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SPEAKER:
You're listening to Everyday Evidence presented by the American Occupational Therapy Association, helping the occupational therapy practitioner apply evidence to practice. Here's your host, Matt Brandenburg.

MATT BRANDENBURG:
Today, I am joined by Malachy Clancy to discuss the “Clinical Management of COVID-19: Living Guideline” published by the World Health Organization on September 15th of this year. By the time this episode is released, I believe that will just be last month. But Malachy, welcome to the show.

MALACHY CLANCY:
Thanks, Matt. Thanks for having me.

MATT BRANDENBURG:
It's our pleasure. As you mentioned to me previously, this is really a beast of a document. It's got numerous contributors. The entire document is available for review on the World Health Organization's website and is linked in the description of this episode. We're gonna be focusing our discussion on applications for occupational therapy practitioners. I would just want to go ahead and dive right in. Can you begin by explaining to us how you became involved with the World Health Organization and what your role in developing this guideline was?

MALACHY CLANCY:
Yeah, sure. So, back in late spring, summer of 2021, there were increasing reports of individuals who basically just continued to present with prolonged symptoms of COVID-19. The World Health Organization utilizing what's called a Delphi process, convened a group of about 40 experts to identify a working definition of what we now call post-COVID-19 condition. And so, post-COVID-19 condition is really the umbrella term for the symptoms that continue to present after an individual has been diagnosed or has experienced COVID-19. The next challenge was to identify clinical recommendations to rehabilitate individuals with this novel condition. And so, the WHO partnered with a number of international organizations, including the World Federation of Occupational Therapists to seek nominations from qualified individuals and subject matter expertise and those with experience in the care of patients with COVID-19. And so, I submitted my application and was nominated by the World Federation of Occupational Therapists and chosen by the World Health Organization to join this international work group.

MATT BRANDENBURG:
That is amazing. Congratulations for being nominated and having a role in this. I want to ask, can you tell us about what your background and working, what type of experiences have you had in your career as a practitioner that prepared you with working with this population?

MALACHY CLANCY:
Yeah. Sure. So, during my time on the guideline development group for the, for the WHO, at that time, I had been practicing and I was as an occupational therapist for 12 years in the acute care environment. And my primary area of clinical expertise is focused on the care of the cardiopulmonary patient population. I also hold board certification, physical rehabilitation by the American Occupational Therapy Association. And I have a PhD in health policy as well with some research expertise, really looking at the cardiopulmonary pop, patient population. And so, when the pandemic started, I was the OT team leader at my organization and kind of helped spearhead and co-lead our rehabilitation response to the treatment of the, of patients with COVID-19, and then the overall pandemic. And so, at that time, a group of colleagues and I had been researching outcomes of patients hospitalized with COVID, including COVID induced myocarditis most recently looking at a case series of patients who underwent bilateral lung transplantation for COVID.

And some outcomes related to hospitalization, discharge, disposition, and length of stay for individuals with COVID.

MATT BRANDENBURG:
It sounds like you are extremely well-qualified. And to have this role with the World Health Organization, your expertise in this field is greatly appreciated. Thank you for your time and coming on the show. You mentioned a lot of this development was coming up with clinical recommendations in, in working with people who have post-COVID-19 condition. On this show, we've discussed practice guidelines and different pieces of evidence that contain clinical recommendations and the vast amount of research and work that goes into coming up with those solid recommendations. And I wanna ask you, what can you tell practitioners who work with a large range of client populations? How can they really focus their efforts to search for evidence that supports best practice?

MALACHY CLANCY:
Yeah, it's a great question. And it's difficult to stay abreast of all the published literature, but there are ways to make it easier. And so, some of the ways that I do it, I sign up for table of contents alerts from journals that are specific interest to me. And so, those will come into my email inbox maybe once or twice a month and I can just click on any articles that I find relevant. You can also create like a weekly digestive search term from databases such as like PubMed, Google Scholar to receive list of recent publications or topics that might be of interest to you. As a member of a OTA, you have access to a wide variety of journals that can easily access from their website. And so, just set those once or twice a week and quickly skim the literature to stay up to date on the latest evidence. And the other big thing is to make knowledge sharing a shared responsibility at your place of work, holding journal clubs, staff and services, things along those lines to really promote evidence-based practice.

MATT BRANDENBURG:
Those are excellent tips for our listeners. And I love at the end there how you emphasized, you know, creating a little community to share research publications and best practice with that that can definitely make a huge difference. I want to jump right in now to the living guideline, COVID-19 and post-COVID-19 condition continues to be kind of a novel illness doesn't have an extensive library of published research related to intervention and outcomes at least that I'm aware of. What types of evidence were used to develop this guideline? And what does that really mean or imply for practitioners when they're using the guideline?

MALACHY CLANCY:
Yeah, that's a great question. So, the World Health Organization actually partnered with Cochrane Rehabilitation and Cochrane systematic reviews to kind of guide the synthesis of evidence. And really, what they did was tried to seek out high-quality systematic reviews and randomized controlled trials related to the care of individuals with COVID-19. But kind of, as you mentioned, there's a small but growing body of evidence on this condition. Knowing that, the literature was also looked at with individuals with other similar known viral conditions. So, thinking about SARS or MERS and trying to look at the applicability to this population. The interesting thing here is, as a living guideline, the goal is to update it as new evidence emerges and we learn more on how to treat and manage the conditions. So, the anticipation is that, you know, after two years, this guideline will hopefully be able to be updated and evidence be able to incorporate it as we continue to learn more.

MATT BRANDENBURG:
Absolutely. I really love how the living guideline is, is put right there in the title to show that the research will continue to be kind of thickened out and added to that's an excellent resource for, for clinicians. You were involved specifically in chapter 24 of the guideline titled “Care of COVID-19 Patients After Acute Illness”. How do you hope OT practitioners can use this chapter?

MALACHY CLANCY:
Yeah, it's a great question. So, my hope is that OT practitioners use this guideline to really guide their models of care, identify potential red flags for rehabilitation, and incorporate the recommendations into their clinical practice. And this would ultimately help people return to their desired occupations and improve their health and function. The second thing is, I would state that many of the recommendations are interconnected since post-COVID-19 condition can impact multiple body structures and functions. And so, the guidelines offer suggested rehabilitation interventions and their anticipated outcomes. And you can use this evidence to educate your patients on why you're incorporating these recommendations into their plan of care and develop a therapeutic relationship with them to identify their desired goals of care.

MATT BRANDENBURG:
I love how you emphasize developing that therapeutic relationship. I think now might be a good time to mention. I'm gonna ask you to share some examples of your experience in working with this population. But we do wanna encourage all of our listeners to take a look at this guideline, really go through this chapter, apply it to your own clinical reasoning and your own experience with being client-centered with the people that you work with. I think that's a good time to put this plug in. How is the chapter organized?

MALACHY CLANCY:
Sure. So, the chapter is titled "Care of COVID-19 Patients After Acute Illness". And so, it encompasses 16 recommendations in total. The first five recommendations are designed to support models of care. So, it discusses things like referral principles for rehabilitation, red flags for safe rehabilitation, components and functions of rehabilitation care, service delivery, and the workforce, meaning who should be involved in the care of patients with post COVID condition. And within that guideline, it specifically states occupational therapy is an essential component of this workforce. The remaining 11 topics were chosen based on a high prevalence of reported symptoms in the literature, and many of the individuals actually involved in the creation of guideline work were healthcare individuals or researchers living with post-COVID-19 condition, and we're able to offer their insight into their lived experiences. The 11 topics that are discussed are include post-exertional symptom exacerbation, arthralgia, breathing impairments, cognitive impairments, fatigue, mental health, olfactory impairments, orthostatic intolerance, swallowing impairments, voice impairments, and return to activities of daily living and work.

MATT BRANDENBURG:
Thank you. I didn't know that the lived experience was really included in this guideline as well. I think that's a really interesting intersection of qualitative data along with quantitative and the combination of lived experience with post-COVID-19 condition and systematic reviews looking at robust and large numbers of people experiencing that type of thing. So, just adds more to the applicability of the document, what, what really is the different type of of recommendations? Can you describe kind of what they are? You mentioned that each section has clinical interventions and expected outcomes, but what about the recommendation statements? I know some of 'em are conditional or strong recommendations. Does that have to do with the level of evidence and support for them? Or how are those organized?

MALACHY CLANCY:
Yeah, so the recommendation statements are listed incorporating what's called the GRADE approach, which stands for a Grading of Recommendations, Assessment, Development and Evaluations. It's a transparent framework for developing and presenting summaries of evidence and kind of provides a systematic approach for making clinical practice recommendations. And this is a clinical practice guideline. The GRADE approach factors in things such as like the available scientific evidence, the balance of benefits versus harms and the burdens associated with them, difference in values and opinion, and the balance of net benefits and costs. And so, a conditional recommendation means that desirable effects of adherence to a recommendation probably outweigh the undesirable effects, but it's not necessarily fully confident. So, for clinicians, this really means that you should recognizing that like different choices will be appropriate for different pop, for different patients, and that you must help each, each patient to arrive in a decision consistent with his or her values and preferences.

A strong recommendation means the panel's confident that the desirable effects of adherence to a recommendation would outweigh the undesirable effects. For patients, this means like most people in their situation would want the recommended course of action. And for clinicians, this really means that patients should receive that recommended course of action.

MATT BRANDENBURG:
Thank you. Thank you. I think that information is important for clinicians in, in going through the chapter and gleaming from it how they can apply the principles to their approach. We'll get back to our interview right after this quick word. We try to make research more applicable and more consumable for our listeners. And completing the survey that we mention on each episode helps us to do just that. AOTA members are now eligible to receive one contact hour for listening to an episode of our show and completing the survey. The survey is still only three questions long and can be found by following the link in this episode's description. Get yourself a contact hour and help us to improve the show, improve the resources AOTA provides to its clinicians, and improve the application of evidence to practice in our field. Now, back to the interview. What, what is post-COVID-19 condition? I know we've mentioned it a couple of times here. Can you give us some more details, really, what is it?

And what are kind of those mid and long term effects of COVID-19 that OT practitioners may see?

MALACHY CLANCY:
Yeah, this great question. And it's just kind of one of the challenges of things that we see out in the literature in the scientific world. And so, you might hear post-COVID-19 condition also referred to as long haul COVID or something along those lines. And so, the World Health Organization defines post-COVID-19 condition as the illness that occurs in people who have a history of probable or confirmed SARS-CoV-2 infection, usually within three months from the onset of COVID-19, with symptoms and effects that last for at least two months. These symptoms and effects of post-COVID-19 condition cannot be explained by an alternative diagnoses. And so, some people develop a variety of mid and long-term effects like fatigue, breathlessness, and cognitive dysfunction, so like, examples like confusion, forgetfulness, or a lack of mental focus and clarity. And it's difficult to predict how long post-COVID-19 condition will last for any given patient. Still have much to learn about the condition, but current research shows that patients can experience lingering symptoms for weeks to months following COVID.

MATT BRANDENBURG:
And what are the settings that occupational therapy practitioners will most likely be seeing patients experiencing these types of symptoms?

MALACHY CLANCY:
I think with the novelty of this, this illness that you can continue to see patients with post-COVID-19 condition in almost any environment. And so, the one big caveat I wanna make here is that this definition of post-COVID-19 condition is really designed for adults. And there might be a separate diagnosis for children. And that's still kind of in development, but we know that it can impact children as well and just in sort of different etiologies. But I think that you can encounter an individual who's still suffering from post-COVID-19 condition in any sort of environment. So, whether that's acute care rehabilitation or acute rehab or an outpatient setting, kind of anywhere.

MATT BRANDENBURG:
Really, important information for practitioners across settings. The chapter we're discussing outlines considerations and evidence related, as you mentioned, to organizational rehabilitation care, service delivery, specific conditions and symptoms which it's, it's very robust and inclusive and a wonderful chapter. I had the chance to look it over. It's too much to cover in one interview, though, unfortunately. And again, we're encouraging listeners to check out the entire document. What would you say off the bat are some of the most important clinical applications included in this chapter?

MALACHY CLANCY:
Yeah, the most important aspect is to understand and identify red flags for safe rehabilitation as you don't wanna harm the patient. And so, in adult with post-COVID-19 condition, exertional desaturation and cardiac impairment following COVID-19 should be ruled out and managed before any consideration of what we would call physical exercise training. Orthostatic intolerance is another big one. And post-exertional symptom exacerbation, they're both amenable to rehabilitation, but the presence of them will require interventions to be modified in view of these diagnoses for rehab to be safe. Some red flags may be unclear and kind of depend on the clinical skills of the, the team and the practitioner or availability of other diagnostic tests or if available. The guideline states that like, you know, clinical teams should have access to training to screen for and identify these red flags. And so, what we really wanna prevent is harming that patient. Unfortunately, right now, there's no one set of assessments or investigations or tests that are suitable for everyone because of the wide range of symptoms and severity of the condition.

MATT BRANDENBURG:
These red flags, is this something that a lot of practitioners could maybe identify through a chart review or interprofessional collaboration even before seeing the patient? Or would it be more of a screen or assessment?

MALACHY CLANCY:
I think that a lot of it is a review of the pertinent medical history screening assessment. So, taking a basic set of vital signs prior to providing any sort of assessment or intervention, and really having a discussion with your patient asking them if there are signs or symptoms of activity, activity intolerance or cardiac impairment or pulmonary impairment prior to any sort of interventions.

MATT BRANDENBURG:
There we go. Perfect. Thank you for those, those tips. I think that's very applicable for practitioners to, to consider. Like you mentioned, the number one thing is, is not doing harm to patients. And you mentioned earlier several impairment specific topics including arthralgia, post-exertional symptom exacerbation, breathing impairment, cognitive impairment, and fatigue, I think you mentioned as well. Can you describe maybe just one or two of these topics and share the clinical recommendations that are included in the guideline?

MALACHY CLANCY:
Yeah, certainly. So, the main two topics that I was involved in are mental health and return to activities of daily living and work. And so, in discussing emotional health, patients might report feeling anxious or depressed. And these symptoms might include things such as low mood, sadness, sleep disturbances, fatigue, concentration difficulties. And the conditional recommendation here is to incorporate psychologic support that might include things like cognitive behavioral therapy or CBT, mindfulness training, peer support groups, but there's not enough evidence to support one intervention over the other at this time. And as post-COVID-19 condition can have a combined effect of impairments in multiple body functions instructors. So, you think about the impact on the physical, emotional, cognitive functioning. There can be a pretty profound impact on a person's ability to engage in their desired activities of daily living and work. And so, the guideline clearly states that optimizing independence in daily living and enabling individuals to return to work should be seen as goals of rehabilitation and health outcomes.

And so, within our recommendation for return to work and activities of daily living, our conditional recommendation is there are really focused on education skills training, incorporating energy conservation, pacing techniques, use of assistive devices to facilitate ease with ADLs. These are all the core principles of things that we know how to do as occupational therapists. And the guideline really also tries to emphasize trying to perform the assessment of ADLs in a real life context, if possible, to offer the greatest understanding of functional performance.

MATT BRANDENBURG:
Absolutely. I think everyone across the board has, has felt their daily occupations and their occupational performance impacted by COVID-19 even more so for people experiencing post-COVID-19 condition. So, I really appreciate that emphasis on, on mental health and getting back to performing those tasks and activities that, that give life the most meaning. What other topic did you, would you like to kind of describe and share those clinical recommendations for right now?

MALACHY CLANCY:
Another highly prevalent topic is thinking about fatigue and the symptom burden of fatigue on occupational performance. And so, if you're profoundly fatigued, and that could be cognitive fatigue and physical fatigue, and thinking about how that might impact your ability to engage in the desired roles that you have, and really the recommendations around there are focused on pacing a modification of ADLs as appropriate and thinking about the structure of your normal daily habits and how we can enable human performance.

MATT BRANDENBURG:
Wonderful. Thank you so much for giving us a little bit more inside information on, on some of those impairment specific type interventions. What did you find, or what would you say would be one of the most effective interventions or treatment approaches to improve occupational performance and well-being of people who have this post-COVID-19 condition?

MALACHY CLANCY:
That's a great question. And unfortunately, with the growing body of research that we have started to, to develop, we still don't necessarily have one validated intervention for this novel condition to definitively state that one intervention works better than another. The most holistic approach that we have, and really what this guideline tries to reinforce is that this recognizing that this is a real condition with real implications impacting real people's lives, we should continue to listen to our patients and advocate, advocate for our patients throughout their rehabilitation process and really support and educate patients, consumers, clinicians regarding the best available evidence as it becomes available.

MATT BRANDENBURG:
I love that. Those are wonderful recommendations for practitioners across settings, across client populations to, to incorporate those best practices into what, what we do. So, thank you so much. I had a follow up question for you as well. You mentioned cognitive fatigue. Can you give us a little bit more detail about that? And that's a new term. I know for me and maybe to some of our listeners, how would you really describe cognitive fatigue?

MALACHY CLANCY:
Sure. cognitive fatigue can be described in a variety of different ways. But mainly symptoms are present with lack of concentration, forgetfulness, feeling like your energy has been just completely depleted. And so, while you might have the energy to stand up and go for a walk or to engage in some sort of leisure task, you don't feel like you have the cognitive energy to engage in some sort of task that involves cognitive functioning. So, thinking about like making a meal or trying to do some work or something that'll involve just a little bit more energy on a normal everyday basis. And you'll feel like your energy level has been completely depleted.

MATT BRANDENBURG:
It sounds like one of those, you know, invisible symptoms that's, that's real and impacting someone's occupational performance and ability to, to go about their day to day. So, definitely essential to consider. Starting with, let's say initial evaluation, how would you recommend a practitioner approach caring for the post-COVID-19 condition population who may be experiencing cognitive fatigue amongst other symptoms?

MALACHY CLANCY:
Yes, great question. And so, to support the delivery of rehabilitation services for post-COVID-19 condition, the guideline really provides three suggestions on the following core components. So, you think about, one, inclusion of a multidisciplinary rehabilitation team, the second would be thinking about continuity and coordination of care. And so, you're not operating in sort of an isolated silo environment. And the third is thinking about the people centered care and shared decision-making approaches involving the patient in their treatment, in their coordination of care, understanding what their goals and values are and what they ultimately hope to achieve. The guideline recommends early referral and a transdisciplinary approach to care. And that really means that, you know, recognizing that one spec', well, not one specialty might be able to address all the patient's impairments because it's, this condition has such a profound impact on multiple different systems. Since the guideline was designed for global applicability, the setting in which care has provided might vary.

So, really what the guideline recommends is based upon the condition of the global pandemic and the levels of infection throughout the community really a hybrid approach of both in person and remote models. And so, thinking about like doing performing telehealth or something along those lines. The next step is thinking about what's the appropriate suggested length of a rehab program. And that's really based upon a patient's needs. And so, thinking about like enabling re-engagement with the healthcare provider or healthcare practitioner, if there's like a new onset or functional decline occurs. The next is thinking about, like, you know, how do you, what's the next steps in the treatment? And so, unfortunately, there's no really like defined core assessment per se, for post-COVID-19 condition to be used, although there is an outcome set being developed. The guideline recommends and recognizes inclusion of standard outcome assessments is important across all aspects of care, including initial and follow-up visits.

But we just don't have enough evidence yet to say, what are those outcome measures we should be using. And as we discussed earlier, screening for red flags is essential and should be integrated into the initial evaluation and subsequent follow-up care. And really, that's because the symptoms of this condition might fluctuate over time. And lastly, the biggest thing I would recommend is for individuals to read the guideline and use those recommended interventions provided to guide their rehab process.

MATT BRANDENBURG:
Thank you. That's a very clear how this guideline can be used to kind of be exactly what it is a guideline for applying the OT process to working with this population. Are there any additional considerations or actions that you would say that clinicians can apply to ensure best practice when working with this clientele?

MALACHY CLANCY:
I think that listening to your patient and listening to their clinical, their symptoms, their presentation and their goals and values is probably the most important. Recognizing again, that this is a real condition that is impacting real people's lives, and letting them know that you're going to use the best available evidence within the rehabilitation field to try to support their return to activities of daily living and work or whatever goals that they may have.

MATT BRANDENBURG:
I love that. I love that. And Malachy, could you give us a clinical example of maybe an intervention you've used with someone after acute COVID-19 illness that really helped them achieve a positive outcome?

MALACHY CLANCY:
Sure. one individual I work with who was hospitalized for a long time, initially for COVID-19 and ultimately continue to experience symptoms of what we now know as post-COVID-19 condition. The first thing was really thinking about pacing and building up his activity tolerance, because any sort of activity that we would attempt to do would provide profound amounts of physical fatigue for that individual. And so, incorporating those principles of energy conservation and pacing and activity modification started to help him enable to participate in the basic activities of daily living that we think of, so like being able to sit up in a chair and feed himself, progressing to being able to address himself and ultimately be able to bathe himself and use the bathroom independently. And it was not necessarily, you know, any sort of advanced rehabilitation interventions that we offered, but really thinking about what are the basic principles and tenants of our OT skills and interventions. And that's what we incorporated.

And we're able to have a great positive outcome.

MATT BRANDENBURG:
I love that. I love that. And Malachy, I don't wanna, I don't want you to have to share all your secrets and everything within your OT toolbox right now, but kind of what, what would you do when you were working with this patient on, on pacing? What, what were you saying to him or her to help them really apply those energy conservation techniques and modify their different activities?

MALACHY CLANCY:
Yeah, that's a great question. And so, one of the things that we really talk about within this guideline per se is symptom monitoring and titration. So, you think about that as you're also working with the individual to identify when they might be experiencing symptoms. So, when they might start to feel like high levels of fatigue or cognitive fatigue or physical fatigue and recognizing what might be the triggers for those symptoms. And so, starting to think about ways that we can maybe modify specific tasks to enable performance in that task, or also working with the individual's family to facilitate recognition of those tasks so they can also guide the treatment or guide continued performance in those basic activities throughout the day really were there with the individual for only a small snapshot of their day, and we want to encourage carryovers those interventions. So, including the family as part of those treatment sessions was also extremely beneficial.

MATT BRANDENBURG:
I love that. I love that. Including the family, it's so important for carryover and across settings. And I just have one more follow-up question on, on pacing. If this is kind of a new approach or intervention that a practitioner would like to, to apply to appropriate clients, of course, what kind of recommendations would you give or some main tenants of pacing that, that our practitioners could focus On?

MALACHY CLANCY:
Sure. And so, I think the easiest way to remember it is, it's, it's a marathon and not a sprint. So, thinking about you have 24 hours in a day dividing up the activities that you want to do throughout those days. So, you're not necessarily doing every activity that you want to do in once or in a short period of time. So, it might require more time initially to perform some tasks, so like waking up in the morning and getting dressed might take you a little bit longer period of time and pacing those tasks a little bit more appropriately, so you're not using all of your energy levels at once.

MATT BRANDENBURG:
Mala, that can be really tough, really tough for clients and a test of patience but with the, with the right guidance can definitely make a large impact. Thank you for sharing that. Are there any other examples you'd like to touch on or share right now?

MALACHY CLANCY:
I think that the biggest thing that you have to recognize is that because this is such a new condition, we're also seeing individuals who might be younger who have never experienced physical or cognitive disabilities before, and there's a lot of unknown. And so, talking through that is, is a challenge and recognizing that, you know, this is a new clinical presentation. There's lots to learn, but you're gonna try to incorporate everything you can within your skill set to help them get back to living the life that they knew.

MATT BRANDENBURG:
I love that. Thank you, Malachy. What additional resources would you recommend to listeners who like to learn more about intervention for this population?

MALACHY CLANCY:
Yeah, I think that there's a number of great patient advocacy organizations that I would recommend. And those are really built out of people who are living with this condition, who are, are truly trying to advocate for appropriate policies, evidence, resources to really help these individuals live a normal life. And so, there's the long COVID alliance. There's occupational therapy for long COVID and long COVID physio are just a few that I would recommend to the listeners.

MATT BRANDENBURG:
And all of that, also, along with this living guideline, which is published on the World Health Organization's website, that's who.int. Malachy, we've made it to the golden nugget segment. Our last question of the interview, if you could give one piece of advice or recommendation to occupational therapy practitioners, what would you say?

MALACHY CLANCY:
I think that OTs are play an extremely important role in the care of individuals with post-COVID-19 condition. And our skills and expertise are well suited to improve the lives of individuals living with this novel condition. I would encourage everyone to continue to advocate and disseminate our expertise on the care of this novel population.

MATT BRANDENBURG:
Thank you, Malachy. That's a wonderful message or nugget to end on. Very encouraging. And I really appreciate your time for this interview. Really, it was a joy having you on the show.

MALACHY CLANCY:
Thanks, Matt.