

Talking Sleep Season 4

Episode 4

February 25, 2022

Sleep, long COVID and critical illness

Dr. Carla Sevin, guest

Episode Transcript

DR. KHOSLA: Thank you for joining us for Talking Sleep, a podcast of the American Academy of Sleep Medicine. I'm your host, Dr. Seema Khosla, medical director of the North Dakota Center for Sleep in Fargo.

So I know we're all tired of COVID, but the reality is that we will be dealing with this for a long time. Some of our patients will have experienced life changing illness and will need continued care and evaluation.

To talk with us today about long COVID is Dr. Carla Sevin, director of the Pulmonary Patient Care Center and the ICU Recovery Center at Vanderbilt University. She's been running the Vanderbilt ICU recovery clinic since 2011. Thanks for joining us today, Dr. Sevin.

DR. SEVIN: Thank you for having me.

DR. KHOSLA: So talk to me a little bit about this ICU recovery clinic. That's not the same as long COVID Clinic, right?

DR. SEVIN: It's not. We actually started the ICU Recovery Clinic in 2011 when a lot of data was coming out about the long-term outcomes after critical illness. And as ICU practitioners, we were relatively sure that the patients who survived our ICU stay went on to recover and have no further sequelae from their critical illness. This was, of course, not the case, and we decided to set up a care system to have them come back after the ICU so that we could screen for the sorts of problems that we were starting to see described in the literature. The so-called post intensive care syndrome, which consists of new or worsening impairments in one or more of three domains: physical function, cognitive function and psychological issues.

So when we started that clinic, there was really only one other similar clinic in the United States, which was at Indiana, and that one was somewhat focused on geriatrics. So we didn't really have

a good model for what kind of care would be most beneficial, what sort of services people would need but you know, we were used to practicing multidisciplinary medicine up in the ICU, so we kind of just translated our multi-disciplinary team from upstairs in the ICU to downstairs in the clinic.

And we had our pharmacist, we had a neuropsychologist we had a case manager and of course, medical people, nurse practitioners and myself, I'm a pulmonary critical care doctor, and we just started seeing patients back and try to sort of elicit what their needs were and tailor our care to that.

DR. KHOSLA: You know, I used to love seeing my ICU patients in clinic and always was such a kind of this bright, shining moment, right, where you saw somebody who had been so, so, so ill and their death then just kind of roll into your clinic. Is that the same now that we've had so much COVID?

DR. SEVIN: It's both the same and it's different. I think it's different in degree because the severity of illness for patients who are hospitalized with COVID critical illness it...these are really long hospitalizations, long courses of mechanical ventilation and a lot more ECMO, which we weren't doing even in the medical ICU in 2011. So the severity of illness and the degree of critical illness that these people are coming on the other side of is much more severe. But the types of problems that we see in the post ICU period are actually quite similar. So for example, when we first started seeing patients in the post ICU clinic to try to be better at what we were doing and trying to figure out what kinds of patients we were seeing, we did describe sort of our initial cohort of patients and they were sort of uniformly very weak. We do a six-minute walk test to see what their exercise tolerance is. And almost a third of our patients couldn't even walk for six minutes. So that's not good. We do some respiratory function screening and we screen for cognitive deficits, post-traumatic stress, depression, anxiety, and all of these things are really quite prevalent. And, you know, since we've had COVID, we've seen all those same impairments just to a greater degree.

So, for example, if you were intubated in the ICU, and had sedation and perhaps some scary memories of your early ICU experiences, those would all be risk factors for PTSD. Now let's add on global respiratory pandemic and tons of misinformation, limited or no family visitation. Our sedation strategies just went haywire because we had been working for 10 years to try to lighten

sedation and avoid things like benzodiazepines which we know are very deliriogenic. And we know that delirium is the greatest predictor of post ICU cognitive impairment. So we had been doing great on trying to minimize those things. And then, you know, the pandemic hit and to be honest, we just ran out of some of our preferred medicines. So I had to use benzodiazepines again. We had to sedate people for much deeper and much longer because they were paralyzed and they were mechanically ventilated and their respiratory function was so tenuous.

So it was really a perfect storm for things to be worse for patients recovering from critical illness. On the other hand, there was suddenly a widespread awareness of critical illness and what ICU care might entail. And, you know, there was discussion in the lay press about intubation and mechanical ventilation and delirium and all these things that we had been trying to raise awareness of for many years without superb success. And one of the things that we noticed in our clinic was that a lot more people started coming to clinics. So pre-COVID, we sometimes had trouble getting people back to clinic because they were like, why do I need to go to this clinic, I have a primary care doctor, for example, or I already have a specialist, and a lot of patients were just not aware of critical care as a subspecialty, and they didn't think of post ICU specialty care as a follow up need. So we struggled to get some patients back. And our no-show rate for years when we started the clinic was about 50% for new patients. Once people came to one visit and they understood what we were trying to help them with and what we could offer, our return rate was almost 100% for those patients who needed to come back. But lack of understanding of post ICU syndrome was a huge barrier to getting the care that these patients need to the patient.

DR. KHOSLA: So there's then a lot of overlap, right, with post ICU syndrome and then this what we're calling long COVID syndrome?

DR. SEVIN: Yes, absolutely. And I think, you know, for most people in medicine, the concept that you can have prolonged sequelae from an infectious disease is not new. So although those things were not well understood, pre-COVID, it wasn't completely out of the realm of possibility that you would have lingering effects just from a viral infection. But the, you know, the World Health Organization definition of long COVID and of course, these are definitions that are evolving as we learn more about these diseases. But in that definition at least, they specify that long COVID is having symptoms beyond, you know, three or four weeks, whatever you would

consider the acute phase of an illness or infection. So symptoms that persist and don't have another explanation. To me, if you have post intensive care syndrome, you have another explanation.

I had a patient come in with a pulmonary embolism, new hypoxemia. He had had COVID, you know, maybe six or eight months before and he had also had a fall at work. He had undiagnosed or untreated asthma. He had untreated obstructive sleep apnea. He had gained 30 pounds because he wasn't working his normal physical job. So he had like five other reasons to feel short of breath. And he asked me, you know, do I have long COVID? I'm like, no, you have a pulmonary embolism and you have sleep apnea and you have asthma, and we're going to treat all these things and then see where we are.

So, you know, the, the range of impairments that we can see, which range from nothing, right? Complete recovery, even from severe infection, to very profound impairments that are completely disabling. That requires a tailored approach to each patient and a careful look at their problems and not just say, well, you had COVID and now you have shortness of breath, so you must have long COVID because, especially now, and we are recording this in the middle of winter, 2022, omicron is widespread. I know very few people at this point who haven't had COVID in some form or another and all the normal stuff is still happening. Like you can have COVID and have cancer, you have COVID and have other, you know, respiratory or other diagnosis that may or may not be related to COVID. So we can't close our eyes to the possibility that patients are coming to us with complaints that may not be related to COVID. We still have to give each patient a thorough evaluation and listen and make sure that we're providing the best care that we can.

DR. KHOSLA: Well, that's just right. You've hit on something really, really important is that we need to exclude anything treatable. Right. And so one of the things that we are seeing in our sleep clinics is this, you know, these sleep disruptions and sleep fragmentation. And there's it just seems like there's this big component of sleep disruption in long COVID syndrome. Is that your experience?

DR. SEVIN: Yes. So, you know, most of my patients that I see, all of my patients that I see in the ICU recovery clinic were in the ICU. So they were critically ill. But I also see a number of patients who are post-COVID in my general pulmonary clinic or as part of our Vanderbilt post-

COVID post-acute COVID clinic system and sleep disturbance...I don't think I am telling your audience anything they don't really know...but sleep disturbance is quite a widespread problem in our in our modern society. But I will say what I see in the post-COVID, not ICU level care and what I see in the post ICU folks are a little bit different. Again, a matter of degree. I see very common sleep disruption problems in post-COVID people. One is obstructive sleep apnea or symptoms that kind of look like obstructive sleep apnea. That's just very common. I'm in Tennessee. We're not the slimmest state in the nation. We have a lot of folks who are overweight and smoke and all the things that and take medications that aren't great for your sleep architecture. So all of those things can kind of contribute to obstructive sleep apnea.

In the post-COVID population specifically I will see very commonly patient has COVID. They have what is considered mild or moderate disease, a mild disease. You didn't have to be admitted to the hospital, although you may still be super miserable moderate disease. Maybe you required oxygen, but you didn't have to go on a ventilator. And then, of course, severe disease being sort of ICU level care. And the patients who have hypoxemia will have really in many cases prolonged hypoxemia and it takes so long for their lungs to get better. Their lungs do eventually get better. But by the time their oxygen requirement has resolved, they're so deconditioned and in many cases they've gained weight, that it is not possible to distinguish their shortness of breath from lung issue versus deconditioning versus overweight plus/minus untreated obstructive sleep apnea. So I send quite a few of those folks to sleep evaluation and often I'm starting that because we're trying to make sure that they don't need oxygen anymore. So I do an ambulatory oximetry walk testing clinic. They don't need oxygen and with exertion. So then I do a nocturnal oximetry, which is of course not a great sleep study. It just gives me oxygen and heart rate. But you can see if somebody oxygen drops intermittently accompanied by a raise in their heart rate that's, you know, suspicious for obstructive sleep apnea. So those are the folks that I will send for formal sleep study and try to get their sleep apnea treated.

DR. KHOSLA: So then it's not necessarily that you have a sleep clinician on your multidisciplinary team that would be a separate referral?

DR. SEVIN: I do not. However, pulmonary there are a number of specialists who do sleep, as you know. And so pulmonary sleep is our in my division, I have colleagues who do sleep. And if they're sitting next to me in clinic, I may just ask them. And for most people, I'll get them hooked

up with our sleep clinic or sleep specialists locally because a lot of our folks come from kind of far away but it is it is often difficult to get somebody into either a sleep clinic or into a sleep study in what we would consider a timely fashion. And I've had some folks get all the way up to the point where their sleep study was scheduled and then they were too...I had one lady call me and say, I'm here at the sleep center, but I'm not going to get the sleep study because, you know, the tech is not wearing a mask and I don't feel safe and, you know, there's just a lot of anxiety around COVID in general, which just throws up barrier after barrier to people getting that the care they need. Then we've had this recall of all these CPAP machines which really does not help.

DR. KHOSLA: Welcome to our world.

DR. SEVIN: Yes. So a lot of folks who already had CPAP just quit it cold turkey because of the recall situation, which has not been great. So that's a little bit a separate issue in the in the non-critically ill folks. The other thing I see quite a bit with them is complaint of hypersomnia such as sleeping more or longer than they normally would and this is also not a new complaint. That's something that I've heard people complain about after they've been trying to recover from illness or injury for as long as I've been a physician. And, you know, I don't have a good if it's really life limiting like they can't work because of hypersomnia, then I will refer them to sleep specialist. But in many cases, people are just trying to go back to work too soon. You know, they just got out of the ICU and they want to go back to work in three weeks. No, you need to embrace the sloth mentality, which is your body needs rest and you should just take more time off until you're ready to go back to work. Because what we don't want to happen is that you go back to work before you're ready and then you fail and you lose your job because that happens. So successful return to work as a worthy goal.

DR. KHOSLA: Well, it's funny, right? Because I think in our field we are seeing more people emphasize the importance of sleep, but I think we still lack that importance of rest. Yes, right. These unrealistic expectations to just sort of bounce back and go back to work and sort of be like at 100%. And I think we do need to you know, I have a lady who saw somebody for chronic fatigue and he told her basically just to sleep for, you know, six months, you know, to take time off work, sleep as much as you want over the next six months that your body can recover. And she got better.

DR. SEVIN: Right. And I see a lot of my patients since I also see workers comp, which is not something that many pulmonologists want to do, a lot of my patients contracted COVID in the course of their work and have that added layer of anxiety to their case because it's a worker's compensation case. And those are, you know, who gets COVID at work, truck drivers, nurses, respiratory therapists, policemen, all these people also do shift work. Right. So it's a really multilayered problem with sleep and recovery and rest and return to work. And then just this generalized anxiety of COVID and financial pressures later on top of it. So for most people, it's not one thing that's disrupting their sleep, but there are usually a couple of things that we can identify and target for intervention.

DR. KHOSLA: So let's take a short break and when we come back, we'll talk more about the impact COVID may have on some of our sleep patients. You're listening to Talking Sleep from the American Academy of Sleep Medicine.

AD BREAK: It's time to go “back to sleep” at SLEEP 2022. The annual meeting of the Associated Professional Sleep Societies is returning in person June 4-8 in Charlotte, North Carolina. Register, view the preliminary program and learn more at sleepmeeting.org.

DR. KHOSLA: Welcome back to Talking Sleep. Our guest today is Dr. Carla Sevin, director of the ICU Recovery Center at Vanderbilt. So one of the things that we have really been trying to do in the field of sleep medicine is to expand our reach and be more collaborative with our non-sleep colleagues. So is there a role for the sleep clinician in a long COVID clinic?

DR. SEVIN: In my opinion, there is a role for a sleep physician in any of these phases of care that we've been discussing so far. So that would include pulmonary patients, patients who didn't have pre-existing pulmonary disease but have long COVID, and then almost universally, the patients who are critically ill will have some kind of sleep disruption. We talked a little bit about folks who were not in the ICU, but might have sleep disruption related to their COVID or COVID adjacent. The folks in the who were critically ill in the ICU, most of whom are mechanically ventilated, they have kind of an additional couple of areas that we run into with sleep disruption.

One of them is, as I mentioned, many of these folks have been in the ICU for much longer than people were used to being in an ICU before COVID. So we have patients who were in the ICU for four months, six months, even longer. I had one patient on ECMO for 154 days.

DR. KHOSLA: Holy smokes. Oh, poor thing.

DR. SEVIN: Yes. And eventually even went home on continued mechanical ventilation. So these are folks who have physiologically disrupted sleep. They got long periods of sedation that screwed up their sleep cycles. They were woken at all kinds of hours to have medical care and lifesaving critical care. But it's not great for sleep. There's a lot of noise in the ICU and there there's a lot of light disruption. I mean, it's really no worse place, I think, on this planet for sleep than the ICU. So they really have physiologically disrupted sleep.

In addition to that, there is a high burden of psychological impact from being in the ICU. And I didn't really realize how common this was until I started asking patients about their sleep. But I have for many years have worked in you know, I'll do my history and physical and then as I start the exam, I'll just say, how's your sleep? I mean, it's a really open-ended question. And I get everything from it's fine. And then the family members like shaking their head in the corner who, you know, snoring, you know, have to pee ten times a night, which there's not much I can do because I'm not a urologist, you know, all kinds of sleep disruption, but not infrequently I will ask this very innocuous question, and the patient will just break down crying. And it's really sad, you know, that patients have this huge struggle that they wouldn't necessarily volunteer. But in the post ICU population specifically, a lot of it is fear, post-traumatic stress and fear afraid to go to sleep. I'm afraid I'm not going to wake up. They're used to being in an environment where they know they're being watched. So in the ICU, you're being watched 24 hours a day. And in that situation, they felt like they could sleep because they knew if they stopped breathing, somebody was going to come in and do something about it. And they don't have that at home, and they're still afraid that they're going to die in their sleep.

I've had patients tell me that they are afraid to go to sleep because they're afraid to wake up intubated again, which, of course, a lot of times people are unconscious around the time that they get intubated. And then when they're better enough to come off the ventilator, we lighten their sedation and they to them, it's just like waking up and now I've got a tube in my mouth, which is a terrible way to wake up. And so there's that fear. And there's just this general insecurity about

breathing. And it's my breathing, you know, enough to keep me alive during the night. So that's something that obviously I don't have a fix for that but that's one of the reasons why I feel so lucky to have a neuropsychologist with me in clinic so we can really do some psychological counseling, validate people's fears, let them know that, you know, they may feel crazy but they are not alone. Many patients feel the same way and are afraid, too. And having that that validation in itself can be quite therapeutic. We also have a peer support group that meets virtually now because of COVID and patients can, you know, zoom in and talk to other patients who have survived critical illness and share their experiences. And that also can be quite therapeutic.

DR. KHOSLA: You know, you've kind of added this whole other layer to this. You know, I joke with my friends that I go through more Kleenex in my sleep clinic than I ever did in my pulmonary lung cancer clinic. And I think, you know, when I've had time to reflect on this over the years and I think, you know, sleep is a very intimate thing, right. And it's such a privilege that these patients allow us into that sacred space and their guard is down. And so it's not at all uncommon for patients to just sort of start crying in clinic because we're exploring their sleep and why they can't sleep and, you know, sort of nibbles around the edges of trauma, for example, or things like that. And now you're introducing this physiologic concern too right, I'm going to not breathe, I'm going to wake up intubated.

DR. SEVIN: Mm hmm. Absolutely. And, you know, I think a lot of us as medical doctors, we feel kind of ill equipped, at least early in our careers to fill that psychological need. But it really is up to us, as you know, the first line responders in this problem, to learn how to you know, provide some reassurance and to really sort of tease out when somebody needs a more specialized referral.

So you know, you asked me whether there's a role for sleep doctors in post-COVID clinics. And I absolutely think there is. But maybe there's also a role for psychologists in sleep clinic.

DR. KHOSLA: Oh, 100%. Yes.

DR. SEVIN: And I I've had some practice settings, you know, before I had kids and they sucked up all my free time in my life. I would volunteer at a clinic for underserved people. And it was a faith-based clinic. And you know, they had kind of the old-fashioned flags on the door where

you could put up the flag like this person needs a vaccine. This person, you know, needs a nurse or whatever. And they had a spiritual flag and you could put up the spiritual flag and, you know, a spiritual advisor would come in and sort of in a non-denominational way try to meet the spiritual needs of the patient. And there are many things that we deal with in medicine that don't have a prescription that can fix them. But these are actually spiritual needs manifesting as physical disruption. So I don't know of a medical setting where that wouldn't be a good idea to have a psychologist and a spiritual counselor.

I felt very lucky here at Vanderbilt during the pandemic. You know, our care practices have changed in many ways, mostly not by choice, but one of the things that has been a huge benefit to me and to families and to patients and to staff has been having, you know, a pastor or a spiritual counselor on the floor dedicated to our unit. So we have that support in the ICU. But, of course, we don't have it in most outpatient settings.

DR. KHOSLA: What a good point. That was always there, you know, and in the ICU, when we would transition, you know, from full court press to sort of allowing natural death and it was such an important crucial step, I think, not just for families, but I think for all of us, you know, to kind of understand that, you know, that that is such an important service and need for these families. And we don't want to overlook it.

DR. SEVIN: Absolutely. And we can, you know, we can't be everything to all people. But if we know that, you know, spiritual needs are high in the population that we're seeing, we can at least acknowledge, you know, perhaps there are referrals that we can make or there are supports that they have in their community that that can help them.

There's some interesting data coming out from one of my colleagues in the post ICU space who is looking specifically at spiritual support in the post ICU period. And it's quite it's quite moving to talk to patients and families as and if you ask them specifically, they feel they feel abandoned when they leave the hospital. They feel abandoned by their care teams but often by their families, by their communities, and in some cases, their churches.

So these are obviously not things that we can fix, but we need to be aware of sort of the whole milieu that we're working in and trying to try to treat. So even if we I think I think there's a general fear about uncovering problems that we don't know how to fix. But I think there is

benefit to knowing that they're there and to validating the patient and acknowledging that this is probably contributing to the struggles that they're going through.

DR. KHOSLA: Well, it's very human, right? That need is just such a basic human need to connect and to feel that validation that, you know, I'm sorry, I may not have the answers, but I hear you, you know, and let's work together to find that. I mean, does this, you know, does this do you see this in your long COVID rehab clinic or program?

DR. SEVIN: Yes, absolutely. And especially with COVID, you know, we we have to stay humble and say this is a new disease. We don't know all the answers, but we're going to walk with you and we are going to work with you and we are not going to abandon you. We're going to do everything that we can to find things that we can make better or that we can treat.

And, you know, and I also tell patients this is a process. So a lot of times, you know, patients have waited weeks or months to see me in clinic. And they kind of hope that I'm going to solve everything on that first visit. And of course, that is usually not the case. But, you know, I try to set out very clearly, you know, here are the problems. Here's my initial impression. This is what I think would be a reasonable plan. And if that doesn't work, we'll do something else.

DR. KHOSLA: Well, and I think that's such an important message, right? It's not a one and done it's let's try this. Let's reevaluate. Let's try this again. And let's really partner to try to, you know, figure this out.

DR. SEVIN: Especially with sleep, right? You're going to sleep every day for the rest of your life. You know. There's no at least there's no long term skipping of sleep. Right. It's going to catch up with you. So and sleep, like many things, changes over the course of the lifespan. And you may have different needs and you know, your work is going to affect you in your family situation, in your living situation.

There was a great article by Atul Gawande a few years ago called The Heroism of Incremental Care or something like that. I may be misquoting the title, but he describes, you know, a headache clinic, basically. And when we think of like heroics and medicine, it's usually, you know, somebody flying in and cracking the chest and, you know, doing the surgery or, you know, saving the life and that's it. But often the hard work of medicine, but also the rewarding

work of medicine is walking with somebody and tweaking and tweaking and tweaking and then one day they come back and they're like, I'm better.

DR. KHOSLA: Yes. Well, and so you raised kind of this important issue. You know how so for us sleep clinicians, how can we partner with you and all the good work that you're doing with these, you know, post ICU patients and long COVID patients like how can we partner with you to help these patients get better? Like, what is our role and how can we do a better job collaborating?

DR. SEVIN: Yeah, I don't know the one answer. I mean, I would love if anybody wants to come to my post ICU clinic and just see all the patients with me, you would find plenty of things to do. But that's not really I think that's probably in most settings not feasible because, you know, sleep physicians are already busy and that is also part of our job, building the systems that work for the patient, and, you know, for us, it's not particularly convenient for me to have a multidisciplinary clinic on Friday afternoons because most people want to do something else on Friday afternoon. But it's a time when we have more time. We have clinic space, and that's why we've been able to create this program that meets the patient where they are.

DR. KHOSLA: I don't know. It's it's -6 here. And you're in Tennessee. I might be packed my bags tonight.

DR. SEVIN: All right. Well, walk carefully, because we actually got a little ice last night and we're freaking out! Yeah, you probably wouldn't. You'd probably be like, what ice? Yeah. Yes. And I think, you know, just establishing those personal relationships like you would with any sort of referring or referral partner, having somebody that you are colleagues enough with and hopefully even friends enough with...you could just text them or call them and be like, hey, I have this, you know, sleep question. Does this patient have to drive 3 hours for another appointment or can I just tell them this? And that's been very helpful to me. So so working. Of course, I work in a in a tertiary center, so I have every specialty that I could want. I can call them. But in many settings, you you have to kind of actively go out and, and meet those people and build those relationships so that you can have that, that collaborative relationship. But, you know, it goes both ways too, right? So they're going to call you about their thing.

DR. KHOSLA: Absolutely.

DR. SEVIN: So yes, whenever I cold call or email somebody at Vanderbilt I'm always like, I'm happy to provide some pulmonary ICU support if you ever need me. I hope you don't.

DR. KHOSLA: Are you bartering your services?

DR. SEVIN: Yes. Absolutely. I will barter. I have no shame when it comes to, you know, trying to make something easier for my patient.

DR. KHOSLA: You know, my brother's an endocrinologist. In Canada, and I will just text him some. I'll be like, okay, hang on. This person has this and this is their whatever level and I'll just wait for him to text me back so I can I can let my patient know if it's, you know, a scary thing or an okay thing or does this need an urgent referral or do they need to see endocrine at all? Is this like a something or nothing? And sometimes that you know, that piece of knowledge and I always preface it with this is totally, you know, just like nothing. But yeah, I think it's important because, you know, it is part of partnering with your patient, really. You can't they can't see a million different people.

DR. SEVIN: Right. Especially in the post ICU population. This is a huge barrier so like let's say they've been in the ICU for four months. Their family already took off a bunch of work to try to be with them in the ICU or in the rehab period. And they're really weak still. Most of these patients are not back to driving. A lot of them got life flighted in from somebody, you know, from parts unknown. And so to come to clinic means a three hour drive and a exactly two week arrangement of child care and off work and other things. So, you know, we talked about a lot of bad things that happen with COVID and a couple of good things that have happened with COVID. One of the good things has been the emergence of telehealth or telemedicine as a viable care delivery mode and we should not let that go.

That is extremely necessary for patients, especially rural patients, debilitated patients, patients who don't have a lot of social support. And, you know, when we started, we actually started a telemedicine pilot of our ICU recovery clinic before COVID hit. That was really prescient because, you know, when March 2020, everybody in the world was trying to figure out how to do telemed. And we were like, well, at least we know how to connect to people. So we were a little bit ahead of the game. But, you know, I was not I don't consider myself an early adopter really of anything, and especially when it's technology concerned and I am kind of old school, I

like to sit in the room with my patient, you know, listen to them, see their body language, listen to, you know, examine them. And I was one of those who thought, well, I can't do that with telemedicine, but the truth is, it's not like, can I have in-person or telemedicine? A lot of times it's going to be telemedicine or nothing, you know, and is nothing really preferable?

DR. KHOSLA: Or both, right. Like maybe it is like somebody with a TSH of seven, right? They see the endocrinologist that lives 4 hours away and the endocrinologist looks at all their labs and says, you know what, let's repeat this lab in a month or three months or whatever. I mean, you've saved that person a big trip.

DR. SEVIN: Absolutely. And there actually have been a lot of benefits that we didn't anticipate. You know, for example, you get to see where the patient lives, often their family members. We've had all kinds of interesting experiences with telemedicine, you know, but I recall one patient where one of the one of our screening questions in post ICU clinic is, you know, we really see this as a pregnant moment for teaching and health improvement and post-traumatic growth. So we're not only fixated on trying to fix the problems that were caused by the ICU, but like, you know, maybe you were tied down for four months and that's why you didn't smoke but that could have been the longest time that you didn't smoke in your whole adult life so let's grab this opportunity to make sure that you quit smoking for good.

DR. KHOSLA: Yes, let's run with it.

DR. SEVIN: One of our screening questions is about alcohol. And I just remember this one patient who who signed into his telemed visit, and he was just sitting in front of a, like, cabinet of like so much alcohol. And and so my screening questions about alcohol were somewhat supplemented by the visual.

DR. KHOSLA: Well, maybe they were all full, right? They're not just he's not going through it so fast.

DR. SEVIN: They weren't. They were not.

DR. KHOSLA: I tried. So any final thoughts for us?

DR. SEVIN: Well, I think this is this is great what you're doing and you know, just as COVID has brought the concept of recovery from illness in general and especially a post critical illness

recovery to the forefront and raised awareness of this, for the same reason, I think there's so much that our patients and families and just sort of the lay population and can learn about sleep.

And we didn't even touch on screens and sleep hygiene. Obviously, that's extremely important. So I really think this is an opportunity for us to improve systems, improve multidisciplinary interdisciplinary collaboration, as you suggested, and focus on getting the best treatment to our patients at the right time.

DR. KHOSLA: So I'm going to share something that you shared with me earlier. So you...and I love this...you take pictures of your patients with permission that are post ICU and that you see and follow up clinic and you share those pictures with your ICU team. I love this. I used to love post ICU clinic. I think that's really where you get to get to know the person that is under all those lines and tubes. And it must be especially gratifying now. So I hope you get to have more of those wins as we get through this seemingly endless pandemic. Thank you so much for taking the time to talk with us today.

DR. SEVIN: It was a pleasure.

DR. KHOSLA: Thanks for listening to Talking Sleep, brought to you by the American Academy of Sleep Medicine. For more podcast episodes, please visit our website at aasm.org. You can also subscribe through your favorite podcast service. And if you enjoyed this episode, please take a moment to leave a rating or review. For more feedback or suggestions email us at podcast@aasm.org. I hope you'll join us again for more Talking Sleep. Until next time this is Seema Khosla, encouraging you to sleep well so you can live well.