



Making Sense of Telehealth & Virtual Exercise Programs

May 8, 2020

Webinar Transcript

- Jamie Sullivan: Good afternoon. Welcome to today's webinar, Making Sense of Telehealth and Virtual Exercise Programs. We're so glad you can join us to connect and learn during this stressful time. But before we get started, I would like to go over a few items so you know how to participate in today's event.
- Jamie Sullivan: You've joined the presentation listening through your computer's speaker system by default. If you prefer to join audio over the telephone, just select phone call in the audio section of your control panel and the dial-in information will be displayed.
- Jamie Sullivan: You can submit text questions at any time by typing them into the questions box of your control panel. We will spend a few minutes at the end addressing as many as we can in the time that we have. But any questions we don't have time to answer today, we will make sure to respond to them separately and post them on our blog.
- Jamie Sullivan: The slide presentation that we will be using today is provided for you as a handout. You can locate that in the handout section of your control panel. Just click on the title and it will open in a separate window for you to download and save.
- Jamie Sullivan: Today before we kick off with the formal program, I'd like to introduce Corinne Costa Davis, the COPD Foundation CEO to provide opening remarks. Corinne, take it away.
- Corinne Costa Davis: Thanks Jamie. Hello everyone and thanks for joining today's webinar. A special thanks to our speakers and to the COPD Foundation staff members for making today a reality. Today's conversation is focused on making sense of telehealth, a new phenomenon for many of us. We're so fortunate to have the experts with us today to discuss this extremely relevant topic. Just wanted to thank you for joining today's webinar, for your continued support and your active involvement in supporting the important work of the COPD Foundation. As always, please

continue to visit our website where we continue to post important information and updates. Enjoy today's conversation. Back to you Jamie. Thank you.

Jamie Sullivan: Thank You Corinne. And once again welcome. My name is Jamie Sullivan. I'm the VP of Public Affairs here at the COPD Foundation. I'll serve as your host today. But to start, I'd like to remind everyone that the information presented on this webinar should not serve as a substitute for medical advice, and any content discussed should not be used for medical advice, diagnosis, or treatment. Please consult with your physician before making changes to your own COPD management plan or if you have any concerns about COVID-19 symptoms.

Jamie Sullivan: We will be making the recording of today's webinar available within 24 hours. The information presented on today's webinar about COVID-19 was current as of today, May 8th, but the information about the disease and the recommendations discussed are changing rapidly. So, if you're viewing the recording as a webinar, this information may no longer be accurate. So, let's get started.

Jamie Sullivan: We will begin by covering a few updates on the COVID-19 situation and what we've learned since our last webinar about risk factors, treatments, and vaccine development. The focus of today will be on telehealth and how you can make the most out of telehealth during COVID-19 and beyond, as well as the important topic of exercise and how to stay active using virtual resources.

Jamie Sullivan: The presentations have been informed by your questions as always. However, we recognize it's impossible to cover the entirety of information on COVID-19 and on telehealth and exercise in one program. So, rest assured if your questions not answered today, we will continue to consult with our medical and scientific experts and we'll be providing additional content online and in future webinars.

Jamie Sullivan: These topics will be covered by a panel of world-class medical experts that are here with us today. We're really grateful for their time and their dedication to informing and empowering our community during a period that's also taxing on them as medical professionals.

Jamie Sullivan: We're again joined today by Dr. Dr. Byron Thomashow, a practicing pulmonologist, Professor of Medicine at Columbia University Medical Center and the COPD Foundation's Chief Medical Officer; Dr. Dr. Jill Ohar, Professor of Medicine and Pulmonologist at Wake Health and the current Vice Chair of the COPD Foundation's Medical and Scientific Advisory Committee will cover telehealth; and with Connie Paladenech, a registered respiratory therapist and the Manager of Wake Forest Baptist Health Cardiac and Pulmonary Rehab Program joins us to discuss virtual exercise.

Jamie Sullivan: We're also really pleased to be joined today by COPD Patient Advocate, Suzanne Howell, and of course COPD Foundation's own Director of Community Programs, Stephanie Williams.

Jamie Sullivan: As you can see, we have an incredible wealth of expertise here with us today. So, without further ado, let's kick it off by hearing from Dr. Thomashow.

Dr. Thomashow: Thank you Jamie. If we can go to that first slide, thank you so much. So as all of you know, COVID-19 is a new disease caused by a novel coronavirus that is different than the common cold, flu, or pneumonia. COVID-19 emerged in China in late 2019, is now present in multiple other countries, including the United States. The picture on the screen is obviously familiar to all of us who spent time watching the news. We now have over 1.2 million people in the United States who have been infected and an amazing 75,000 deaths, and worldwide we're up to 3.8 million with 270,000 deaths. I think many of us who have spent our career in medicine over 40 to 50 years have never seen anything quite like this before.

Dr. Byron Thomashow: I think it's important to stress from the beginning as we discussed in prior webinars, the data from China, Europe, and now the United States suggest that people with COPD do not appear to be at greater risk of catching COVID-19, but if they are infected, there appears to be a greater risk of having a more severe case. This risk likely would correlate with how severe their underlying lung disease may be.

Dr. Byron Thomashow: The take home message from my standpoint is as parts of our country open up, it is even more important that those at risk, particularly older folks with underlying comorbid conditions like COPD take all possible COVID-19 precautions, with the issue of separating socially within as much as we can. Together we are making progress, but we have a long way to go. Let's look at some of the data that's come out since the last webinar. Next slide please.

Dr. Byron Thomashow: There has been some good news, and I think that's important to stress. As many of you know, remdesivir is an antiviral agent. Preliminary results now indicate that the patients treated with remdesivir have a 31% faster time to recovery than those who received placebo. The median time of recovery was 11 days on remdesivir, 15 days on placebo. This is clearly statistically significant. The results also suggested a potential survival benefit. The mortality rate of 8% with remdesivir versus 11.6% with placebo. In addition, in a manuscript just released by the New England Journal of Medicine, a cohort of patient with severe COVID-19 who received remdesivir for compassionate use had an improvement in oxygen support status observed in 68% of the patients.

Dr. Byron Thomashow: These are obviously very good news. It's nice to have a therapy that looks like it may be helpful for us. But it's worth stressing that this is not a cure-all. Remdesivir is an intravenous drug. This is being done for sick people in the hospital. It's certainly not an answer, but it's a step forward. Next slide please.

Dr. Byron Thomashow: There's also a lot of interest obviously in vaccines. And as many of you may have seen in the newspapers, Oxford University has been able to move more swiftly because they have been developing a vaccine candidate for Middle East Respiratory Syndrome, MERS, a similar coronavirus to the one we're dealing with now. Tests last year for this vaccine showed that the vaccine appeared to be safe and provides potential immune responses for at least a year.

Dr. Byron Thomashow: In January based on these results, the Oxford team began adapting the technique to develop a vaccine for COVID-19 using a genetically engineered virus, something called an adenovirus similar to that of the common cold. And when six monkeys were given this new vaccine, they did not fall ill despite a subsequent heavy viral exposure. And this is very early. It doesn't mean that there's a vaccine around the corner, but again, it's helpful information. And overall, there are 90 different vaccines for COVID-19 which are now under development and at least six have moved to human trials. We are making progress. Next slide please.

Dr. Byron Thomashow: The issue of smoking remains a concern to many of us. The World Health Organization and the CDC have suggested that smoking increases risk. There's a recent New England Journal pre-print publication of meta-analysis of 12 studies over 9,000 COVID-19 patients. Current smokers had double the risk of developing severe disease versus never smokers, 18% versus 9%.

Dr. Byron Thomashow: As with many things in this disease, we learn from many different studies. Several smaller studies from China and France have suggested that the incidence of active smoking was actually less than expected in COVID-19 patients. In one French study, 5.3% of the COVID-19 patients were active daily smokers compared to 25% overall French smokers in that population. There are many issues here we need to look at.

Dr. Byron Thomashow: But the World Health Organization stresses that whatever other risk smoking carries, that the act of smoking means that fingers and potentially contaminated cigarettes, water pipes, vaping devices could increase possible transmission risk. Obviously, all of us would hope that people would stop smoking. This gives us yet another push to trying to move down that path. Next slide please.

Dr. Byron Thomashow: And finally, there's the issue of hydroxychloroquine, the anti-malarial drug that has received a tremendous amount of press. Much of that started with a small French study with only 26 patients, which suggested a benefit in reducing the viral burden. Based on that and the fact that this was a drug with a long track record and easily available, there was a tremendous amount of interest and this drug was used commonly. There have been problems since those early reports, however.

Dr. Byron Thomashow: A clinical trial testing two doses of chloroquine was halted because of EKG changes, cardiogram changes and an indication of higher mortality in a high dose group. And then just yesterday, the New England Journal published an observational study from my site with 1376 patients, a median follow of 22.5

days, 58.9% of them had received hydroxychloroquine. Hydroxychloroquine use was not associated with significant higher or lower risk of intubation or death, didn't seem to do much of anything. These results do not support its use at the present outside of randomized clinical trials, and randomized clinical trials remain the key.

Dr. Byron Thomashow: I think it's important, it's critical to understand that results like these are really important, that science will ultimately lead us to a better place. Together we can make a difference. Continue to follow all the securities that we're trying to do. We will get to where we need to go. Thank you Jamie. I'll turn it back to you.

Jamie Sullivan: Wonderful. Thanks so much for sharing these important updates. I think it's safe to say the whole community is rooting for continued progress in this quest to develop treatments and vaccines. So, thanks again for the very relevant and timely updates.

Jamie Sullivan: Okay. So I'm going to kick us off for the telehealth component of today's program by covering some basic terminology and highlighting a few of the changes in policy that has made it easier for you to use telehealth during the COVID-19 pandemic.

Jamie Sullivan: All right. So here are just a few of the terms. I know it's a busy slide. I wanted you to have this for after the webinar. These are just a few of the terms commonly used when talking about telehealth, sometimes interchangeably. They're certainly not all of the terms and there's a great resource here at the bottom that does have even more if you want to do a deeper dive. So, let's start with the basics.

Jamie Sullivan: Telemedicine and telehealth. For the most part these two have the same meaning. You'll hear them used interchangeably. But ultimately, they're the use of electronic methods to exchange medical information. And really the only difference you might encounter is telehealth can be a broader term, used to include some of the non-clinical services like health education.

Jamie Sullivan: So, moving on then, what about virtual visits? Typically, when you hear a virtual visit, it isn't 100% but typically you can likely expect the use of some type of video technology to interact with your healthcare professional.

Jamie Sullivan: And then moving on to remote patient monitoring. This is a term that isn't new. It's been increasing in popularity, excuse me, as we've gone in recent years, and really this is just meaning the use of home technology or medical device to assess a symptom or perform a test that's communicated with a healthcare professional. So, there could be a whole range of possibilities here from wireless transmission of data to the use of online or paper logs that have to be sent to someone manually.

Jamie Sullivan: What about mHealth or Mobile Health? Here people are typically referring to the use of a mobile device. It's as simple as that, like a phone or a tablet to facilitate medical care or medical information exchange or recording. And many people use mHealth daily. It doesn't have to be something that's used only with your physician. We might use it to track health related items on our apps, in our smartphones, or for example as we'll hear about later, the use of the COPD Pocket Consultant Guide for example.

Jamie Sullivan: And finally, I thought it was important to highlight that for the most part the telehealth issues we're discussing today are primarily those that involve synchronous communication, meaning live or immediate information exchange as compared to asynchronous communication which is what you're most likely already using and used to doing via your patient portals or other ways that you can send messages back and forth with your providers like email or phone messages. When it's synchronous it means it's happening live time, immediate response and exchange, whether that's via phone or video. And asynchronous is when you are simply sending a message on your own time and it's being responded to at a different time. Okay.

Jamie Sullivan: So why can all of this care be provided via telehealth suddenly? Besides the fact that it's the right thing to do to minimize all the possible exposures to COVID-19, there have been many emergency policy changes. The changes I'm going to discuss here originate from the Centers for Medicare and Medicaid Services and primarily apply to people who have Medicare. However, with that said, for those who are on Medicaid or might have a commercial plan from an employer or a retiree health coverage or the VA for example, it's more likely than not that similar exceptions have been made. So please do check with your specific insurance company to verify what will be covered if you have questions.

Jamie Sullivan: Another important note I think is relevant that while most of these changes were made on a temporary basis, during this COVID-19 health emergency, they are by and large changes that would be beneficial regardless of COVID-19. So, it will be interesting to see if CMS, the Centers for Medicare and Medicaid Services make some of these changes permanent. The cat has been left out of the bag so to say and maybe we are seeing the increased use of telehealth permanently.

Jamie Sullivan: The first major change to note is that while telehealth has been expanding gradually, until recently Medicare only paid for telehealth services that were delivered in a facility, mostly as a way to connect rural communities with additional specialist care, not as a way to receive care in your home, for the most part. Now, thanks to the new changes, Medicare will pay for telehealth services, for some telehealth services, provided right to the patient's homes.

Jamie Sullivan: To facilitate the services at home, CMS also waived requirements regarding the type of device that would be used, expanding to allow for mobile phones and tablets, even removing the requirement to have a camera and allowing for audio-only services. That is a big change.

Jamie Sullivan: And to ensure people can get the care they need for new and existing issues, they removed the requirements that telehealth be provided by a healthcare professional you have an existing relationship with, meaning one that you had seen in person in the past. They've also relaxed many of the rules that prohibited telehealth across state lines. Something that is especially important in areas where patients might cross into nearby metro areas in another state, or centers of excellence that treat patients from across the country. Now those physicians can connect with their patients via telehealth.

Jamie Sullivan: Finally, they vastly expanded the types of services that can be provided via telehealth, and the list of healthcare professionals that can provide them. Unfortunately, we still have some work to go here to clarify their intentions around the respiratory therapists, since RTs were not previously eligible to bill Medicare, and to get pulmonary rehabilitation added to the list.

Jamie Sullivan: But the good news is that CMS has said they will make the process for adding new services easier moving forward, giving us some hopes that this will get done and some leeway in the way that the most recent changes were written to allow for some possible education services.

Jamie Sullivan: This is certainly not an exhaustive list of changes and we can expect more as the situation continues to develop. Since we expect that it will be safest for people at higher risk of severe disease to continue to minimize potential exposures for some time, it's all the more important to embrace telehealth where possible. And that is where Dr. Ohar will pick us up and give us some tips. Dr. Ohar, over to you.

Dr. Jill Ohar: Thank you very much. So on to cover the next slide, and I need to tell you that I just dropped off of my email while I waited, so I'm going to go back in and get that so I can see it along with you. Let's see. I believe this will bring it up. No. Well, I'll fly blind.

Dr. Jill Ohar: At any rate, so when should telehealth be utilized? What vitals would be useful to provide before or during the health visit? What should I bring during a healthcare visit, a telehealth visit? How can I effectively communicate with my doctor when something's wrong via telehealth? And what should I do to prepare? I'm going to go over each of these in turn and we'll move first to when should telehealth be utilized.

Dr. Jill Ohar: And really anytime, all the time. I think all of us, both patients and physicians were dropped into the deep end of the pool, and we all were probably ill-prepared, but it's been a very, very pleasant surprise, like jumping into the swimming pool on a very hot day. It's more convenient for patients. You don't have to deal with travel cost. The physical burden of getting all your stuff in the car, finding a ride if you don't drive, disrupting your schedule. So certainly, for the patients it's very convenient.

- Dr. Jill Ohar: It's equally convenient for physicians. We find that we have a better show rate, so is better efficiency. When you prepare for patients, you actually get to see them. I think it forces physicians to have a better sense of schedule, so we stay on schedule because there's less distractions when we're seeing patients remotely and virtually. So, I think it becomes a positive experience all the way around or a more positive.
- Dr. Jill Ohar: Now in terms of the next slide what vitals would be useful to provide before or during a tele-visit, it's important to realize that not everyone has resources to purchase vital sign monitoring equipment. Some home health companies provide this to you, as well as the VAH for free or a small charge. You may need a prescription. You need to know that these monitoring tools can be purchased without a prescription at your local pharmacy. Furthermore, you can buy these online. Amazon has things to provide to you to check your pulse oximetry, your oxygen saturation, which will give you both your heart rate, as well as your oxygen saturation. Certainly, blood pressure cuffs have been available for quite a long time, and again, you can buy them on the internet or from your local pharmacy or Walmart or whatever.
- Dr. Jill Ohar: There are newer types of equipment that are becoming available. There's a virtual stethoscope. Weight, a scale is a wonderful piece of equipment to tell us if you have concurrent heart failure, are we worried about you starting to retain fluid? A watch, having a wristwatch and measuring your respiratory rate is also very important. So not only is the absolute value important, but the changes from baseline is equally important. If your weight has been stable at 180 and suddenly you're 200 pounds, that's very important and may be indicative of retaining fluid. Equally, if you aren't trying to lose weight and you're suddenly a 165, that's an important thing too.
- Dr. Jill Ohar: Now, remember that you have somewhere between 20 minutes and 40 minutes, so we're on our next slide, what should I bring up during a telehealth visit. And it's important to remember you have 20 to 40 minutes. So choose carefully. Be concise. You may even want to write down in advance the things that are going to be important to talk about that are important to you.
- Dr. Jill Ohar: What's going to be important to your physician, especially with a new patient visit, are the dates and locations of previous testing such as breathing tests, PFTs, CTs, other hospitalizations, because testing is difficult to obtain. Many testing laboratories are shut down, and so having a set of PFTs that's available to your new physician that were done two or three years ago is a resource, a very valuable resource.
- Dr. Jill Ohar: Knowing the dates of these hospitalizations or of these tests, if you don't have copies you can provide in advance for your physician is also critical because it will be easier for them or their offices to get a hold of. I so often, when I need the date of something I'll say, "Well, when was that?" And I hear from a patient, "Well, when Sally got married." "Well, I don't know Sally and I don't know when she got married. I need the date." So being very specific about that, having that

information in advance and ready to go really maximizes your time with the physician.

Dr. Jill Ohar: Things like smoking history, how old were you when you started? How old were you when you stopped? What was the most you ever smoked in a day? I love the patients, "Do you smoke?" "No." "Did you ever smoke?" "Yes." "When did you stop?" "Yesterday."

Dr. Jill Ohar: Other important exposures are work exposures. Sometimes the older exposures, things you did in high school and college in the summer may be more important than what you did right before you retired. Equally, in third-world countries the most common cause of COPD is exposure to biomass fuels. So it's very important to tell your doctor, "We had a wood stove in my house growing up and I was exposed for 18 years."

Dr. Jill Ohar: The family history of asthma, COPD, a past medical history of tuberculosis, frequent respiratory tract infections, pneumonia are also important. We know that people who were very small babies or premature have a better chance of developing COPD than those who weren't. So having that information available is also important.

Dr. Jill Ohar: Before you get off that visit, get a phone number to call back if you have questions that come up later or have concerns that come up later, either with your medications, the testing, or just questions you didn't get to answer.

Dr. Jill Ohar: The next slide deals with return patient visits, and here there are different issues. The doctor only kind of knows those things that we discussed in the new patient visit, and what they need to know about is changes in your symptoms or your findings since the last visit. So has your cough changed? Was it dry before, now are you bringing up mucus? Is the amount of mucus, the color, or the viscosity different? How about the shortness of breath? And that needs to be quantified by an activity. How many flights of stairs? Half a flight of stairs, three stairs, distance walked on a flat surface, et cetera. And also, duration of these changes. Sleep patterns or sleep position are all critical to assessing your current condition or changes in your conditions.

Dr. Jill Ohar: Equally, therapies. What drugs are you taking now, both pulmonary drugs, as well as non-pulmonary drugs because they may affect your symptoms as well. Devices are critical. If this is a video visit, have your devices right there at the elbow, along with your bottles of drugs, just like if you were going to the physician's office. I often ask patients to demonstrate their inhaler technique because frequently patients are confused as to the appropriate use of a certain device. And being able to demonstrate it for me in front of me is incredibly helpful for me to coach them to get ... to be able to use their inhaler more efficiently.

Dr. Jill Ohar: Also, I think it's very important for you to in advance try to think about your different devices and do you believe that you're getting the most bang for your buck out of them so to speak. Are they effective for you? Because sometimes if you're not using a device correctly, you may sense that a certain therapy is not being very efficacious. And it may be all centered around not the drug so much as your interface with the drug through the device. Again, that return patient visit it's important to get a phone number to call for questions or concerns that may arise after that visit.

Dr. Jill Ohar: My next slide deals with how can I effectively communicate that something is wrong during a telehealth visit. We've already gone over what are the things that are going to be important for a new patient visit, what are the things that are important to have for a return patient visit where you think you're doing just fine? Now, this is when you're calling to get an appointment because something's going on you. Don't feel as well as you used to. Or it may be a return patient visit, but this is your opportunity to express that things aren't going the way I want them to. Again, be specific when you quantify things.

Dr. Jill Ohar: What is the new symptom? Is it cough? Is it mucus? Is it shortness of breath? Is it a change in your sleep patterns? Is there a new sign? Do you have ankle swelling that you didn't have before, wheezing, a change in your weight? Is your heartbeat erratic or racing? Have you noticed blueness around your lips or have others noticed blueness around your fingertips or lips? How is this different from your baseline? How long has it been different from your baseline?

Dr. Jill Ohar: Triggers, what makes it worse? What makes it less? What improves it? Be concise. Think this through before the visit. Don't ramble. The more concise you are, the more time you have to interface with your doctor and ask more questions or for them to explain what they think's going on with you and what should be done.

Dr. Jill Ohar: What should I do to prepare? The next slide. Well, write it down. Everything that we've already talked about, write those things down, that change in cough, change in sputum, ankle swelling, new wheezing, whatever. You should also, when a plan is discussed, either a change in the meds or new meds to be prescribed, test to be ordered, procedures or return appointments, write all those things down because even though they should be scheduled by the institution, often something slips through the cracks and ultimately the person who cares most about your healthcare and the health outcomes is the guy who stares back at you when you look in the mirror. So having that checklist so that when they call to schedule those appointments, you go to the pharmacy to pick up the meds. They call to schedule the procedure, you have a checklist there that you know what's been done, what hasn't been done.

Dr. Jill Ohar: As I mentioned before, have all of your medications at your elbow so you can show them or read the label off, show how you use them. Have a family member or a friend with you to assist with the technology. And test drive your equipment out in advance. There's nothing worse when it's time for your

appointment and you realize you know nothing about the technology or how to troubleshoot it.

Dr. Jill Ohar: Take notes. Have a family member there to take notes and also to keep you honest. I can't tell you the number of times I would ask a patient about, "Are you short of breath?" "Nope, not at all," and I hear the wife screaming in the background, "Yes, he is. Yes, he is." "Can you get up a flight of steps?" "Oh sure." "No, he can't. He has to stop three times on the way up." So really, it's very important to have that friend, family member, whomever to assist you. They can take those notes. They can help you with the technology. And they can also keep you honest.

Dr. Jill Ohar: That concludes my part of the presentation.

Jamie Sullivan: Wonderful. Thanks so much Dr. Ohar. You really shared such practical information related to telehealth or even applicable to when we resume in-person appointments and how to prepare as well. So thanks so much.

Jamie Sullivan: Okay. Now we are going to hear directly from one of our patient advocates, Suzanne Howell. Stephanie and Suzanne, please take it away.

Stephanie Williams: Thank you Jamie. Hello everyone. If you participate with us on COPD360social, you may know Suzanne. Her username Laverne & Shirley. Suzanne, I just want to thank you for joining us today. We always find it's important for us to include the patient's perspective in everything that we do, so we really appreciate you sharing your experiences with us today. Let's make sure your line is unmuted so that we can hear you.

Jamie Sullivan: There we go.

Stephanie Williams: Perfect. Now we can hear you - great. So, with that, I just had a few questions that I thought we could go through today so that you could share your recent experiences with telehealth.

Susanne Howell: Okay, sounds great.

Stephanie Williams: Yes. So, have you been using telehealth before the COVID-19 situation?

Susanne Howell: No. Actually, I did not start using it until the COVID started. And I've had about I think four visits at this point. So, I have been using them.

Stephanie Williams: Okay. And tell us a little bit about the visits that you have participated in.

Susanne Howell: Okay.

Stephanie Williams: Are they with your primary care or pulmonologist?

Susanne Howell: I did ... I've had two appointments virtually with my primary care. I had one virtual appointment with my pulmonologist, and then I had a virtual appointment with ... I actually did a Teladoc appointment with a doctor that I didn't know through my health insurance because I had a reaction to a vaccine. So I've had those two.

Stephanie Williams: So you've really had the gamut. You've used a lot of different services. How were your visits similar with your primary care pulmonologist in Teladoc?

Susanne Howell: I found that [crosstalk 00:35:05] ... They were. They all wanted to know the same basic what medications am I on, what am I experiencing, am I getting worse, am I staying the same, am I getting better, because I had been ill and had been in the hospital previously. So they all wanted to know those things.

Susanne Howell: But I found that the doctors that I had a previous relationship with which was mainly my primary care, I did find that the appointments were more helpful and they, we were also able to get to the point faster because the ones that I had not had a previous time with, they needed to find out basic stuff, that they wouldn't know because they had not seen me before.

Susanne Howell: I found that the pulmonologist was the best one though. She was very thorough. She took a lot of time with me. I think we had an hour and a half timeframe to work with. So it was very long and she was great.

Stephanie Williams: Right. And I think when we spoke earlier this week, you mentioned that your pulmonologist tried very hard to go over test results with you and prepare you for testing that would happen in the future when you're able to come back to her office, is that correct?

Susanne Howell: Yes, that's correct. She, yes.

Stephanie Williams: Well, did you feel that you were prepared for your telehealth visits? Did you feel that maybe you were walking into it with a lot of unknowns and a lot of uncertainties? Do you think maybe you could have benefited from some helpful hints and tips like you've heard today on this presentation?

Susanne Howell: Yes, definitely. Actually before I had my first appointment, I went on the Foundation, our website where we meet on social, and I made a post and I basically what I needed to ask because I didn't know how to prep for it, and Gene, the [inaudible 00:37:26] it was a rep had responded to me and she was giving me some pointers on things that I would do, questions that I could ask. So that was very helpful.

Susanne Howell: But if I had seen this, what we've gone through this morning, if I had seen this first, I think that would've helped even more. I was kind of lost. On the first one I let the doctor take the reins and didn't know much of what to ask. But after my fourth visit, I've kind of gotten the hang of things.

Stephanie Williams: Right. Right, this is becoming old hat for you now, right?

Susanne Howell: It is. Yes, yes.

Stephanie Williams: So now that you've had these experiences, do you feel that you might be more likely to use telehealth services in the future?

Susanne Howell: For certain things I think it's awesome. I do think there are times when like the [inaudible 00:38:32] that had was [inaudible 00:38:36] that I had not ever seen before. And there was the webcam. I don't think he could see as well as he would have in person like how much of the reaction of my arm where I got the shot. I don't think he was able to really see that clearly, and I don't think he was able to see how like pasty white my face was. It's those types of things that where if you're not in person, you can't really tell. So I think there's a time and a place for it, but I think there are also times when seeing someone face to face is probably the best choice.

Stephanie Williams: Very good. Well, we do very much appreciate your perspectives with this and we do hope that after viewing the presentation today, more people will feel comfortable and confident, that if they need a telehealth visit and it's necessary for them, that that they can be very beneficial. So thank you so much for sharing, Suzanne.

Susanne Howell: You're very welcome.

Stephanie Williams: Putting it back over to you Jamie.

Jamie Sullivan: Wonderful. Yes, just echo my thanks to Suzanne for being so candid with your experiences. I think hearing real examples from other patients really helps others get prepared. And I love the use of COPD360social to ask your questions and get tips from others who have done it. So please, don't hesitate to keep doing that, and hopefully others will join you.

Jamie Sullivan: So now we are going to transition to virtual exercise programs related from the technology sense but very important topic, and we're going to hear from Connie Paladenech. Connie, take it away.

Connie Paladenech: Okay. Well, as Jamie had mentioned earlier, pulmonary rehab has not received approval from Medicare for reimbursement for telehealth services. We are hopeful that we're moving in that direction and that we'll be hearing more about it. We certainly at my institution have been pushed in this direction a bit in order to try to provide some pulmonary rehab services for our patients as we're all undergoing social isolation, to try to keep each other safe. So, what we're going to do for the next few minutes is to review some of the options that are available at this time for exercise in the world of virtual pulmonary rehab.

Connie Paladenech: One of the things that we'll talk about is some of the options, how do we get started if you haven't been doing a formal program. Another concern is how you know when you're doing too much, or on the other hand, how do you know if you're doing enough with your exercise, and how to facilitate interaction and educational components. I'll tell you a little bit about what some of the things are that we're doing here, and also show you briefly a link to an exercise video or I should say videos that we have developed here at Wake Forest. And then just a small list of resources that are available if you would like to explore things further.

Connie Paladenech: In this time some of the options that are available would be, one would be a traditional model. We're using this a little bit where we are seeing patients in a one-on-one setting. We're social distancing. We're following all of those precautions, but we will see patients one-on-one. And at that point we establish what their needs are, their treatment plans, and determine what type of exercises are best and go from there.

Connie Paladenech: Some of the other options that are available would be some of the virtual options the Skype type things where we're using video chat with enhanced security. Skype has been used. One of the issues with Skype of course is that we don't have the security function that some of the other programs do, platforms do.

Connie Paladenech: Videos are another option, and you can see some of those here. Another thing that we're using occasionally is WebEx presentations, similar to what we're doing here today. And then also phone contact, which is just voice, or it could be we do have some contact with some of our patients by cell phone actually, smartphone.

Connie Paladenech: And then there are some hybrid programs that we are beginning to use where we will see someone and establish an initial exercise prescription. We provide them with home programs and follow up, and just bring them back to the hospital-based program periodically. And then the other option would be self-directed programs. If we can see the next slide.

Connie Paladenech: One of the things that is incredibly important to folks who do have chronic lung disease is that they establish and maintain a regular exercise regimen. Some of the reasons for this are that we know that the benefits include improved ability to do daily activities, it helps to reduce breathlessness. Exercise also helps to improve arm, body, and leg muscle strength. It helps to clear mucus from the chest, improve balance. It also is very helpful in improving our moods and making us feel more in control and it does help to keep us more independent. It's helpful in assisting with weight control, in improving bone density, and also in reducing the need for hospital admission. And there are many others, but that's just a few. And if we can go to the next slide.

Connie Paladenech: The question then is, and we'll focus for a few minutes on what if you haven't been enrolled in pulmonary rehab or a formal program, and you're wanting to

start some exercise? Well, one of the things that we know when someone has a lung condition, it can be very daunting and even scary to think about exercise. But we also know that it's very important to help you manage your lung condition. And we know that with the right support you can include regular exercise in your daily routine, and you'll feel much better by doing it.

Connie Paladenech: Some things to think about before if you haven't been exercising, some things to think about before you begin an exercise program would be first of all is it safe for you. And that's a discussion that you should have with your physician.

Connie Paladenech: The other question is will you need to use supplemental oxygen during your exercise session? It would be very helpful at that point to have an evaluation by a pulmonary rehab program. But that can sometimes be done with your physician as well. There are some guidelines to be considered for exercise too for starting. So, if you're going to go on your own, one of the first things that we would recommend is that you plan to start out slowly. Rome wasn't built in a day, and you're not going to regain your strength and your stamina with one exercise session.

Connie Paladenech: Another thing that's important is to know your limits, and I'll give you some guidelines for that in a minute. Stop and rest if you feel tired or if you feel that you're starting to get short of breath and losing control of your breathing. Try to focus on exhaling during the hardest part of an activity. Another thing that helps is to try to find exercises that you like to do, something that gives you enjoyment.

Connie Paladenech: It's also easier to be consistent with your exercise if you have a family member or a friend who can exercise with you. And it's important to learn to pace your activities, wear comfortable clothing. And a lot of times with exercise, you want something that isn't tight and binding, but it helps to wear layers so that as you warm up, you can peel the layers off and you'll be more comfortable. And then of course, the other thing that's important is ask for help when you need it. Okay, if we can go to the next slide.

Connie Paladenech: Okay. This is really the foundation. If someone is going to start an exercise program and they do have chronic lung disease, one of the things that's so important is first of all to get control of your breathing. The technique that we recommend for doing that is with a pursed-lip breathing. At the bottom of this slide you'll see a link to a video that is very helpful in terms of demonstrating the correct technique. So, if anyone has questions, I hope that you'll take the time to take a look at it.

Connie Paladenech: Basically, what you're doing with pursed-lip breathing is you're breathing in or inhaling through your nose at a normal rate and depth to fill your lungs. Then you're pursing your lips as if you're going to whistle and exhale slowly. This helps to support the airways of the lungs and to provide a better exhalation. You're better able to empty the air, which again allows you to get a more effective breath in on your next breath. If we could go on to the next slide then.

Connie Paladenech: Okay. The question then is, how do I know if I'm doing too much or if I'm doing enough? There are several tools that we can use for that. And these are just some examples. The first one in the upper left-hand corner is the Modified Borg Dyspnea Scale. And if you'll notice, the color codes are coded just like a stop light. We want to try when we're exercising, to exercise at an intensity that would allow us to be in the green range.

Connie Paladenech: The scale ranges from zero to 10, and you want again, to be able to maintain about at least a two to four rating. Basically this is just it's a subjective rating so you're exercising and we would ask you to tell us how do you feel on a one to 10 scale, where would you rate your breathing, how short of breath do you feel? Typically, we would expect that to be someplace between a two and a four, or in other words in that green zone. We recommend that if you're more than up four or five, that you slow down or stop your exercise for a bit, catch your breath, and then you can go back.

Connie Paladenech: Another way of rating or adjusting your exercise is to use the skill of perceived exertion. The first one was shortness of breath. The middle one is overall head to toe how do you feel? There are two scales that are sometimes used for this. Some of you may be more familiar with a zero to 10 scale there. Others are familiar with this six to 20 scale. Again, the whole idea is to maintain yourself during exercise in that green range. And you can use it in two ways. One is to know if you're at a point that you need to slow down a little bit. The other one is maybe if you've been doing a particular exercise for a while, walking, whatever, you're finding that well, gee, how do you feel? Well, I feel like I'm a nine or an eight. Well, that might be an indication that it's time to consider increasing your intensity just a little bit, walk a little faster or a little bit longer.

Connie Paladenech: Something else to look at to keep in mind is oxygen saturation. So, what we recommend there is making sure that when you're exercising, you're able to maintain an oxygen saturation of at least 90% or whatever your physician has recommended.

Connie Paladenech: Now just as important as knowing how much to exercise or when, I think it's also important to know when it's safe to exercise. Some guidelines there are that yes, it's safe to exercise if you are having a day where you just feel a little bit tired, maybe a little shaky, a bit of a headache, you've just been on a burst of steroids and you're coming off of those, or maybe you're having a bad day, or you're just too busy. Those situations are all things that I think you could tolerate the exercise well, and in fact, it may even be very helpful.

Connie Paladenech: There are other times though that it probably is not in your best interest to exercise on that particular day. Some examples, and this is not an all-inclusive list, but examples of that would be do you feel nausea, are you experiencing unexplained leg pain, are you experiencing chest pain, are you out of oxygen, if you do need to use supplemental oxygen or do you have a fever? If the answer is yes to those questions, then that's probably an indication that that day might

be a better day for you to take a day off. Okay, could we go to the next slide, please.

Connie Paladenech: Okay, some of the other things. We talked about exercise a little bit. So what about some of the other things that are important with pulmonary rehab? Of course, learning those self-management skills, the education piece is extremely important. So what we have been doing with our patients is while we're not seeing them face to face, we, our staff actually calls patients weekly to check in with them to see how they've exercised regularly. Then video chat is another option, and then WebEx presentations as we're doing here. Okay, could we go to the next slide please?

Connie Paladenech: Okay. This is something that we did. One of the requests that we got from our patients was, "Gosh, you guys give us these exercise prescriptions and you do the exercise, you lead us with the exercises during class, and we can't always remember those," or, "Is there any way that we can do something to guide us through those?" And we've had handouts. But what we have done is we very quickly thrown together some exercise videos. And the way that we use these, is we have graded or established certain levels of intensity with them. And we will give the patient the number of the video that we want them to use, and also instruct them in the number of repetitions that we want them to follow. And it does include a combination of both stretching, flexibility, as well as strength training. These are available to you and they are free. Feel free to use those as your pulmonary rehab team would suggest or your physician. Okay, can we ... All right.

Connie Paladenech: And just as an additional resource, and these are, again, this is by no means an exhaustive list but these are some of the videos that we also recommend for our patients that we've found to be very useful. Again, our focus is on free. Now, there are other programs that are available for a fee, but we tried really to focus on those that would be free and that had good information. So, I hope you enjoy these. And that's the end of my presentation for today.

Jamie Sullivan: Wonderful. Thanks so much Connie. You really provided some very practical information to help people think about how much exercise they can do, how to do that exercise and some great resources. We really do appreciate that.

Jamie Sullivan: Okay. As we near the end of our program, we're going to turn back to Dr. Byron Thomashow who will share a couple examples of some tools within the COPD Pocket Consultant Guide that are useful for preparing for telehealth and exercise.

Dr. Byron Thomashow: Thank you Jamie. Some 12 years ago we launched our COPD Pocket Consultant Guide, and over the years we've distributed literally hundreds of thousands of these cards to providers around the country at no charge. Several years ago we developed an app. The first versions were aimed more at providers, but we have now added a patient track if you will, what you see on the slide now.

Dr. Byron Thomashow: We're very excited about this. The app is free and available either for Android or iPhone users. And as you can see, that's got a lot of interesting stuff that can help you to prepare for a telemedicine visit. So there's a my COPD action plan where you can actually categorize your days as to whether they're green, yellow, or red days, and a calendar that will highlight that for you and your physician or your provider that you can show him by your tele visit.

Dr. Byron Thomashow: There's activity tracking, what you're able to do, what you would want to do. There are clues to ask questions for the next visit. Probably worth going through these to see whether or not these would help you in preparing for that visit. And we have a whole set of all the inhaler videos that people can work on, and there are exercise videos. Next slide Jamie.

Dr. Byron Thomashow: These are some from Burke that we have. We're hopeful to work with our friends at Wake Forest to have some of their videos put in. I'm working with my team here at Columbia to add some videos. We hope that this video library will continue to grow so that whether in a COVID-19 situation where you're stuck in the house for periods of time, or in a general situation where you want to do this on a regular basis, I think that these are things which are really potentially very helpful.

Dr. Byron Thomashow: I just wanted to add my two cents. If somebody had asked me a month or two ago what I thought the future of telemedicine was, I'd say, "Well, and maybe in some parts of the country where there are limited numbers of providers and specialists, maybe it would have a role," but I wasn't clear that it would have a role in many areas, and particularly metropolitan areas where there may be many physicians.

Dr. Byron Thomashow: I've changed my mind here. I think the telemedicine may very well be a very important part of the future, and to make pulmonary rehab work I actually believe it's critical. The way things presently stand, only 2% to 3% of the 30 million people with COPD in this country actually have a complete pulmonary rehab. We need to do better than that, and telemedicine sure allows us to do that. Jamie, back to you.

Jamie Sullivan: Wonderful. Thanks so much for highlighting those resources. So to close out today's webinar, I want to make sure you're aware that we have launched our second COPD and COVID-19 experiences survey. We urge you to complete this anonymous survey to share your experiences during COVID-19. This is not a survey just for people who have been diagnosed with COVID-19. We want to hear from all of you about how the disease has affected your life. Results help guide future research and future programs and resources that we can create to support the community during these trying times. It will be open for at least another week. I really urge everyone to go on and complete it. It should only take you just a few minutes.

Jamie Sullivan: Our goal at the foundation continues to be to inform you of important changes in the CDC and WHO recommendations, also adding context and additional

information that's directly relevant to the COPD community. You can find our updates directly from our homepage by clicking the top of the page, and we will continue to host regular updates on our blog as well. Please, check in often, get support, support others, view new videos and blogs, and let us know how you are doing.

Jamie Sullivan: Here are some additional credible resources to visit regularly. These sites are continually evolving and providing new information on the disease outbreak, as well as practical, action-oriented advice. Actually, just today the CDC has updated their pages for older adults and those at high risk for severe disease to include tips for things like how to navigate household errands and more.

Jamie Sullivan: Before we wrap up, I think we have two questions that we will take and conclude with one final thank you. Stephanie, over to you.

Stephanie Williams: Okay. The first question I think would be for Dr. Thomashow. So let me make sure I can get him unmuted. Dr. Thomashow, do you have any information regarding how important it is to do everything possible to keep COPD under good control? And would that make a difference in survival if one were to get the virus? This would include not only adherence to medication but also daily exercise. Do you have any comments about that?

Dr. Byron Thomashow: Yeah, the answer is obviously clear. The answer is you want to continue to keep your COPD under control. And point of fact, you want to treat, keep all of your medical problems under control. Exercise is obviously a critical part of COPD care and that's important. So is using your medicines, using your medicines correctly, making sure that you have your medicines available, those are important steps. So the answer that is yes, you need to do those things.

Dr. Byron Thomashow: You should also talk with your physician about how you should approach if you have a flare, how to distinguish those flares from a COVID-19 issue. Some of those things we discussed on prior webinars, but it's important when you talk to your physician, when you do your tele visits, that those are some of the things you talk about. It's a very good question.

Stephanie Williams: Thank you. And the next question will be for either Dr. Ohar or for Connie. Let me make sure I can get you guys unmuted here. I think I've got you. So, the next question is, are you aware of any pulmonary rehab programs that are receiving any reimbursement for both virtual pulmonary rehab?

Connie Paladenech: Unfortunate-

Dr. Jill Ohar: Yeah. Go ahead, sure.

Connie Paladenech: Unfortunately, at this time no. We're providing ours free. Well, there are some that are charging out-of-pocket for infants of the Lift program out of Missouri, St. Louis is one. There are a couple of others, but again, those would require

some well out-of-pocket expenses. So, there are a few but nothing that is receiving reimbursement from commercial or from CMS at this time.

Connie Paladenech: Now interestingly enough in North Carolina, our respiratory care board just recently issued an order or a rule I should say stating that respiratory therapists can provide telemedicine. Unfortunately, at this time there is no reimbursement tied to that, but we're hoping that eventually and it's certainly based on the experience that we have had here at Baptist. We're really hoping to see this area grow, and we feel like that it is the future.

Jamie Sullivan: That's great.

Dr. Jill Ohar: I just want to add to what Connie said, that overall about well, less than 5% of patients who are referred to pulmonary rehab actually get there and go to a significant or greater than one visit. We discussed briefly already the concept of the burden of getting there, schlepping your oxygen, getting a ride, all of that. And I think that telemedicine provides us an opportunity to circumvent many of those barriers. So I think it's something that you should implore your government, your state government, those people who are making decisions about payment to really consider because of all the salutary effects that Connie went through in her presentation.

Jamie Sullivan: Absolutely. Thank you. It's an issue we will certainly continue to advocate on as we go both at the federal and alerting people of state opportunities as well. There is one more question I think for Dr. Ohar and Dr. Thomashow, and that is, as they start to reopen, there was a question regarding are you starting to see patients, non-COVID patients at your hospitals and how is that working, how are those decisions being made?

Dr. Jill Ohar: We're going to reopen next week. Patients who have symptoms are asked not to come in. We're going to continue our telehealth. How about you Dr?

Dr. Byron Thomashow: Yeah. I mean the hospital is moving forward like all hospitals are. I mean there are a lot of people with many medical problems beyond COVID-19 who need to be treated. They think that many of us are concerned that many of the people who ended up ordinarily in our emergency rooms, in our hospital are not coming in because of understandable concerns about COVID-19. We need to figure out a way to take care of all those people. Medicine offers a lot to a lot of different people. There are elective surgeries that need to be done. Elective doesn't mean that it shouldn't be done. It just means it doesn't have to be done urgently. So there are many things that need to be done.

Dr. Byron Thomashow: I guess my major concern going forward and I don't have an easy answer to this is that with COVID-19, a lot of the ... much of the spread, how much is not clear, but at least a proportion of the spread is through people who are asymptomatic. So checking their temperature or asking about symptoms will help but may not eliminate all of those issues.

Dr. Byron Thomashow: Ultimately I think this depends upon having easy testing available that you can get results back earlier so that we know when people are coming in that they are not infected and therefore that no one else around them should be at risk. I think that's an issue. The testing issue still needs to be better defined. But we need to move forward, and we all understand that.

Dr. Byron Thomashow: I want to stress with everybody that these webinars that I've been part of that the foundation is arranged I think have been very helpful. The reality is that there's a lot of information we continue to grow. We're making progress. We will get to a better place together. Thank you all.

Jamie Sullivan: Thank you so much. There are a couple questions about medical devices that we're out of time to answer today, but we will certainly investigate and get back to those people who've asked those questions. So please don't think we're ignoring your question.

Jamie Sullivan: That is all the time we have for today. We hope you've taken away some practical knowledge and tips that will help you navigate the weeks ahead as we continue this fight against COVID-19.

Jamie Sullivan: Finally, I just wanted to recognize especially in this week where we celebrated Giving Tuesday now that we want to thank all of you for supporting each other and for those that are able to for supporting the foundation. So, on behalf of all of the staff, we hope you stay well, and you stay engaged. That concludes today's webinar, but please do check back soon for the recording and answers to questions that were not answered live. Thank you everyone.