

Occupational Therapy and COVID-19



An occupational therapist works with a patient. Photo courtesy of Jamie Wilcox.

HIGHLIGHT

*The goal of occupational therapy is to be able to get patients back to where they want to be, via a mix of physical rehabilitation, cognitive activity analysis, and improving safety, function, and independence. ASPR TRACIE interviewed **Jamie Wilcox**, OTD, OTR/L, **Kelsey Peterson**, OTD, OTR/L, Neuro-IFRAH® Certified, and **Carnie Lewis**, OTD, OTR/L, Neuro-IFRAH® Certified, who work in acute care settings at the Keck Medical Center of the University of Southern California to learn more about the impact the COVID-19 pandemic had on their jobs. **Heather Parsons**, the Vice President of Federal Affairs for the American Occupational Therapy Association, also participated in the interview.*

■ ASPR TRACIE

Let's start with a national level perspective—please tell our readers about any challenges you encountered with providing usual occupational therapy care and how you overcame them.

■ Heather Parsons (HP)

The greatest challenge for us at the national level was ensuring that occupational therapists and occupational therapy (OT) were included in things like personal protective equipment (PPE) policies. Another challenge was ensuring that practitioners had the information they needed to advocate for themselves, and what the latest national guidance was. They were absolutely on the front lines, caring for people with COVID-19, and with people in facilities who would be very at risk for complications should they contract it.

Now, one of our challenges is on the rehabilitation side, making sure that healthcare practitioners understand the role of OT in the long-term recovery of a COVID patient. This could either be after an acute care stay or for someone who was never hospitalized but would still benefit from OT. We are working on some clinical case studies to highlight the evidence.

We have also provided a lot of general guidance related to telehealth and ethical decision making, what is appropriate treatment, and what to do if you do not have the appropriate equipment.

■ ASPR TRACIE

Do you think you will use telehealth moving forward?

■ HP

Telehealth has been a game changer. OT is focused on helping people live their daily life. With telehealth, we can see our patients in their homes and in the communities in which they want to participate. Sometimes clinicians can see something in the home that might present a challenge or barrier to participation that patients did not think to report. Clinicians also report more compliance with their appointments and may be finishing plans of care more quickly and in fewer sessions. Telehealth also helped patients who otherwise might have transportation challenges or fear of taking public transportation to their appointments where they might be exposed to the virus. Long term, telehealth really provides that link to the community and home setting that is essential for positive OT outcomes.

■ Carnie Lewis (CL)

Telehealth also helped patients feel less isolated during the pandemic. It was crucial in allowing therapists to identify signs of loneliness and depression.



■ ASPR TRAICE

For those of you who work in outpatient settings, what did you do when volume dropped?

■ Jamie Wilcox (JW)

Our institution pivoted relatively fast to telehealth and learned its lessons along the way. In the early months of the pandemic, we used a staggered staffing model where we broke our team into two parts and we worked four days on, three days off. We also created a small clinical team to see patients admitted for potential COVID infection.

The rest of the department focused on cross training to ensure we had coverage in case people became sick or were pulled to the COVID team. Because we work at a large academic medical center, there are a lot of specialty rehabilitation service lines. I typically work in pulmonary transplant; those transplants never stopped. I cross trained a core team of people from other specialty service lines to be able to cover for me while I worked on the COVID front line.

Our outpatient rehabilitation clinic took the lead in figuring out how to shift care delivery and workflow to telehealth. Our doctoral residents, who had been sent offsite, helped clinicians and patients navigate technology frustrations as we transitioned to Zoom therapy sessions. They drafted education handouts, updated home exercise programs, and made wellness calls to our outpatients to keep their care as active as possible.

The hospital census dropped, but we had a core group of non-COVID patients who were unable to leave the hospital; our teams always had work to do.

■ ASPR TRACIE

Were any OT providers pulled into other jobs?

■ JW

Yes, our per diem staff were able to opt into a labor pool and were redeployed to work across the health system. Some worked in research labs that were using their 3D printers to design and print PPE. Others served as hospital entrance screeners (to greet staff, check temperatures, and check IDs). Another group was deployed to teams that were taking and managing donations and coordinating with community partners to get us PPE and iPads for patient to use.

■ ASPR TRACIE

How challenging was it for patients and providers to communicate with loved ones virtually?

■ Kelsey Peterson (KP)

There was definitely a learning curve for both providers and loved ones. We were very thankful for the donations and equipment provided by the hospital, but whenever you have new technology, there will be hiccups. It took a lot of educating to all the providers who would potentially interact with family members.

■ CL

Being in Los Angeles, we have a lot of social inequities; some patients do not have the tools needed to participate in a video call and we had to be very mindful of access challenges on both the patient and family sides. We also had to ensure that language differences were addressed through video calls as we often found that while some patients were fluent in English, their family members needed Spanish translation to understand the training and education we were providing through a call.

■ JW

When possible, we enhanced bedside inpatient care using video calls. Due to visitor restrictions in the hospital, most of the caregiver training and family education happened virtually on video calls, in preparation for a patient's discharge home.

■ ASPR TRACIE

Did you have to change your inpatient therapy plans?

■ JW

Outside of the COVID units, care delivery remained consistent, with some additional PPE requirements.

One early lesson from inside the COVID units, was that almost all patients requiring hospitalization for COVID-19 needed OT consultation. Initiating OT services early during an inpatient stay allowed us to begin the discharge planning process early. We collaborated with our interprofessional care team to develop a discharge readiness checklist; that ensured a consistent standard of care across providers and maximized hospital throughput.

OT focused on helping patients understand the ways their symptoms impacted their functional capacity. We were the ones who helped patients get up for the first time as they learned to manage new symptoms like severe breathlessness. We ended up doing a lot of oxygen titration to support patients' safety while participating in basic activities, like using the toilet.

A lot of patients did not appreciate how sick they really were, particularly as symptoms continued to escalate during the hospitalization. We rounded daily with the interprofessional team to provide updates on patients' functional capacity for basic daily activity routines- flagging escalating symptomatic distress or worsening oxygen desaturation during therapy, which often prompted physicians to transfer patients to the intensive care unit for a higher level of care. As patients improved, we shifted focus towards planning for the transition to home. OT treatment sessions focused largely around optimizing independence and participation in basic daily activity routines, often requiring supplemental oxygen, activity modification, pacing and adaptive equipment to manage persistent symptoms. We trained patients to self-monitor their oxygen saturations using pulse oximeters and how to integrate oxygen cannulas into functional routines.

■ ASPR TRACIE

At discharge, did OT providers notice significant differences in patient deconditioning or other needs that are not part of the traditional spectrum?

■ JW

There were a few different subgroups of patients admitted with COVID-19 infections, each with different functional limitations.

One group were those patients waking up from critical illness in the intensive care unit on life sustaining therapies. This group of patients faced severe post-intensive care syndrome, with severe muscle weakness, delirium, anxiety, and endurance limitations. We initiated OT services for early engagement and mobilization as soon as they could tolerate turning down the sedation while on the ventilator. Often, these patients required months of post-acute rehabilitation before returning home. In the early months of the pandemic, it was extremely challenging to find post-acute rehabilitation centers for patients with a history of COVID infection. We did a lot of this rehabilitation in the telemetry unit of the hospital because we did not have anywhere to send patients; they were not ready to go home yet.

Another unique group were those people suffering neurological sequelae from COVID-19, like ischemic strokes.

Another cohort were those patients admitted with severe pneumonia, but who did not require mechanical ventilation. Although they were lucky to avoid intubation, these patients had extremely fragile functional reserves and were unable to sit at the edge of bed without rapid decline in oxygen saturations and severe breathlessness. They often spent weeks in bed, awake on high flow nasal cannulas, laying on their stomachs in the prone position. We did our best to support their ability to cope during this scary time filled with so much uncertainty around their potential to further decompensate. We would move the furniture in their hospital rooms so they could see the television while prone and attach their phones to the bed rails to they could access them without too much distress. As their condition stabilized, these patients often faced

Occupational therapy practitioners can focus on community mobility and related needs during an emergency; I would promote incorporating them in disaster preparedness planning. We can help emergency managers consider people aging in a community and residents with access and functional needs when they are planning for other emergencies beyond COVID-19.

- Heather Parsons



persistent limitations in functional endurance and were discharged to home with high supplemental oxygen requirements. In our follow-up outpatient appointments via telehealth, I have slowly observed some of these individuals wean off oxygen eight to twelve weeks following their hospitalization.

Many patients discharged to home on supplemental oxygen and often needed to increase the oxygen flow rates before getting up to move around the house to prevent exertional hypoxia. These patients required ongoing OT services after hospital discharge, but access to home health rehabilitation was inconsistent. We started to see many of these patients in outpatient OT via telehealth. We would perform activity-based desaturation assessments virtually using their personal pulse oximeters and guide their process of weaning off the supplemental oxygen, in collaboration with their primary care provider. Another early lesson was realizing that managing oxygen at home was not an intuitive process. Supplemental oxygen titration is intricately related to what a person is doing, how they self-monitor their symptoms, and how they pace themselves during activity.

■ ASPR TRACIE

Is OT automatically consulted in the ICU? How do you function in the integrated team?

■ JW

Despite already having good working relationships with our intensivist teams, they did not even realize we were on site during that first very hectic week in March 2020. Nobody was thinking about early mobilization or long-term recovery; they were just trying to wrap their heads around what was happening, securing PPE, and keeping patients alive.

Our first patient was discharged straight from the ICU, without seeing an occupational therapist. No one had assessed the patient's ability to get up and move around his hospital room. No one had explained to the patient that he was supposed to wear the oxygen at all times, most importantly, when he was up and moving around. I got a call later that week from the outpatient nurse practitioner asking for our help. We started an outpatient telehealth program the next day to teach him about properly using oxygen while at home in the context of his daily activity routines.

That week we realized we needed to start therapy services earlier in patients' recovery from severe COVID-19, just like we would for a typical ICU patient. We started to meet each morning with the ICU multidisciplinary team for a quick "power rounds" to determine which patients' met readiness criteria to participate in early ICU rehabilitation. Patients were candidates for early ICU rehabilitation, as long as they could achieve basic arousal for active participation once sedation was held and maintained adequate cardiovascular and respiratory reserves to support functional participation while receiving supportive medical therapy. Patients' conditions changed dramatically day to day and required a collaborative team approach to make sure everyone was on the same page.

■ CL

As the pandemic progressed and we understood what we were dealing with, we realized that patients were more likely to experience decompensation on days 8 through 12. We were often seeing patients in the medical/surgery units before that happened; having an automatic OT consult allowed us to teach them about proning, energy conservation strategies, and limiting over-exertion early before their clinical course progressed.

■ ASPR TRACE

How did COVID affect you and other OT staff mentally?

■ CL

I experienced an intense anxiety level early on in the pandemic, and this was coupled with the fact that I was also living with high-risk individuals at the time. I am very thankful that USC offered hotel housing for anyone who had been exposed or worked in a high-risk setting like the COVID-19 unit. I utilized this option while we reacted to new policies towards PPE and social distancing

so that I could keep my loved ones safe. I am also lucky to have supportive colleagues and a work environment because it made it much easier to dedicate my emotional energy towards helping others recover from COVID-19.



OT Inpatient COVID Team, Keck Hospital of USC, University of Southern California. Photo courtesy of Carnie Lewis.



■ JW

I was able to isolate myself well. I live by myself and my coping mechanism was jumping into the deep end. My quarantine hobby became writing and teaching about COVID when I wasn't "doing COVID" at work. It quickly became clear once I was in the COVID unit, and working with the team, it was very collaborative. We looked out for each other and rates of asymptomatic transmission in COVID units were lower than they were on other units. We had "PPE buddies" who watched us don and doff our equipment and wash our hands; it was a collaborative and supportive environment. Once you were suited up and in the unit, it was almost easier to focus compared to other units of the hospital. While it is nice to think about taking time off to decompress, I personally enjoy working with patients facing acute and chronic lung disease and there are so many people who need help post-COVID. I am looking forward to helping people manage and recover from the long-term physical and cognitive effects of the virus.

■ ASPR TRACIE

Did you note an increase in demand for OT treatment and providers from skilled nursing facilities and long-term care providers?

■ JW

Our health system does not have its own skilled nursing or long-term care facilities. Our inpatient rehabilitation unit has remained active, caring for patients with and without COVID. They initially hesitated to admit patients with prior COVID infections until we had a better understanding of duration and contagion. These units have patients out and about the hallways; they share rooms, public spaces, and a therapy gym, so we had to make some changes to minimize spread. We did connect with clinicians at various levels of care across the country (thanks to AOTA), and we were able to exchange information and strengthen each other's practices.

■ HP

One of the challenges that AOTA heard about was that OT staff could not go from one building to another within a skilled nursing facility, for example, because they were not supposed to "share" staff between buildings. That truly challenged our staffing models until telehealth could be used.

There was so much newness this past year—the ways in which we collaborated online, sharing information within the country and globally, was a great example of working together. I felt more connected in certain ways to different resources than I did before the pandemic. As OT practitioners, we are already treating a lot of the symptoms that long haulers are dealing with. We are still trying to figure out the intricacies of the symptoms and how they relate to other types of chronic conditions. These conditions impact function in some long-term clients. Helping our clients learn to manage and cope with these symptoms during daily life is challenging but these are symptoms we have been helping them manage for a long time now. It has been rewarding to be able to work with these patients and learn how to use pre-existing tools to treat this new beast.

- Jamie Wilcox

