --> 01:36:42.960 You know? I think we're finding out of the we're now testing every single case that comes into the hospital for Covad and finding about 5%

1214 01:36:42.960 --> 01:36:49.010 being positive, even if they're coming in for things like and a sithis or something totally random.

1215 01:36:49.010 --> 01:36:55.130 So I think some of it does depend on what is the rates out in the community.

1216 01:36:55.130 --> 01:36:57.510 That might sway that pretest probability,

1217 01:36:57.510 --> 01:37:00.279 and so it is there you know.

1218 01:37:00.279 --> 01:37:06.609 Is there a level at which we do sort of trust those results and do it,

1219 01:37:06.609 --> 01:37:08.609 you know? I'd say is,

1220 01:37:08.609 --> 01:37:11.399 you know, in our hospital right now,

1221 01:37:11.399 --> 01:37:20.180 if there's a patient that is on Bipap in RC Pap at home and they come into the hospital for something else.

1222 01:37:20.180 --> 01:37:22.569 And again their code but negative.

1223 01:37:22.569 --> 01:37:25.760 They aren't put in a special precaution room,

1224 01:37:25.760 --> 01:37:28.560 so I imagine given our infectious disease,

1225 01:37:28.560 --> 01:37:38.560 who is usually very conservative about about things given they don't feel that those people need to be in a special situation or with special.

1226 01:37:38.560 --> 01:37:48.640 Precautions that they will simply tell us that we can't use the full error civilization precautions if we have the testing in place that's negative.

1227 01:37:51.350 --> 01:37:51.670 I

1228 01:37:51.670 --> 01:37:55.239 think we will have to see what the EMT folks do.

1229 01:37:55.239 --> 01:37:59.590 I'm sure they're putting a Heckler thought into this.

1230 01:37:59.590 --> 01:38:02.229 It probably will be coming up with guidelines soon,

1231 01:38:02.229 --> 01:38:09.046 I'm sure. Our problems are similar.

1232 01:38:09.184 --> 01:38:09.869 Yeah,

1233 01:38:09.869 --> 01:38:15.529 I mean, I think you know PTI labs radiology procedures that need sedation and you know into Bashan.

1234 01:38:15.529 --> 01:38:24.000 I mean, I think there there are a lot of similar groups were trying to get a work group together at our hospital with all those groups,

1235 01:38:24.000 --> 01:38:28.710 so that were kind of treated on the same plate as opposed to you know,

1236 01:38:28.710 --> 01:38:34.989 all living in our own silo is trying to come up with the answers to these sort of similar problems.

1237 01:38:34.989 --> 01:38:40.390 I think obviously there's a Munich issues that then this leap pads and our long tests and.

1238 01:38:40.390 --> 01:38:43.289 And you know in different different other issues,

1239 01:38:43.289 --> 01:38:52.369 but I think there's some basic issues of if you're coming into an outpatient procedure that has a nearest lization risk and you tested negative,

1240 01:38:52.369 --> 01:38:53.819 what precaution to use?

1241 01:38:55.939 --> 01:39:05.390 I just want to Echo Karen what you said this is Shannon in that it's it's really a great opportunity to get start communicating with your local anesthesia groups,

1242 01:39:05.390 --> 01:39:15.170 especially at your hospitals because they're dealing with putting people on ventilators for outpatient procedures that these folks are coming in is while they're gearing up to do this now.

1243 01:39:15.170 --> 01:39:16.800 At least in Northern California,

1244 01:39:16.800 --> 01:39:20.390 have patients come in for day procedures and then go home.

1245 01:39:20.390 --> 01:39:25.609 And you're exactly right. They're dealing with the same issues and they I'm reading one now,

1246 01:39:25.609 --> 01:39:31.100 I. I have well formed protocols or what to do vis-a-vis testing what level of air,

1247 01:39:31.100 --> 01:39:41.390 civilization and droplet precautions to use based on testing and symptoms and the one I'm viewing now is one where patients would need to be tested within four days of

1248 01:39:41.390 --> 01:39:47.949 coming into an ASE. Has a few people have mentioned four days seems awfully lying to me.

1249 01:39:47.949 --> 01:39:49.739 Maybe that should be shorter,

1250 01:39:49.739 --> 01:39:55.850 but even in a patient without symptoms and with a negative tasked with a low risk procedure,

1251 01:39:55.850 --> 01:40:02.130 either with general anesthesia or or without with local standard pbe would be recommended but but.

1252 01:40:02.130 --> 01:40:08.048 The folks in the room with the patient have the option to Danann 95 or a pepper if they,

1253 01:40:08.105 --> 01:40:09.710 if they judge the situation,

1254 01:40:09.710 --> 01:40:12.239 merits it. And as someone else brought up,

1255 01:40:12.239 --> 01:40:16.350 we also have to remember we need to keep our healthcare workforce safe.

1256 01:40:16.350 --> 01:40:20.770 And so if you have sleep technologists or respiratory therapists with certain risk factors,

1257 01:40:20.770 --> 01:40:22.670 that may also be worth considering.

1258 01:40:24.300 --> 01:40:25.760 Yeah, I don't

1259 01:40:25.760 --> 01:40:30.760 get that. The greatest good for the greatest number an having an available workforce.

1260 01:40:30.760 --> 01:40:36.460 Stay as healthy as possible so they can continue being service for the rest of our patients.

1261 01:40:36.460 --> 01:40:38.470 You know there as valuable resources.

1262 01:40:38.470 --> 01:40:43.159 Anything we have. So I think that it needs to be made a priority.

1263 01:40:44.090 --> 01:40:51.699 You know, I think one other issue is a CDC currently does not recommend any health care worker testing unless they're symptomatic,

1264 01:40:51.699 --> 01:41:02.079 so you know we do have the issue of patients being afraid to come in for the study because it might be the health care worker giving giving it so,

1265 01:41:02.079 --> 01:41:09.750 specially if there is a health care worker that's going to spend up along time up close to someone's head and face.

1266 01:41:09.750 --> 01:41:12.060 It may may give the patient.

1267 01:41:12.060 --> 01:41:19.760 Also, you know that sense that they won't pick it up from the tech who may or may not be,

1268 01:41:19.760 --> 01:41:22.579 you know, a cobet carrier.

1269 01:41:22.579 --> 01:41:23.260 Great

1270 01:41:23.260 --> 01:41:31.550 card there, probably some people on this session or from other countries.

1271 01:41:31.550 --> 01:41:39.739 How do we sort of get them to give us some information about what their experiences?

1272 01:41:39.739 --> 01:41:42.170 Yeah. Go ahead and

1273 01:41:42.170 --> 01:41:44.439 there are particular people at this point.

1274 01:41:44.439 --> 01:41:50.289 I'd say now that we're late in this if they want to unmute themselves and and wanna try

1275 01:41:50.289 --> 01:41:51.939 to chime in with our.

1276 01:41:51.939 --> 01:41:54.159 Are they able to unmute themselves?

1277 01:41:54.159 --> 01:41:57.270 I believe I made it so they could OK,

1278 01:41:57.333 --> 01:42:00.449 so if there's anybody there from another country,

1279 01:42:00.449 --> 01:42:02.670 we'd love to hear from you.

1280 01:42:05.600 --> 01:42:09.659 I can also give a perspective from other

1281 01:42:09.659 --> 01:42:11.189 countries from my.

1282 01:42:11.189 --> 01:42:19.899 Michael. Hello. Imagine.

1283 01:42:19.899 --> 01:42:30.579 Owner. That became chaotic.

1284 01:42:31.390 --> 01:42:33.460 OK,

1285 01:42:33.460 --> 01:42:44.979 so. I guess. Is there someone there who can unmute themselves from another country?

1286 01:42:44.979 --> 01:42:45.500 I.

1287 01:42:46.649 --> 01:42:49.420 Yeah, use the raise hand function.

1288 01:42:49.420 --> 01:42:53.380 And Karen can unmute you specifically.

1289 01:42:53.380 --> 01:42:53.720 I

1290 01:42:53.720 --> 01:42:55.439 I think I'm a muted.

1291 01:42:55.439 --> 01:42:57.149 Can you hear me? Yeah,

1292 01:42:57.149 --> 01:43:02.268 I can hear you yeah real quick while we wait for others to chime in.

1293 01:43:02.369 --> 01:43:04.010 I was on a call.

1294 01:43:04.010 --> 01:43:07.789 As I mentioned earlier with some of the folks in Europe.

1295 01:43:07.789 --> 01:43:09.840 And just like in the US,

1296 01:43:09.840 --> 01:43:13.619 sleep labs have essentially closed down in the countries hit hardest.

1297 01:43:13.619 --> 01:43:15.680 Germany, France, Spain, Italy, the UK,

1298 01:43:15.680 --> 01:43:23.849 etc. Germany this week is going to begin slowly opening a few sleep labs in selected areas of the country that have been.

1299 01:43:23.945 --> 01:43:36.609 It was far and they're going to do very slow deliberate rollout using very similar guidelines as the ASM guidelines to slowly reopen,

1300 01:43:36.609 --> 01:43:41.149 not just sleep labs, but other elective procedures.

1301 01:43:41.149 --> 01:43:42.279 Another ambulatory

1302 01:43:42.279 --> 01:43:54.970 services. Good. So I think this might be a good time to come to move on to our next zoom call.

1303 01:43:54.970 --> 01:44:00.090 Believe it or not I have another zoom call with pulmonary critical care,

1304 01:44:00.090 --> 01:44:02.449 uh, that starts in 14 minutes.

1305 01:44:02.449 --> 01:44:11.199 So do you? Do we think it's a good idea to have another one of these in about a month?

1306 01:44:11.199 --> 01:44:15.420 To see what kind of progress is sort of going on,

1307 01:44:15.420 --> 01:44:17.729 so let's go ahead and Carne.

1308 01:44:17.729 --> 01:44:19.649 Should we plan for another

1309 01:44:19.649 --> 01:44:26.000 month? You're muted. You muted yourself

1310 01:44:26.000 --> 01:44:26.850 there IJ

1311 01:44:26.850 --> 01:44:28.960 sure. Alright, so let's plan

1312 01:44:28.960 --> 01:44:34.880 on about another month to get a sense of of how things are going.

1313 01:44:36.369 --> 01:44:36.729 And

1314 01:44:36.729 --> 01:44:39.970 we do have a survey I think are in

1315 01:44:39.970 --> 01:44:47.399 wants to mention. Um, so I did um post a survey both in the chat and on the slides.

1316 01:44:47.399 --> 01:44:50.170 And if you need to get it,

1317 01:44:50.170 --> 01:44:52.149 you can email me otherwise,

1318 01:44:52.149 --> 01:44:54.920 um, and we're going to try to.

1319 01:44:54.920 --> 01:45:02.439 I'm hoping send it out in the ASM news blast and other ways to get the link as well.

1320 01:45:02.439 --> 01:45:04.420 And it's both for text,

1321 01:45:04.420 --> 01:45:09.970 ansley providers, and it's basically to get providers opinions on issues related to this,

1322 01:45:09.970 --> 01:45:12.439 so I think we definitely can.

1323 01:45:12.439 --> 01:45:16.119 You know what I'm gonna be trying to get the data out to everybody,

1324 01:45:16.119 --> 01:45:21.380 but that that's definitely something that we can help try to present on as well when we meet back again.

1325 01:45:22.420 --> 01:45:26.060 Yeah, for all of the people who were on the call today,

1326 01:45:26.060 --> 01:45:33.329 this is your chance to let us know how you're doing and how you're handling business in your labs and what your concerns are

1327 01:45:33.329 --> 01:45:35.149 in the survey. Does a great

1328 01:45:35.149 --> 01:45:37.270 job of capturing all the main points,

1329 01:45:37.270 --> 01:45:39.090 and I know it's have to,

1330 01:45:39.090 --> 01:45:40.850 but. Appreciate any any comments.

1331 01:45:40.850 --> 01:45:44.369 I think you know, we tried to cut it down.

1332 01:45:44.369 --> 01:45:50.699 But there are just so many I think issues from so many areas that people have thought 7.

1333 01:45:50.699 --> 01:45:55.979 One thing when you do the survey as soon as 10 people have answered it.

1334 01:45:55.979 --> 01:46:04.850 You start seeing what other people's responses are to the question so I think people will find that really interesting for you know for what?

1335 01:46:04.850 --> 01:46:06.850 Other people are thinking and saying out there.

1336 01:46:07.789 --> 01:46:09.130 It takes 10 minutes.

1337 01:46:10.390 --> 01:46:11.880 Thank you so I'm

1338 01:46:11.880 --> 01:46:16.359 I'm I'm leaving for my next call bye bye and thanks everybody.

1339 01:46:16.359 --> 01:46:17.479 We are going

1340 01:46:17.479 --> 01:46:20.460 to do our best to get this posted.

1341 01:46:20.460 --> 01:46:26.060 I hope it got recorded appropriately and uh and I an and this was great.

1342 01:46:26.060 --> 01:46:29.789 Thank you and sorry for the initial little technical issues,

1343 01:46:29.789 --> 01:46:30.529 but I

1344 01:46:30.529 --> 01:46:31.649 think we survived.

1345 01:46:32.180 --> 01:46:32.750 And

1346 01:46:32.750 --> 01:46:34.470 the next time?

1347 01:46:34.470 --> 01:46:38.729 The Next One is a webinars so we can get even more people.

1348 01:46:38.729 --> 01:46:39.659 Thanks very

1349 01:46:39.659 --> 01:46:41.050 much. Thank you

1350 01:46:41.050 --> 01:46:41.970 for your

1351 01:46:41.970 --> 01:46:44.529 leadership. Appreciate it.

1352 01:46:49.939 --> 01:46:50.979 Thanks very

1353 01:46:50.979 --> 01:46:52.020 much, Karen.

1354 01:46:52.020 --> 01:46:53.579 Thank you everybody.