Sawbones 321: COVID Lies, Darned Lies and Statistics

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Clint: *Sawbones* is a show about medical history, and nothing the hosts say should be taken as medial advice or opinion. It's for fun. Can't you just have fun for an hour and not try to diagnose you mystery boil? We think you've earned it. Just sit back, relax, and enjoy a moment of distraction from that weird growth. You're worth it.

[theme music plays]

Justin: Hello everybody, and welcome to *Sawbones*: a marital tour of misguided medicine. I'm your cohost, Justin McElroy.

Sydnee: And I'm Sydnee McElroy.

Justin: Syd, aren't you relieved that this whole thing has been blown out of proportion? And it is gonna be smooth sailing from here on out. It's all a conspiracy. It's all a scam. And I, for one, uh, am f—am feelin' pretty good about it. Gonna get my beach body right. Gonna get out there to the mall.

Sydnee: The beach—the beach here in Huntington, West Virginia.

Justin: Gonna start licking phone poles again.

Sydnee: Um, so how fast into the episode should you clarify that you're being facetious?

Justin: It's actually this exact moment.

Sydnee: Okay.

Justin: I—there—

Sydnee: Just in case somebody, like, decides to stop and send us an angry email *right* now.

Justin: Can you clarify what I'm pretending to talk about? Because you said I was not allowed to watch it, [holding back laughter] because I am impressionable, and am easily swayed.

Sydnee: Well, moreover it's already been removed from YouTube.

Justin: Oh, really?

Sydnee: How bad you gotta be?

Justin: Oh, listen, y'all.

Sydnee: [laughs]

Justin: I've seen some *thing*s on YouTube!

Sydnee: Yeah.

Justin: Some *things*!

Sydnee: Yeah, there was a video circulating that hopefully—I don't know. I always like to say hopefully you haven't watched, but at the same time, it's not that I don't—I don't think—I don't believe in censorship, but they are doctors spreading misinformation, and that is dangerous to the public health.

So, I don't believe that's censorship to say, "Well, we shouldn't let—" I mean, if I ran a video platform, I wouldn't want that video up there, because they're endangering lives with misinformation, and that's—that's different. I mean, that—to me, that's more akin to yelling fire in a theater than it is, "Oh, I don't like what you have to say."

Justin: But these two doctors that were talking about COVID and—that made quite a stir. But I think that you'll see some of their talking points, and some of their quote, unquote "data," uh, regurgitated, and I use that word specifically—

Sydnee: Mm-hmm.

Justin: —in the... the public and the media. So we wanted to kind of give you—or Syd will, I will sit calmly and make fart jokes—uh, give you the tools that you

needed to sort of work against that, and sort of unearth where things are, uhh... just a little bit sketchy.

Sydnee: Right.

Justin: On some of those, uh—those points they're bringing up.

Sydnee: So, in this video, two doctors who identify themselves as emergency physicians, as—uh, that is the specialty they pursued, but they currently work running a system of urgent cares, so they own multiple locations of urgent cares.

And I think it seems like they spend more time in, like, the administrative, running-a-business end than actually, like, face-to-face patient care.

Justin: Dr. Kelso is not Dr. Cox.

Sydnee: Yeah, yeah. I—I get that impression from—from what they're saying. Um, but that this how they self-identify, and they put all this out there.

And they make clear, too—they actually do say, to be fair, that they have seen a much lower patient volume, and their business has been hurt. So it's out there. I mean, that's not conjecture, "I bet their business has been hurt by the shutdown."

Justin: It's weird. The only one. [laughs quietly]

Sydnee: It—[laughs quietly] they've lost money. Uh, and they held a press conference that was widely aired, and then—I think, like, CBS aired it, or one of the major—one of major broadcasting stations aired it, and there were news reports on it, and then there were rebuttals to it, and then it was on YouTube, and then it was taken down, which only really fanned the flames, uh, of kind of a right wing conspiracy... network. Basically saying these are the two truth-tellers who the liberal media is trying to shut down. And so now they've kind of become, like—like, darlings of—

Justin: [gasps]

Sydnee: —that side of—[laughs] things.

Justin: It's amazing! A cycle I've never seen before! I don't even know why I'm calling it a cycle! It's the first time!

Sydnee: And I think the reason that what they said—there are several reasons that what they said was taken so seriously, even though it flew in the face of what... all other medical experts were saying.

Justin: So weird.

Sydnee: Um, but I think—I think one of the reasons that I wanted to break down is that they use a lot of numbers. And I think that statistics in particular, it—it can get very dense.

It is a hard thing—I know that it is something that we are—uh, part of our medical education is, you know, used to focus on, because we're supposed to be able to read studies and interpret them, and just tell if they're, you know, valid or not.

And that's a hard thing to do, even I know with the education I've had, specifically looking at that. So if you've never had a class in statistics, it—it could seem like they know what they're talking about. Like, you could do some simple math based on what they're saying, and it sounds accurate.

And that's very... that's very intentional. And so I thought it was worth breaking down some of the numbers, and then talking a little bit about some just, like... bold faced lies. [laughs]

Justin: Why don't you start by framing it as to—what is their thesis statement, for people who are uninitiated?

Sydnee: Their thesis is that, first of all, our reaction to coronavirus as a nation has been a huge overreaction.

Justin: Hm.

Sydnee: That there is no need to continue the shutdown, that we have done basically more damage than was necessary to the economy, and we should immediately open everything back up.

And they're basing that on a couple of points. One, they think way more people have already had coronavirus than we know. They're just walking around, already had it, didn't have—maybe had no symptoms, or so mild symptoms they didn't go to a doctor, and therefore they are now immune.

Justin: Mm-hmm.

Sydnee: Uh, and also that coronavirus is not nearly as deadly as we are being led to believe.

Justin: Okay.

Sydnee: He thinks that the, uh—the death numbers are inflated, and he has several reasons that he lays out for how he thinks and why he thinks they're being inflated.

Uh, but basically that we should all go back to our lives because most of us are gonna get this virus but—but such a small percentage of us are going to die that it doesn't matter, basically. That it's the flu. He compares it to the flu. He said it is very much like the flu, and in some ways not as bad as the flu.

Justin: Still a wild line of reasoning, for what it's worth, as a humanist. Uh, I think that's still a wild kind of—kind of, uh, stance to take, but sure.

Sydnee: If it wasn't any more deadly than the flu—I mean, we—we don't shut down for the flu, right?

Justin: We have a flu vaccine.

Sydnee: Yeah, but sometimes the flu vaccine doesn't protect everybody, and sometimes we do get hit—what I'm saying is, if you really truly bought into that lie—which it is. It's a lie, that it is the same as the flu. It is... absolutely not.

But if you bought into that lie, the rest of the house of cards he builds makes more sense. Um, and the numbers that he puts forth at the very beginning of the video are the foundation of this house of cards.

Which I—I called—I thought it was worth mentioning. I called this episode, um, "Lies... darned lies—" 'cause I can't say the other d word 'cause this is a family friendly show— "and statistics," which is a quote I had heard on *West Wing*. But I

looked it up to see where it came from, and it looks like were not exactly sure the first person to say this. There are a couple different people who it's been attributed to. I think Mark Twain made it very popular, although it was not—it did not originate with Mark Twain.

Um, but those are the three types of lies. Lies, darned lies, and statistics. That's—that is what—that's where that quote comes from. Thank you, *West Wing*, for sharing it with me.

Justin: [laughs] And thank you Sydnee, for sharing it with—nah, I saw *West Wing* too.

Sydnee: Okay, so he starts off with a bunch of numbers. He starts off with the tests that have been done at their locations, their data. That's what he—that's his whole thing. "I have data. I have this system of urgent cares at which I've done testing, and I can tell you the data, the hard data. Here are the numbers I have. We've tested this many people, and we have this many positives."

And he comes up with a number from that, a percent based on that, that he then extrapolates out to the state of California, to the country as a whole. That is where all of his numbers come from.

So, like, he talks about the state of California. There have been 33,865 COVID cases at the time of the videos being made. 280,900 were tested, so that's 12% positive.

Now, it is important to remember, this is the—this is the fatal flaw in the entire video that makes everything fall apart.

12% of people *tested* were positive in this number, in this fraction. He uses that to say 12% of *Californians...* are positive.

Justin: Mm-hmm.

Sydnee: Now, Justin, do you know why that's a problem?

Justin: Yes, because the people who would—it's a biased sample, because the people who would be, uh, seeking out testing are already sick, and as we know, there are a ton of asymptomatic spreaders with COVID. I've seen numbers as high as, like, 50% maybe exhibit no symptoms.

Sydnee: Yes.

Justin: So there could be—we have no idea. There could be—there could be—it's a much higher ratio, because you have people who are sick who are seeking out tests, so a higher percentage.

Sydnee: Right. So—so if 12% of people who are the—if you remember, when we first started testing in this country it was really hard to get a test. It's still hard to get a test in some places, but it was really hard to get a test at first because you had to have traveled... to China. Or been directly in contact with somebody who had just traveled to China, or a case.

So the people who were getting tested initially were the absolutely most likely people to have it. And of the absolutely most likely people to have it, 12% were positive. So why would we think that of the people who were less likely to have it... a higher percentage—or even the same?

No, a much lower percentage. That number is actually comforting in some way, that only 12% of the absolutely most likely people to have had it have had it, or actually had it. That shows a much lower prevalence, depending on how you look at it.

So that's—that's—and that is the error that everything is based on. Because once you see that, that that part of his data is wrong, everything crumbles. Because what he takes from that is he then says "Well, if that percent of the country is infected, and so far we have had—" I mean, at that point it was 50-some thousand deaths in the country, "—then what that means, comparing the population of the United States to the death rate, that it is .03% fatal."

Justin: I mean, it just doesn't—

Sydnee: Which puts it on par or less than the seasonal flu.

Justin: That's just not—but there's—but it—because of what you said earlier, it doesn't make sense.

Sydnee: Right. But—but if you bought those numbers that he puts out in the very beginning, then all the sudden the death rate is so low you would ask yourself, "But why don't we do this for the flu, then?"

Justin: I mean, I—

Sydnee: So—so the numbers are specifically being used to bolster a case that is false. Um, so the math is bad. I think that's the first thing you need to know.

The second is he—he obviously doesn't understand a randomized sample, as we spoke to. The people who are coming to urgent cares to be tested cannot be considered a randomized sample of the American people, especially early on, if we're talking about people who had classic symptoms or known exposures were the only ones being tested.

So the example that I came up with for this is, let's say I wanted to know how many people in this country liked my podcast, *Sawbones*.

Justin: Okay.

Sydnee: Our podcast, I guess.

Justin: It's fine.

Sydnee: [laughs quietly] So, uh, let's say there—I—I guess the best way to do this would be, like, what? I send out random emails, except that would only be people who have email. So maybe I would need to send out some emails, and then also go door to door, and then also send out some letters, and then also make some phone calls.

Justin: Mm-hmm.

Sydnee: Right? Like, it would take a while to generate a random sample of the entire country from different locations, different ages, different genders, to find out how—what percent of the country likes my podcast, *Sawbones*.

Justin: Okay.

Sydnee: Now, what if, instead, the next time—whenever that day comes—that we get to go on tour for a *My Brother, My Brother, and Me* show, I wait until there's a line outside the theater and I walk down that line and I ask everybody in the line for your show, at which *Sawbones* opens, if they like my podcast or not.

Justin: Well, you're gonna get a much higher hit rate, there.

Sydnee: And then I say, "Guess what? [laughs quietly] Guess what, everybody? My podcast is popular with literally half the country." Or maybe more, I don't know. I don't know how many people come to MBMBaM shows like *Sawbones*.

Justin: But still.

Sydnee: Still, the point is it's—it's cherry picking.

Justin: Right.

Sydnee: And that's—that doesn't make sense. That's bad data. That's not a randomized sample. Anybody can tell that. Um, so—

Justin: Except this guy, apparently. [laughs quietly]

Sydnee: Yeah.

Justin: Who we're—we know it's weird to intentionally not name these people. We just don't want to give them any more platform than they already have, so.

Sydnee: Right, right. Um... I also don't want 'em to, like, yell at me. [laughs]

Justin: Yeah, yeah. We've been down that road before.

Sydnee: I don't want 'em to come after me. I just want them to stop telling lies about COVID. Um, so obviously their numbers fall apart from there, because that's their whole case, is built on that.

Um, the other thing is, you know, if you wanna get into some of this—the tests we need, uh—the tests themselves that we're doing right now, I think it's important to note, is a test that tells you if you are positive, if you have the virus right now.

And this is a really big problem, because all of his—all of his arguments about how prevalent this is are based on this concept of point prevalence. That at this exact moment in time, this many people tested positive. This completely excludes people who may have already recovered from the illness who will now test

negative, or people who haven't gotten it yet but will get it maybe tomorrow, who are gonna test positive tomorrow.

And then also the fact—it excludes a very scary question mark that's in the back of a lot of doctor's minds, which is, we think you are immune to coronavirus for a while after you have recovered from it. We believe that is likely to be true. Not long lasting, lifelong immunity, but at least some period of time. But we don't know that. We don't know that.

So it's even more dangerous to say, "All you people have had it, and also, you're fine now that you've had it."

Justin: Yeah.

Sydnee: We don't know that. We hope that, we think that, but we don't know it. Um, antibody testing could do a little more of what he's trying to do, but that's not at all what he's using. And antibody testing is still—there are still problems. There are still issues with rolling that out.

Um, which leads me to the flu comparison. So, in the worst years of flu, in the worst years of seasonal influenza, it can kill up to 60,000 people in a flu season.

Justin: Okay.

Sydnee: Okay? Those are the worst years. Anywhere from 10 to 60,000 is what we estimate the mortality of the flu is going to be in a given year.

Um, that is with... no social distancing. That is also with a vaccine, by the way. So with absolutely no social distancing, with no other measures taken, with nothing else we're doing, it's still going to kill that many people.

Now, COVID has killed that many people... *with* lockdowns, *with* social distancing, *with* travel bans, *with* businesses being shut down. We have already had 60,000+ people die.

Justin: But without a vaccine.

Sydnee: And a shorter period of time, yes.

Justin: You call—you brought the vaccine into it. I think that that's, like—

Sydnee: Well, I want to give hope.

Justin: Okay.

Sydnee: I think the vaccine—because the vaccine makes a huge difference.

Justin: Right.

Sydnee: But my point is, COVID is worse than flu. [holding back laughter] It's worse than flu. It's—statistically, it is categorically worse than flu.

Justin: Okay, but we—

Sydnee: What if we had not done social distancing?

Justin: —we have to deal with the vaccine thing, though. 'Cause you said the vaccine, so we have to deal with that. Like, what—how much is that blunting the impact of seasonal flu?

Sydnee: Well, I'm certain it is.

Justin: So how can we say that COVID is worse, if the seasonal flu has the vaccine?

Sydnee: Because even in years when we didn't have a vaccine for the flu—I mean, we haven't always had a flu vaccine—it didn't kill as many people.

Justin: Really?

Sydnee: Yeah. I mean, not all—there have been pandemics. We've talked about 1918, 1919.

Justin: Sure, right, right, right.

Sydnee: There have been—

Justin: Millions.

Sydnee: —there have been flus that have killed this many people and more, but not the typical seasonal flu.

Justin: [simultaneously] The seasonal—the rate—yeah, that makes sense.

Sydnee: Right. But my point is that with social distancing, we have reduced—the number of deaths we've had so far is equal to the absolute worst years of seasonal flu, with all these measures. If we had not taken these measures, how much worse would it have been? And it's not done.

Justin: Right.

Sydnee: Like, that number's unfortunately going to go higher. So the—the comparison to the flu, it's—I mean, it's really—it's like closing your eyes. It's—it's—you're not paying attention to reality.

He says things like, um, "And besides, 96% of Californians are gonna recover from this, and there will be no long-lasting complications."

That is a—it's a great move, because that's such an impressive number, right? Well, what's the big deal?

If you're saying that 4% of people *die*, that's a huge number, man!

Justin: I saw somebody on Twitter—I forget. Just, like, uh, "Why don't—instead of all these depressing numbers, why don't we focus on *this* number?" And it's like, "97% recovery."

And I'm like, "Um... [wheezes] like—[through laughter] that's very bad! That's so many people!"

If—I know over a hundred people, right? [through laughter] If 3% of the people d—just, like, died today, I wouldn't be like, "Hm. Good one. Anyway, I'm off to bed." Like, it's wild! It doesn't make any sense!

Sydnee: Those numbers are huge! And he even says—I think he said 92% of New Yorkers are recovering.

Justin: That's wicked bad!

Sydnee: 8%?! So we're just willing to say that it's no big deal? 8?!

Justin: [stammers] Re—re frame it: 8% of grandmas. Like—[laughs] what are we doing? Like, 8% of all grandpas are now—are—are about to die, but that's fine. It's good.

Sydnee: But he's—he's hoping you won't think about the flip side of the numbers. Um, he's assuming you won't. He's also—by the way, there are a lot of people who are still sick, and we don't know what their outcome's going to be. So to sit here and talk about recovery rates—like, we're in the middle of it, man! You can't take a view as if it's history when it's happening, and that's—and sometimes that what he's—that's what he's trying to do.

Um, he also calls into question all of the, um, projections that were given early on. Remember the—the early graphs that they showed us—

Justin: Sure.

Sydnee: —where, like, 100,000, 200,000, how many people are going to die in the US? Um, more than that, even. And then he said—and then we were told, like, "Oh, it's lower, it's lower, it's lower."

And he's like, "See? They just made up all these numbers to scare you, and all their projections were wrong. All their stupid models," blah, blah, blah.

And obviously I think it—you might already know this. But the truth is, those were projections used to show us what we happen if we didn't take social distancing seriously.

Justin: So, the parachute thing, right?

Sydnee: Yes.

Justin: The parachute—

Sydnee: Exactly.

Justin: —I fell out of the plane, I'm falling slowly, I'm gonna cut these parachute strings 'cause I never needed them in the first place.

Sydnee: Exactly, exactly. Um, and then the—the last big numbers issue that I wanted to get into is, he has this little thing about Sweden and Norway, and I don't know if you've been following the situation in—in Sweden, but they decided not to do any social distancing. Um, which sounds—[laughs quietly] that sounds like a really heavy charge for me to lay at their feet, with all I've said about being in favor of social distancing.

But they—there was a thought in the beginning of this, like, could we do a herd immunity thing? Could we let everybody go about their lives and enough healthy young people will get sick, get better, be fine, that they'll protect the elderly and at-risk in our population?

Um, it looks like that's not a good idea. Uh, but that was the track they decided to take. And so he compares Sweden and Norway; Norway, where they have done all of the social distancing and the things that we've been doing here.

And he looks at the number of deaths that they've had in each country and says, "And that difference is insignificant."

Now, it is worth noting that first of all, um, I think what he's talking about is statistically significant. And if you—and that's—that's a—that's a term we use to determine—if we have, like, a control group and then a group in which we've done some sort of intervention in a study, and then the control group has this many that got sick and the group in which we gave the intervention has this many that got sick, we have to do an analysis between those two numbers to see, is that difference real, and was it due to whatever we did, to the medicine or the vaccine or whatever? Or is it just chance?

Because one number could be higher than the other purely out of chance, right? I mean, you have to control for chance. So I think that's what he's saying, is that the difference between these two numbers is just chance.

And the way he arrives at them, again, is by dividing the number of people who die by the entire population of the country. Which doesn't make any sense. But even if he did the math, it *is* statistically significant. It *is* a statistical sig—a statistically significant difference.

Unfortunately, a statistically significant higher number of people in Sweden have died from COVID than Norway, and Sweden did not do these things, and Norway did.

Now, I would not use any of those numbers were *I* making an argument, 'cause they're bad numbers. His math is bad. That's not how you figure out death rate. None of that makes sense. It's bad math.

But even if you use his math, he just lies at the end of it. No, there *is* a difference. Social distancing *did* work in Norway. Fewer people *did* die. He just said they didn't. I—it's—it's wild! It's... anyway.

Justin: That's wild. I wanna hear more, Sydnee.

Sydnee: I'm gonna get out of the math, 'cause I know the math is heavy.

Justin: Yeah. I'm, like, struggling with it. [crosstalk]

Sydnee: Well, I know, but that's why. That's why the statistics are presented like that, because they get... they can lead you down a path, and you don't remember how it started, and if you're not somebody who likes this, which I am not—I like math okay. [holding back laughter] But I'm not in love with statistics.

If you don't love this stuff... it can get—it can lead you in the wrong direction.

Justin: But as long as you're feeling malleable and open to suggestion, why don't we—[laughs]

Sydnee: Head to the billing department.

Justin: [through laughter] Let's go!

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[ad break]

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Justin: Alright, Syd. You promised me a math-free back half.

Sydnee: So, he says a couple things that aren't based on math, to help support his—his argument. Um... some of it is political. Uh, there's definitely that undertone there. There's a lot of talk about "they."

Justin: "They."

Sydnee: The—the mysterious "they" who want you to be scared. He talks a lot about "They use the word—*they* use the word 'safe,' and when they say 'safe,' they really want you to be under their control," and that's a... I don't know.

So, obviously there are some, um, deeply held political... ethical... I don't know. Some sort of beliefs that underpin this argument. And as I've said, he—he's very honest that they've lost money. So that is part of what is happening here.

Um, but then he says that the reason the death rate might be wrong—he thinks we are—we are saying that so many more people are going to die of COVID than actually are, and that that's not true and it's not that dangerous, is because it's being over-reported.

And the way he says that and the way he bolsters that claim is by saying that doctors that he has spoken to, all of—because all ER doctors to each other every day, I guess, at least in his world—[laughs quietly] uh, that they are—they told him that they're being pressured to put COVID on death certificates by their hospitals because they get paid more.

[sighs] I should—I should start with, there is no... I could not find any evidence for this. I could not find any. And this is a hard thing to disprove, right? It's hard to—to prove a negative. Like, nobody's pressuring anybody to code COVID. Um, but that was really difficult for me to find, and I do think—but I could find no incident of that. I didn't find any evidence that that is happening.

Um, right now the thought is we're under-reporting COVID deaths. I don't know if you looked recently, but the number of people who have died in general in the US is way higher than normal, even excluding COVID.

So we might—we're probably missing at-home deaths, and also not everybody could get tested, or can still get tested, so we're probably missing a lot of COVID deaths, is the truth. And you don't test somebody after they've died, 'cause we don't have enough tests to use them for that purpose.

So... all that aside, though, um, I think it's important to know first of all, when it comes to death certificates—and I don't know if this is interesting to hear, but I

have found that a lot of people who don't have to interact with them don't always know how that document—

Justin: I was—I was interested when you told me. I thought it was interesting.

Sydnee: Okay. So, when one of—as a family physician, if one of my patients that I take care of pass away, they will actually send me the death certificate most often. Occasionally they'll fill it out in the hospital if it happened in a hospital, but a lot of the times it ends up with me, even if I—I mean, unfortunately sometimes that's how I'm notified, is receiving a death certificate. Um, if a family member doesn't call me.

And, uh, I will then have to try to figure out what happened retroactively to fill out the death certificate, most of the time. Sometimes the doctor in the hospital or the ER, wherever, will fill in some of the information.

But the vast majority of us don't get an autopsy, so as far as, like, the death certificate providing some sort of new information, it really doesn't for the vast majority of us. It's just what we think based on what we saw, what happened at the end, the test that were done if there were any, here's what we think happened. That's it. There is no...

Justin: It's interesting, 'cause I had always thought of them as, like, a le—you see 'em presented a lot in, like, legal contextes or—contexts or, like, um... you know, you think of them more as, like, evidence, like proof or something like that.

Sydnee: It gets really difficult. Um, like I said, if there is not going to be an autopsy and you have someone who—who goes suddenly, and not after, like, a protracted course of disease with a certain thing, um, I mean, it's really—they're really difficult, sometimes, to fill out.

And we—and that doesn't mean, like, so they're invalid. But, like, the idea that ER doctors are spending a lot of time writing COVID on death certificates—or certainly urgent care doctors, who probably aren't—um, that this is all—this is all wild conjecture.

Um, but aside from the death certificate part of it... [sighs] so, this is sort of like—he has taken a lie, but he wrapped it in just enough half-truth that if you try to research this for yourself, you might find something that leads you to believe it's true.

And I think you have to understand the really, um... messed up American healthcare system, and the way that healthcare is billed for, to understand it.

So, if you come into the hospital, and you come in through the ER because you have a fever and you're short of breath.

Justin: Mm-hmm.

Sydnee: And when you come in that's what you say.

Justin: [coughs]

Sydnee: "I have a fever, I'm short of breath, I'm coughing—"

Justin: "[simultaneously] I have a fever, I'm short of breath, I'm coughing—"

Sydnee: —right, those kinds of things. You don't—

Justin: I'm trying to play my role.

Sydnee: Okay.

Justin: In the role play.

Sydnee: And I say—

Justin: "[weird voice] I have a fever, I'm short of breath, I'm coughing."

Sydnee: —and I do a chest x-ray and I find that you have pneumonia.

Justin: "Oh, it's cold! The x-ray plate is cold."

Sydnee: [laughs quietly] And I take your vital signs and I find that your oxygen's low, your blood pressure's low—you're pretty sick, right?

Justin: Mm-hmm.

Sydnee: I do some bloodwork, it doesn't look good. I do a bunch of stuff. I—

Justin: [Dracula voice] "Then you discover I have no pulse! And I rise!"

Sydnee: This is not the direction this was going.

Justin: Sorry.

Sydnee: But let's say that I do all that, but then when I go to write my note about what I just did, and I give you all the right stuff and I get you admitted to the hospital, you're doin' fine. But then when I go to write my note I write, "Fever and shortness of breath. I gave oxygen, some medicine—"

Justin: [snorts]

Sydnee: "—monitor. Continue to monitor."

Justin: Do you write that in charts a lot? [holding back laughter] "Some medicine?"

Sydnee: No, but you know what I mean. Let's say that I did that. Well, first of all I would probably get a call from administration. [laughs quietly] But secondly, the people—there are people in the hospital whose job it is to take whatever I put in my note and turn it into money.

They're going take the—the words that I put and turn them into billing codes. 'Cause I don't type billing codes in my note. I type words. [laughs quietly] But then there's someone whose job it is to look at that and turn that into a code, which they will send to your insurance company, which will mean a certain amount of money gets paid back to the hospital.

Justin: Okay.

Sydnee: So if—if you have all of that, and all I document is fever... the hospital doesn't get paid very much. The reason for that is—the thought is, "Well, you're not gonna have to use very many resources for this patient."

You know, if you just have a fever... you won't use as much medicine. You won't use as many, uh, person hours, you know? You won't have to get checked on as much. You won't need, like, an ICU bed. Uh, I didn't say anything about you needing oxygen support. You know, I—all these extra things. And your length of stay probably won't be very long, maybe just a couple days.

Justin: Right.

Sydnee: And they put all that together and then give the hospital some money. And then you stay much longer, 'cause actually you had all that other stuff, and so the hospital's upside-down on you. Does that make sense?

Justin: Yes.

Sydnee: I know this is gross. I understand that this is medical care in—

Justin: The system is gross. We've been clear about this for a very long time.

Sydnee: It's all gross, but this is how it—I'm just explaining that this is how it works. So—

Justin: Can I try to extrapolate, just based on what you're saying?

Sydnee: Yes.

Justin: So, basically instead of fever, if you see a cluster of symptoms that could be COVID, and there's not enough tests to go around, the coding person could just put COVID, because there would be more resources for it, right?

Sydnee: Sort of, yes.

Justin: So that would [crosstalk]—

Sydnee: Well, sort of. The coding person is not gonna put COVID. They can't do that. The doctor would put in their note, "Suspected COVID, rule out COVID."

If you were getting admitted to the hospital and you're that sick, you're getting a test, by the way. Um, but the—the—what I think this is is, let's say I didn't put that in my note because I just put "pneumonia" or whatever, and then your COVID test came back later, I would probably get a call from the coder to say "Hey, do you mind adding COVID to your note?"

Justin: Mm.

Sydnee: This happens all the time. This is—there are—

Justin: Not just about COVID.

Sydnee: Not just about COVID. There are people in the hospital, this is their job. This is what they're trained to do. They go to school to do this, to learn these codes.

And when they look at your note, and like the note I—the example I gave you, and I just put "fever," I'll get a nice little note or call or task or something that says, "It seems like this patient had sever sepsis with community-acquired pneumonia. Could you please document that, if that is accurate?"

I mean, that's always the thing. It's not "Put it in there if it's not," it's "If it's accurate, would you put in there? Because then we'll put that, we'll give that to the insurance company, and the insurance company will pay us for the actual amount of resources that went into caring for this patient."

Justin: Worth noting that these coders are not the bad guys, either.

Sydnee: No.

Justin: I mean, we have—their just doing their job, as part of this—this system. We have family that do this job. This is not a... you know, they're not, like, the pencil-pushing, like, squeeze every... dime out. They're just doing their gig.

Sydnee: The system is broken, of course. But if they didn't do that, hospitals would go under in a week.

Justin: Mm-hmm.

Sydnee: They—that's why they have a job, is they realize, doctors are never gonna be good at doing—I mean, there are some doctors. I know some who are very good at this. I'm not good at it. I suck at it. And these people reminding me or—or suggesting, "Hey, it looks like this is in your notes. Should it be in there?"

It makes the hospital enough money to stay afloat. And you could make arguments about where all the money goes, but still. The point is, uh, that is—that is how you get paid for the actual amount of resources. That's what you gotta look at it. Not, like, "Oh, if you're sicker you get more money."

Justin: Right.

Sydnee: It's because you'll use more stuff, people, time, longer stay, blah blah blah, if you're sicker. Um, and we know that patients with COVID tend to use a hospital resources—

Justin: [simultaneously] Hang around a long time, yeah.

Sydnee: —and stay longer, especially if you consider the costs of isolation, PPE, and all the other things.

Justin: Sure.

Sydnee: So, that is why if you dig into this you will find... that if you code "COVID" instead of just, I don't know, um, "viral syndrome" or "pneumonia" or "respiratory distress," if you code "COVID" you'll get—the hospital will get reimbursed better.

Not the doctor. There is no—there is no pressure on us to code things that are false. In fact, they don't want us to code things that are false, 'cause if we do, that's called fraud.

Justin: [laughs quietly]

Sydnee: And we'll get in trouble, but the hospital gets in trouble. Everybody gets in trouble. That's fraud. We don't—no one wants us to do that.

Um, you are only supposed to code "COVID" if they actually have COVID, so I think that is the—the truth in his lie that makes it more believable. And again, it's—it's hard, because, like, nobody wants to talk about all this. Because the whole system is so gross.

Justin: Right.

Sydnee: Um, but it's logical. If you—if you break it open, what he's saying, like... this system, the way it works, is a cold business logic that shouldn't have anything to do with medical care, but does in the United States of America.

So there is no conspiracy. Doctors are not getting pressured to code "COVID" more than it's already there. We're probably missing a ton of COVID deaths, unfortunately. And the number of—it is probably more dangerous than we think.

Now, when will we finally know how many people got sick, and how many people recovered, and how many people recovered with lifelong complications, and how many people actually died of COVID? When will we know all that? Not for a while.

You just—you can't take that—you can't figure those kinds of numbers out in the middle of things.

Justin: Right.

Sydnee: So the idea that he's even trying to is flawed. It's just not possible. We can create models and guesses, and try to find ways to, you know, mitigate that. But it's impossible to arrive at those numbers.

Um, he also says, by the way, that the other—his other argument is that people aren't dying of COVID, they're dying of, like, their COPD, and the COVID just made it worse. Or they're dying of their heart disease, but the COVID just made it worse, so it's not really the COVID that killed them. It's their heart disease or their COPD.

Justin: Well, that's kind of like...

Sydnee: Please, *please* explain why that's a wack argument. [laughs]

Justin: Uh, that's kind of—

Sydnee: 'Cause it is.

Justin: —equivalent to, um, "The fall isn't too bad, it's the landing that gets you." Right?

Sydnee: Right, mm-hmm.

Justin: Like, well, yeah. But... the fall is why the landing. [laughs] Like, yes, okay, fine. But...

Sydnee: It—it's... it—

Justin: Like, we know comorbidities are a big—there's a big connection to fatalities with this. Like, it's not an—it's not news, right?

Sydnee: And many other things.

Justin: Right.

Sydnee: There are lots of conditions that are harder on people with certain comorbidities, not just COVID. Um, and we still consider that their cause—'cause the other thing is, do you really think all of these patients with chronic, but maybe stable heart disease, COPD, whatever, are suddenly going to drop dead in that month if they didn't get COVID? No! It was the COVID! This is...

Justin: It's kind of like diabetes is—is like that, right?

Sydnee: Yes.

Justin: It's like a co—a huge complication for a lot of different things.

Sydnee: Mm-hmm.

Justin: But we don't say that, like, the diabetes is not so bad, because you're actually dying of whatever else you're dying of.

Sydnee: Right. It's—it—so COVID is the cause of death in these patients. They would not—and the way you can tell is, would they have died would they not gotten COVID? Well, no. I mean, all of us eventually. But no, not at that moment.

Justin: So they died be*cause*... the death was be*cause* of COVID, so—it's right there in the sentence.

Sydnee: Yes. So that's—I—hm. I don't know. He—I mean, there are other things in there where he talks about, like, New York wanted 30,000 ventilators, but they only used 5. I don't even know where—again, I don't know where—some of the things it's hard to debunk, 'cause I don't—I can't even find what he might be referencing. It sounds like some—some guy on the phone told him that and he repeated it.

Justin: Yeah.

Sydnee: I don't know. That's my conjecture. I have no idea where he got these. I imagine there are New Yorkers listening to this show right now who are screaming at the idea... that only five [laughs quietly] ventilators were used. So—

Justin: Five ventilators, or 5,000?

Sydnee: Five. [laughs quietly]

Justin: No, that can't be what he said.

Sydnee: He said—

Justin: Really?

Sydnee: —they asked for 30,000, and they only needed five. Now, I think he may mean *additional.* Like, they only needed five additional, but that is not... I have not—that is not...

Justin: Ei—either way.

Sydnee: That is inconsistent with what I have... read, and... and, um, observed. But, uh, anyway. So... [laughs quietly]

The point is... the last thing that he calls to, other than money, and "This is overblown, it's a hoax, a conspiracy, " all this stuff that we have unraveled. The last thing that he mentions is that we've gotta get people, um—we've gotta start taking care of people again, 'cause there are people who are getting sick and dying of other stuff because they're not getting proper care. Um, they're not coming to their doctors and getting proper care.

This—this is a truth. This is a concern. And—and he talks about it as if he's the only guy who knew. "I—I'm just this guy who owns a bunch of urgent cares, but I understand this. Nobody else does."

Well, excuse me, sir. I'm a family physician. I think I know that, and so do all of my colleagues, and especially all of us in primary care. And I would say the medical community at large knows this.

Justin: Yeah.

Sydnee: And also, the non-medical community. It makes sense. It's the—it's the secondary effect that can happen with a pandemic. People not going for their routine maintenance visits, people not getting screening tests when they're due for them and missing things in early stages.

Um, people who aren't able to get their money—or, able to get their medicine because maybe there's a huge run on their medicine, because maybe somebody says it's a cure for COVID when it's not really COVID—cure for COVID. Who knows?

Justin: [simultaneously] Who—who happens to be the President of the United States, yeah.

Sydnee: We know that this is a problem. Uh, there are people thinking about it and talking about it and trying to figure out ways to get these people who have not been getting their routine care that we know is important, their preventative care and their maintenance of chronic disease care that they need.

Um, we are trying to expand telemedicine. There are people who are thinking and worrying and working on these things. It's not perfect, and it—there will be problems from that, but to think that the solution—*especially* for people who have chronic disease—that the solution is to just open everything back up and let these people get exposed is a wild... solutio—I mean, it won't work. It'll hurt more people than it will help. Um, we do need—

Justin: We can't just sweep it under the rug.

Sydnee: No, no. I—and that was very frustrating to me, because I—I meet with my fellow family physicians in my department every single week, and that question, "How do we make sure that all of the stuff that isn't COVID is still getting taken care of as best as we possibly can while this is happening?"

That is the central question every week in our discussions, and I guarantee you that is true in almost every other medical system throughout the country. Because the medical *system* in this country might be completely screwed up... but all the people who make it up aren't.

Some of them, like these two guys, are. But all the people who make it up aren't. There are a lot of good people who are working really hard to try to figure out how to take care of you. Um, even if you don't have COVID right now.

Justin: Yeah. I think it's—you know, I—[sighs] I think it's, uh—my sense is it's unfair, I think, and maybe you listening at home—it's unfair that you have to work as hard as you do right now to get to the facts of the matter and the truth of the matter. And I think it is what we've talked about—I mean, you may be asking yourself, like, "Why do I need to know all this? Why—why is this happening?"

Like, I think that it goes back to a vacuum of leadership. If we had people at the top who were telling—uh, sorting through this stuff and who were trustworthy, reliable narrators—other than Fauci, of course—um, if we had the leadership in place, we wouldn't—this wouldn't be happening, because it would be—there wouldn't be someone who is undermining this message while they're putting it out at the same time, as our President currently is.

And I think that that's why you *do* have to equip yourself. Like, you have to get smarter than you have been about statistics and—and—and this kind of stuff, because you really do have to kind of look out for... for your own interests, and to push back against the—the... the ignorance. Which is, like, harder than it ever has been, because all of a sudden the—the stakes are so much higher.

Sydnee: I think—I think that's the really important part. It's not just—I can—I know it can seem like, "So, is this just so when people present this video I can argue back with the right points?" Which is always nice to be able to do, but that's not even the brunt of it.

I think we're entering a phase of this, for a lot of us in this country—not every place, but unfortunately where we live and many other places—where I—you are going to have to make good decisions for yourself.

Justin: Yes.

Sydnee: More than ever, because the advice you're going to be given from the top could be bad. And that is a really scary place to be.

Justin: Yes.

Sydnee: Um, if you're—if you're not an expert in these areas—which I'm not either. I'm not a—I'm, you know, I'm not an epidemiologist. I'm not an expert on pandemics. I am a doctor, I know some things, but I am not Anthony Fauci. And, I mean, he's maybe the—well, I'm sure there's other people in this country who understand it as well as him, but... nobody more.

And, uh, I—it's gonna be hard to know what the right thing to do is next, and you're going to have to use your best information and use science and rely on facts, so that you're not distracted by—I think the hard thing is... right now, doctors and science—we don't have all the definitive answers yet.

Justin: Mm-hmm.

Sydnee: We just can't. It's too—we're in the middle of it. It's impossible. This is unprecedented. We don't have a road map. Um, there's a ton that we don't know. And if you look at me and ask me for a definitive answer, and I can't give you one—I'll give you the truth, but it's not—it's not... definitive. Uh, you're going to have a tendency to hear the voice that speaks the loudest, with the most certainty, and that also maybe tells you the thing that you'd rather hear.

Justin: I mean, the—the facts that we do know are these: until there is a widely distributed vaccine for... COVID-19, there is... not—[stammers] you are always going to be—you are going to have to take your safety into your own hands, every time you leave your house.

And the people who are reopening things—and I'm not—I'm not trying to make an economic argument here. I understand that... you know, the—the—the economic impact has devastated a lot of people, so I'm not trying to get into that here.

But if there are people telling you that it is, like, safe? Um, perfectly safe, as safe as it ever was, you know, same as it was before? You—you have—that should set off alarm bells for you, because you have to be responsible for your own safety, and the safety of people you care about, until there is a vaccine.

And I know that's exhausting. Like, when—when restaurants start opening up here, you *know* my first impulse is gonna be like, "Let me at... that—you know, the—the Bahnhof wienerschnitzel. Like, please let me get a table over there by the fire. I miss human beings so much."

But, like, you—this is the deal. Like, this is the—this is the—the journey that we are on. And anybody that tells you differently than that, anybody who says that they aren't taking risks by reopening things right now is a liar. They're lying to you. Because it is. They're gambling that they've probably beaten enough to get things going again economically.

Sydnee: And it's—and it's—I understand that it's hard. I say that, like, we have a tendency to hear what we want to hear. This is true of me too. I'm not—I'm not saying you, the listener—

Justin: Yeah, bud!

Sydnee: —we all do. We all—

Justin: I'm on that Disney Reddit every day like, "What are you all thinking? 25% max capacity? 50%? Is Mickey gonna be wearing a mask? Where we all at? Let's get this thing open!"

Sydnee: This is quarantine fatigue. This is—this happens. This happens over time, where you start to convince yourself that maybe the threat isn't that bad. This is a known... problem. Because it's hard to imagine doing this any longer, and this is where we all are.

And as the states start to open up, there are gonna be people who are well-meaning, intelligent people who believe in science and truth, who might take a risk that they wouldn't have taken otherwise 'cause they're just so frickin' tired of staying at home. And that's what you have to be vigilant against right now, because we're all gonna have that impulse.

I—I can tell you that when I started hearing the rumor that this has been circulated in the US a lot longer, and so many more people have already has this, and we're gonna find that, like, most of us are already immune to it and all that stuff—when I started hearing that theory go around? Oh, man. I read every article. [laughs quietly] I wanted that to be true.

Justin: [laughs]

Sydnee: I read everything I could to try to—like, "Show me. Convince me. Sell me on it. Show me the facts. Man, that would be great. It would be great to think that it's not gonna be as bad."

And one, the evidence wasn't there. It just wasn't there. As much as I wanted it to be, it wasn't there. And two, how do you look at what's happening, in—in places like New York and say, "Well, most of us were immune already."

Well, we—a—[sighs] obviously we were frickin' not.

Justin: Yeah.

Sydnee: Um, that's the—that's the sad truth. So, um... you've gotta—you've gotta keep—as much as you can, we should be staying home. You—if you're going to go outside the house, you need to maintain social distancing, you need to wear a mask, you need to keep washing your hands.

Um, I—I... for now, it's just too—there's too many unknowns. It's too unpredictable. I think there are some glimmers of hope with treatments. Um, we might cover that some more next week. But, uh—

Justin: And—and you know what? Who knows. Maybe we're wrong and it will all be fine. And if it is, that's a win for you, too. But don't be the guinea pig. Don't be the canary in the coal mine who's like, "I'm just gonna get out there [holding back laughter] and see how things are."

Don't—that's not—don't let that be you!

Sydnee: No. And I—I hope—I've said this many times in the last week. I hope I'm wrong. I hope that everybody looks at this podcast and goes "Well, *she* was wrong. Look, it wasn't that bad."

But we won't know for a while, so why not play it safe? Protect yourself, protect your family, your community, the people at risk. You know, people with chronic disease and with, you know, other comorbids, and the elderly. Why not—

Justin: You know we'll be honest with you. [through laughter] We already ate crow on this thing once already! When we were like, "Eh, well, no biggie. We're—we're chill on it. Not gonna be a problem. NBD."

Like, we're—we don't care! We'll say it right away. Like, "Uh, well that was wrong. It's a pandemic. Anyway, we're locked in our house for the next—for the presumable future."

Like, trust us! If it turns around, we'll be the first ones who are like, "Everybody! Barbecue, our house, [through laughter] let's go!"

Sydnee: [laughs]

Justin: [laughs] Um, thank you so much for listening to our show. We appreciate it. We hope you are staying safe, staying hopeful, staying home.

Um... our theme song—uh, thanks the use of our theme song, which is by—these words have gotten jumbled for me! I'm gonna start at the beginning of the words and see if they're there.

Sydnee: Try the words again.

Justin: Let me try the words again. [pauses] Thanks to The Taxpayers for the use of the song "Medicines" as the intro and outro of our program... that's good.

Thanks to Maximum Fun for having us as a part of their extended podcasting family. And thank you to you, for listening. We sure appreciate. And, uh, be sure to join us again next week, for *Sawbones*. Uh, until next time, my name is Justin McElroy.

Sydnee: I'm Sydnee McElroy.

Justin: And, as always, don't drill a hole in your head!

[theme music plays]

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