**Professor Jill Ohar - Managing COPD patients during the COVID-19 pandemic**

Richard Russell ([00:00](https://www.rev.com/transcript-editor/Edit?token=NLTN7VYlK2T3CD9-JYE_nXd5p8wl_vwCHT94Uqos219Mq9ewmCdxB3ieEjHRYVbxQpXmGW7Nx-SBp8OnB89dKjuKhks&loadFrom=DocumentDeeplink&ts=0.57)):

This podcast is intended for healthcare professionals outside the United Kingdom and the United States of America only. Welcome to the Medical Insider COPD by Boehringer Ingelheim, a podcast offering a breath of fresh air to clinicians treating COPD across the globe. My name is Dr. Richard Russell, and I'm a Consultant Chest Physician at Lymington New Forest Hospital in the United Kingdom, a senior researcher at University of Oxford and the Editor-in-Chief of the *International Journal of COPD*. I'm your moderating host for this season of Medical Insider COPD podcast. I'm here to bring you news and insights in COPD, right from the source directly to you. So, thank you for joining us today. Be sure to subscribe and follow Medical Insider COPD to ensure you do not miss any of the exciting podcasts in this series or in the ones we've already done.

Richard Russell ([01:02](https://www.rev.com/transcript-editor/Edit?token=gDKLyzA_VqWeyv5qugEo5iDNoBsm6jMLaXyYuljGKc3-f9I86dY68-cQugt_B-JTa7022uWB7Ay7Bm-kPrw7mHuavtQ&loadFrom=DocumentDeeplink&ts=47.03)):

Today, we're going to delve into a publication which we believe is well worth reading. This has the title of ‘The Use of Inhaled Corticosteroids and Risk of Acquired *Pseudomonas aeruginosa* infection in patients with COPD.’ It's just been published in *Thorax*. We're also going to look at an emerging exciting topic from social media, particularly looking at communities of COPD, particularly during COVID. But first, I am absolutely delighted to introduce today's guest Professor Jill Ohar. We're going to discuss COVID today. Jill is a friend of mine. She's a Professor of Respiratory Medicine at Wake Forest University in Winston-Salem, North Carolina in the United States. So, Jill, welcome.

Jill Ohar ([01:42](https://www.rev.com/transcript-editor/Edit?token=X3pKz9W4gWAcx9d2fUwI_HkH3KLilhbVE0Cz_NKpGG5_QBeDcKbbVKgomF2BNrLqdAzgmk9fCRHu0tOaMu86d7Y0dAI&loadFrom=DocumentDeeplink&ts=87)):

Thank you very much. I'm very excited about the discussion today, especially because I'm doing some work in virtual technologies in COPD, and I think this will be relevant to today's discussion.

Richard Russell ([01:56](https://www.rev.com/transcript-editor/Edit?token=tSOPU6Q5wC6dPUuGKjc2C967EJj4QEZvqV_Jdq_mA73WvFH8Om4WmcsZDu2uRBR7Fa-eQL27xMtfl7hH5TUejNXnq3I&loadFrom=DocumentDeeplink&ts=101.75)):

And Jill, like many of us as a respiratory physician, you've been on the frontline in COVID, and we'd love to hear your experiences of COVID and your COVID and COPD particularly. How have you found it? Has COVID impacted COPD and also has COPD impacted on COVID?

Jill Ohar ([02:11](https://www.rev.com/transcript-editor/Edit?token=VvXabGSr1uRXGt_wPU1Ig4sZm2ij1u91SgeDYwzec7mrrkTQ1Jc7hwTSgOkpvK9eliwY-VHNfJX0QZ3CH5_X6Ed6iSw&loadFrom=DocumentDeeplink&ts=118.72)):

Well, you would think that patients who have COPD should be at increased risk for COVID. They have upregulated angiotensin-converting enzyme-2 receptors in their airways. They have endothelial dysfunction that could lead to coagulation dysfunction. They have impaired innate and adaptive immunity leading to delayed clearance of viral respiratory tract pathogens. However, the data has not really supported that patients with COPD are more likely to get COVID infection. What we have found, however, is that if they do get a COVID infection, they are more likely to develop severe complications such as hospitalisation, ICU admission, mechanical ventilation, and also death.

Richard Russell ([03:06](https://www.rev.com/transcript-editor/Edit?token=fJWgi2e0IBKjtLT7_cI4_76DGaY4ymVU2zYsmAC3CZHpM4uoGIyS0_MCGAyGAeqG9qE8RZwsDESxM_92jqgwQUO2Row&loadFrom=DocumentDeeplink&ts=176.8)):

Here's a tough question for you. Has it been possible to tell a difference perhaps between a patient with COPD presenting with an ordinary exacerbation of COPD, versus when they present with COVID, and have you been able to pick these apart?

Jill Ohar ([03:21](https://www.rev.com/transcript-editor/Edit?token=fdQWstSTRQpRkxxcr-lFmQsc71SiSSi38-oeYInWjAR-T_Ipq2andcKuVg5i8s1Fpf3otcd99lbyX4qPv5BlMjukaV8&loadFrom=DocumentDeeplink&ts=191.37)):

Not really. If you think about it, the most common ideologic agent that provokes an exacerbation is a viral infection. And what is COVID? It's a viral infection. Patients who present with COVID really don't present in a fashion with symptoms that are markedly different than other viral respiratory tract infections. Patients get fatigued, they have flu like illnesses, they have diarrhoea, they have loss of appetite. So, nothing here that can separate the sheep from the goat, so to speak.

Richard Russell ([03:54](https://www.rev.com/transcript-editor/Edit?token=841wVeSBNLcRY-1WX9c3r7e45ZDEY6hXD54uXI4UrucEfADhsNklJLVNQ2yNQ6XhQkfA28OxllNg6wCqlnbb5zDAZBw&loadFrom=DocumentDeeplink&ts=228.52)):

So testing is really important. And you mentioned prognosis of these people is tricky. We also know that age, obesity, cardiovascular co-morbidities are really important prognostic factors in COVID. Is that the same in COPD and how does that all interact together?

Jill Ohar ([04:09](https://www.rev.com/transcript-editor/Edit?token=FRKRWaa8Egjv9gE6YRxVgXJdWVsIHntSlbSGPyPzrsq2-zYsNOqnPHF6GBFugnuIayH9fvViSU4OwmNj3YE6ML6BzdM&loadFrom=DocumentDeeplink&ts=243.31)):

Well, that's very fascinating that you would mention that. We know that patients who smoke and develop COPD are a very unusual group of people. Overall, 30% to 40% of all smokers will develop COPD. And this group generally tends to have a much higher prevalence of common comorbidities such as diabetes, the metabolic syndrome, cardiovascular diseases, depression, cancer, et cetera. And so here we are with a group of patients, COPD, who are at increased risk for severe complications of COVID if they get it. And in addition to that, they have the double whammy, so to speak, of also having a higher prevalence of these common comorbidities that also increase their risk of severe disease.

Richard Russell ([05:03](https://www.rev.com/transcript-editor/Edit?token=_Rjuiu7jcJvbEV-u1R-rUulgndNWjHMHmrFae-tkpigjy5SkDlruSANzul-Ox6Szxaam1Bjh-qwLaIZBrJZ-bt1WkIg&loadFrom=DocumentDeeplink&ts=298.68)):

That's really relevant and actually how we treat these people, which we'll talk about in a minute. Let's also though move on to something which is very close to my heart, which is the impact that the pandemic overall and our response to the impact has had on our patients with COPD. How have you found that and how have your patients found it?

Jill Ohar ([05:21](https://www.rev.com/transcript-editor/Edit?token=Yp9xWuQvpnVKl6Ga4qGXDIfniIGrzacP1oC575QBxKAaK7pH2th33daQ5i3VMzdTsaSs9AwOQbKJxRcGRc0tiS2HftU&loadFrom=DocumentDeeplink&ts=316.52)):

Well, I think that many of our patients are hiding out at home, and this has several ramifications. One is a good one, which is they're not being exposed to the usual viral respiratory tract infections that they would get in a usual annual course of events. Their children, their grandchildren, are not coming over to interact with them. If their grandchildren do, they're not in school and so they're not passing the viral respiratory pathogens around. So that may be the good news. The bad news is that shielding is resulting in social isolation, depression, often weight gain, deconditioning, and also failure to really keep up with medical surveillance, usual medical management of their COPD, and maybe their comorbidities as well.

Richard Russell ([06:14](https://www.rev.com/transcript-editor/Edit?token=l4X2odrkYeCIzgaRjDVVOSl7Nu9o9mS1OXAof0SiW75FObzd2eaHbsNbtdXNPUgFibdx86MYvtRIUo6pOpTTzsEHVYM&loadFrom=DocumentDeeplink&ts=370.02)):

So what should our response to that be? We've got to get rehab going again, I guess.

Jill Ohar ([06:19](https://www.rev.com/transcript-editor/Edit?token=6-jQtilMCrxD2FNX6vlW4XgFgbIjYobetUYqCVTo8FzjZpUWVkBYV4sEcIhBQw2p75zz8ypHehIZ6tDpxLedf2SOlAk&loadFrom=DocumentDeeplink&ts=374.86)):

I would strongly agree. And personally, I'm involved in a study investigating virtual pulmonary rehabilitation. There are several ways to provide this service. One would be remote instructor that you follow digitally on your tablet or computer. The other would be a gaming platform. Both of which in preliminary study appear to have the same or possibly even better outcomes than standard pulmonary rehabilitation. It also provides patients an opportunity to do pulmonary rehab at their leisure. It avoids the barrier of transportation, and it may be less expensive.

Richard Russell ([07:00](https://www.rev.com/transcript-editor/Edit?token=CEBTv5tFmtzdOjomXiYVrOdWrs43qOq6GJ0yb09Jfq9yajl7vPqw2Lvmo080Vn1i4cnB3_cGPRNBlWdogncMYX0rzew&loadFrom=DocumentDeeplink&ts=417.17)):

Let's talk about treatment of COPD and perhaps talk about a little bit about COVID treatment. What would your recommendations be for our patients with COPD to continue their usual therapy and how should they be treated? Any different?

Jill Ohar ([07:13](https://www.rev.com/transcript-editor/Edit?token=eYxEZ15zGcaIT_raO7PlbaFfPjt9BPftCl8lpDWGVecXv3jLvU5qrnPMDezHXT4RPbeFqmpWQi_XJs0drfExO2EUAIs&loadFrom=DocumentDeeplink&ts=430.8)):

Yeah, I think it's important first off to know that your patient has COPD. This is a clinical diagnosis that's often incorrect. There are many smokers out there with severe COPD who don't carry a clinical diagnosis or a spirometry diagnosis. So, number one is ‘make a diagnosis’. Number two is ‘prescribe bronchodilators’. That's the first line therapy for patients who are symptomatic with COPD. And whether you go with a single bronchodilator to start off with or dual bronchodilators, I think it's an area of controversy, but certainly bronchodilators. Not only because they improve symptoms, but they also reduce exacerbation frequency.

Richard Russell ([08:00](https://www.rev.com/transcript-editor/Edit?token=KnQo9492N0PbdcbXy1ILWxib0torHTF1WmS5ZpjJcTF6vzRq0rZ1U520AzQ78PbZXhGqMUPLc7vBwGdTnVaxuPx8EhE&loadFrom=DocumentDeeplink&ts=661.22)):

What's your thoughts about the use of inhaled corticosteroids as a novel therapy for COVID-19 in COPD patients?

Jill Ohar ([08:10](https://www.rev.com/transcript-editor/Edit?token=WKVMQZ-a4fnccCDbdFQUpH-Dfzdfv4lQFeYSMtMns7ufusAAZctkTYWymaQPS3-EeOQyZAAkjyEBVFK-fbLLfAu-78g&loadFrom=DocumentDeeplink&ts=673.4)):

I think the take home message to our clinicians and also our patients are, if you're on a bronchodilator, continue the bronchodilator. If you're on a bronchodilator ICS combination, continue it. Remember that inhaled glucocorticoids are limited in COPD to patients who have frequent exacerbations and/or modulated by your peripheral eosinophil count of perhaps greater than 300. Finally, the use of oral medications that reduce inflammation, such as Roflumilast as an end stage patient who needs bronchodilatation, inhaled glucocorticoids, and additional work with control of their chronic bronchitis and frequent exacerbations.

Richard Russell ([09:02](https://www.rev.com/transcript-editor/Edit?token=astVXEgkVO41RDpF75IHo2fbsONZFYnoclQFxfwosXm4BkEPGCEMw2Lj91jvPSjNKPKPF3EoAQeLTp-Fi7qVRyZAOdo&loadFrom=DocumentDeeplink&ts=514.39)):

What about treatments actually of COVID and have you come across any trials or things which have something specific to say about that?

Jill Ohar ([09:09](https://www.rev.com/transcript-editor/Edit?token=NqjNgHwt-BLXUafLJbW1R_lF9X9e4YYP89MRkjk9EEY0KPuNX0MF4vELpdg1SmNPNfZ3j2cN2koHRWAJaWSUzIcfuQc&loadFrom=DocumentDeeplink&ts=535.02)):

Well, clearly the standard therapy for COVID, at least in our hospital, is dexamethasone. And then an antiviral. We're using remdesivir. I read an article earlier this week about a dual antiviral combination in high-risk populations. And in this population, it was a Mayo Clinic paper, 22% of the patients were COPD patients. And all of the patients had comorbidities that would put them at higher risk of severe disease. And this was a group that had mild to moderate COPD, and they found that the use of a dual monoclonal antibody cocktail that was an antiviral combination, reduced the frequency of hospitalisation in these patients. Now, do we have a magic bullet yet? No. I think other than dexamethasone systemically used, the jury is still out, but I think soon we're going to have some pretty firm guidelines on other things we can do in mild to moderate disease to keep patients from moving to the hospital. And furthermore, perhaps patients who have moderate disease to keep them from requiring ICU type of care.

Richard Russell ([10:22](https://www.rev.com/transcript-editor/Edit?token=GGXPswa_LDzhZPXyiXkseaNo_bO_5a1Q8GVqAAFakLKM_3yDct_cgbOljVLimowG7ALz8xVKkF5JSpVO8U0UUfm6tIQ&loadFrom=DocumentDeeplink&ts=620.39)):

You've already mentioned Jill the impact that social distancing, shielding and mask wearing, et cetera, has had on respiratory infections and that in fact, we've had a lower rate for last winter than we've had before. Do you think you can make any sort of recommendation for the winter coming up and what have we learned from the COVID behaviour that we can take forward for COPD care?

Jill Ohar ([10:45](https://www.rev.com/transcript-editor/Edit?token=yHfMcMtQED1sYG3P2Dwv4nXsnncATKczla_Mt_hY1chLENzTUsenIom9eZXu0aQ2DscwUomNbQbChiOsSQrUjb30_TA&loadFrom=DocumentDeeplink&ts=644.11)):

Well, I think with the winter coming, I think, vaccination, vaccination, vaccination. Number two, take your medicine. Please be meticulous about taking your medicine. Number three, keep up with your appointments with your doctor and please take advantage of the virtual office visits. They're wonderful. Patients love them. They don't require transport to the hospital or to the clinic. And they avoid that social interaction with other people who could be carrying the virus.

Richard Russell ([11:15](https://www.rev.com/transcript-editor/Edit?token=zghd-eHB2VAlZiN83eNj33TqklocKBT40ueIqdxzweVDexYNqgjGoxvfp1n0Q7Urjhi8UAyOgcbjcqb-882T1yhPVKo&loadFrom=DocumentDeeplink&ts=752.13)):

Jill, you mentioned your interest in remote telemedicine and remote medicine. Perhaps one of the silver linings of COVID is that we've really pushed this technology forward and the interaction we have with patients is now very different. What's your view on this and where may this go in the future?

Jill Ohar ([11:30](https://www.rev.com/transcript-editor/Edit?token=B0sIqrKZ6PD9x89RkJ5-wisfroY899SjzTtq4wg5tzsYm1FdJLEnC8YUQGNVKHQ3LHTKwKoa3qZ0jTZtlsHXcL7s65M&loadFrom=DocumentDeeplink&ts=770.21)):

I have exclusively for the last year and a half had a virtual clinic, and I find that my no-show rate has been dramatically decreased. I find that I have time because there isn't the usual intake process that eats into my time with the patient to ask about their inhaler use, which is critical. And I have time to ask and can actually see their technique. I also get an idea of whether they really use that inhaler or not because people who use their inhaler frequently, they know immediately where it is and can grab it, show it to you, and then show you how they use it. Where those who have not been necessarily adherent to therapy, have no idea where that inhaler is.

Richard Russell ([12:20](https://www.rev.com/transcript-editor/Edit?token=hLU0D8rDpl5mpQjX8ysA_DGeZ6xIJcTk8eukbE-w4Q7kPOTdoUM7J62XP1vWDtnQMcE4Qq-ZTtS3muIZfJItZSIj23g&loadFrom=DocumentDeeplink&ts=824.36)):

That's a really good tip. I love that. I think that's a really smart way of getting inside the patient's head a little bit and seeing, and you can then clearly challenge them about their treatment and take it forward as a really active discussion. And Jill, have you had any problems with those digitally unable or digitally disadvantaged, shall we say?

Jill Ohar ([12:37](https://www.rev.com/transcript-editor/Edit?token=bGCuEg84vfmfGZ_Ma88tovNeh_j9kuji9inL5fLAJIn5RvHfX72DY471whg_7GWMSMoz8r359xxbB0r6th8vEp7B2Ek&loadFrom=DocumentDeeplink&ts=775.09)):

Yeah. But it hasn't been nearly as great as I had anticipated. I find that many of my patients have digital consultants either present in the home or frequent visitors. They're also known as grandchildren. In addition to that, many times patients will have a neighbour, a friend, a spouse, et cetera, that can help them get online. Finally, if patients are having trouble, it's simple to convert it to a phone visit with advice to get that consultant to come back and help them before the next visit.

Richard Russell ([13:11](https://www.rev.com/transcript-editor/Edit?token=rSQ4vRrZVs5COPrkARJoWDU4wkiMaCX73b1DisbVLOIF3AenGVQVt2KVHxuY5arzqOqN1SYFMw-t-Vebb7cWrwQdwjI&loadFrom=DocumentDeeplink&ts=815.86)):

That's really helpful. Jill, before I come on to this important publication which I think is worth talking about, and the hot topic on social media which is interestingly about COPD patients and their communities online, perhaps you could summarise for us a couple of key points from this discussion today.

Jill Ohar ([13:28](https://www.rev.com/transcript-editor/Edit?token=CxkLlWoQoNOCvl9pSJteHfDlHEFtMxQ2NlmvBvU7slArSwsA8-vVhF8MSFQuuH37uc5yQKdSUhjycJLuVGP4Ve4xID0&loadFrom=DocumentDeeplink&ts=833.4)):

Yeah. I think that the key points are, as I mentioned before, vaccination, vaccination, vaccination. Number two, confirm that COPD diagnosis and that's for clinicians and also for patients who are smokers, who really, they think they may have it, but haven't really had a confirmed diagnosis. Take your medicine. Whether it's bronchodilators, bronchodilators with or without inhaled glucocorticoids. We know that in addition to improving your symptoms, they also reduce exacerbations and hospitalisations. Keep active. Join pulmonary rehab or go out and walk daily in your neighbourhood. Maintain a healthy diet and a healthy weight. Obesity is such a risk factor for severe disease and it's something under a patient's control. And finally, take advantage of virtual opportunities.

Richard Russell ([14:18](https://www.rev.com/transcript-editor/Edit?token=RMaxi8RKtLJnN3ByfK2VtY9PqaM3SLYLckUTLGufP53r4JIxFuyaaXpH_2hjHIve06xy7bXzyiJk4nu9G2-H1ez2YkA&loadFrom=DocumentDeeplink&ts=887.85)):

Professor Jill Ohar from North Carolina, United States. Thank you very much for joining me today. It's been a great pleasure working with you. I look forward to seeing you very soon and wish you the very best. Thank you.

Jill Ohar ([14:29](https://www.rev.com/transcript-editor/Edit?token=Dl9EGANae3bYZWP2lozG4H4sb6uZ4zzqV1A7oq0gSfMHOAxK8DRWPUK3OB3JUDZ5AVEgJFsX8Xj7eM8gPj3bJTChAPI&loadFrom=DocumentDeeplink&ts=899.05)):

Thank you.

Richard Russell ([14:35](https://www.rev.com/transcript-editor/Edit?token=KgGoD6OFDjVaM0l1GGRkOdNhqepn-1LUUYr3WsOcx4WDXw2m8_DmTglSwYgvB7DdP4ABHXpxZ3VZcB5PvVSifMOBPXg&loadFrom=DocumentDeeplink&ts=4.06)):

In a moment, I'm going to talk about a really important hot social media topic. This is looking at the communities for COPD that we're finding online at the moment, particularly relevant during COVID. But before I do that, I want to share with you about an important new paper. This is entitled ‘The Use of Inhaled Corticosteroids and The Risk of Acquired *Pseudomonas Aeruginosa* Infection in Patients with COPD.’ This has just been published in *Thorax* August 2021, and it's published by Eklöf et al. The reference is *Thorax* 2021, Volume 0 page 1 to 8. The background of this paper is really interesting and important. We know inhaled corticosteroids are used widely in the community of COPD, and this is associated with pneumonia. But these researchers asked the question, "Does this ICS use lead to a risk of culture-positive with *Pseudomonas aeruginosa*?"

Richard Russell ([15:26](https://www.rev.com/transcript-editor/Edit?token=f6k0awhjNtyXMNbHDln851i98eNcBY80LJoapHAWesP2ZJY54aI3lf0JRgd7gymfGdkGKjrHHSKoka8R_wx1q46DT70&loadFrom=DocumentDeeplink&ts=56.46)):

*Pseudomonas* is really important because it leads to increasing exacerbations or loss of lung function and death. This was a large epidemiological study performed in Denmark, looking at COPD patients over 2010 to 2017. They followed these patients prospectively and saw whether, if they're on inhaled corticosteroids, they develop *Pseudomonas* infection and *Pseudomonas* positivity in their sputum. The analysis was by a Cox proportional hazard regression to estimate the risk of *Pseudomonas* colonisation and infection.

Richard Russell ([15:57](https://www.rev.com/transcript-editor/Edit?token=uRE1VLe9r7fLelp8KN1jM-ncYRDOkzbavLSt7FHkn_lIAQg8Mi8ZffW-buqZDT9-zk6nOKhcDQ401ClzWmMORWsLksc&loadFrom=DocumentDeeplink&ts=87.85)):

Well, 21,000 patients were included in a study. 763 of these got *Pseudomonas*. That's 3.6%. And this was associated with inhaled corticosteroid use in a dose-dependent manner with low-dose steroids leading to a hazard ratio of 1.38, moderate-dose steroids had a ratio of 2.16 for risk of a *Pseudomonas* infection, and high-dose steroids, that's above 800 mcg of beclomethasone or equivalent, having a risk of 3.58 for getting *Pseudomonas* in your sputum.

Richard Russell ([16:29](https://www.rev.com/transcript-editor/Edit?token=OMVfUTfhMBa4Gh5mkzlOtr-wmEXKe4mC3mRxbsEpLV5DFJ9wOv35lriLugUOZ_P9HlQnQngPJQw2_My4unkSU9xaIk0&loadFrom=DocumentDeeplink&ts=121.73)):

Well, what do we learn from this? We can't predict what's going to do this. And indeed, association is not necessarily causality. But this was controlled for confounding factors, and there is biological plausibility here. We also know *Pseudomonas* is really important in our patients, so we need to keep an eye on this. So, the risk is small but certainly significant. And my tip for you would be to test for *Pseudomonas*.

Richard Russell ([16:58](https://www.rev.com/transcript-editor/Edit?token=4sbUAXHMyJq3ll0LO_nvW7J5-RDJWPWyCrrtqRQKlWG-QENqV2-9OuMoYwW7k-GGx9TUqY5AjY-_rhYUTr7imfA5Myo&loadFrom=DocumentDeeplink&ts=1.86)):

And now I want to share with you something important that I've come across on the internet and also online, on social media platforms, for our patients with COPD. You've heard how we can digitally interact with patients with COPD, so let's maybe look at what they're saying and how they're interacting with each other. What are the communities for COPD out there in the social media world? Well, there are many groups available, with our patients choosing the groups they want to join, and also the information they're getting. In America, there are groups such as the COPD Foundation, a large charity, helping with information for patients with COPD. There's also another great website and group called My COPD Team, which offers questions and answers, advice, help on diagnosis, treatment, pain and insomnia, particular items of interest to patients with COPD.

Richard Russell ([17:50](https://www.rev.com/transcript-editor/Edit?token=tcUr0N-p2b4Yn41OmUHHfiI3pAWGgP0MUzuuDwjzT3zCZknNO4HxKE_9u-poF6iYTsnNALJZE_ainzip8R7CrRlReO0&loadFrom=DocumentDeeplink&ts=55.75)):

In Australia, please look out for the COPD athlete. I've mentioned him before, and he's extremely inspirational. How to exercise with COPD. Let's Talk COPD is also another great site for information to signpost outpatients to. There are also private COPD support groups and information groups. And there's also another group called I Have COPD, which is valuable in helping patients understand how to use their devices and what treatment they've got. So what themes are coming out of these sites? Well, patients want an earlier and better diagnosis. They want early treatment with better interventions for them for the future. They want to help with dealing with exercise, how to exercise and when to rest. And they also want help with smoking cessation. And encouragement, particularly from peers, not just from us. They are anxious, and how they deal with anxiety and breathlessness together also is a very relevant topic.

Richard Russell ([18:37](https://www.rev.com/transcript-editor/Edit?token=44s_qo-f8IbEQggOm_wvhGLhYKuCVhUqawJ1nxgs_XneC6ShwvN_9PLgGs43vM6uvCkUqygE5MrR-H041qg-u7s0vco&loadFrom=DocumentDeeplink&ts=111.37)):

And they particularly want help with oxygen. Oxygen is a particularly controversial topic online, and they would like some clear guidance from us. And lastly, patients want to be treated as individuals, not just a person with a diagnosis or a label, but somebody with individual problems. And that's something we can learn from them. I hope you've enjoyed today's Medical Insider COPD podcast, listening about COVID and COPD, the new paper on *Pseudomonas* infection and about the communities with COPD online. I look forward to you joining me with the next podcast in the series, Medical Insider COPD.