

July 12, 2021



CTS INSPIRATIONS

CTS NEWS

President's Message

The biggest announcement this month is the retirement of CTS Executive Director, Phil Porte. Phil and his entire team at GRQ have done a tremendous job over the past several years furthering organizational growth and strength. With 7 institutional members and over 700 individual members, CTS is well positioned to continue to meet its mission to improve California lung health and, through advocacy and education, advance the science and practice of pulmonary and critical care medicine. Despite the COVID pandemic, Phil and his team coordinated a successful transition to a virtual platform for CTS events. We now have twice a month *non-branded* talks by nationally renowned speakers sponsored by CTS corporate partners. Phil has also ensured a thoughtful succession and a smooth transition of administrative leadership and operations to Jason Seidler who has been closely working alongside Phil over the past year. Phil's commitment to CTS is reflected by his pledge to work *pro-bono* for several more months (post-retirement) until the new office settles in. We at CTS are very grateful to Phil for his dedication, commitment, and his hard work that has enabled CTS to continue to thrive during challenging times and most recently through the pandemic.



On a positive note, I am very excited that Jason Seidler (CEO, Jade Orchard) will be formally taking over the CTS executive office July 1st 2021. Jason has an academic background in business and linguistics, extensive experience working with medical societies (including NAMDRRC, CSRC, and CHEST) and diverse organizations for over 10 years. He has a full-service team with skills in marketing, technology, and conference planning. I am confident that Jason will continue to accelerate the growth momentum that CTS strives for and its role as a leading thoracic society.

As a reminder, our virtual educational (non-CME) webinars continue to be held every 2nd and 4th Friday. Other upcoming events include a DEI (Diversity, Equity, and Inclusion), and Phage Therapy symposia; stay tuned for details. These events are posted on the CTS website and we will ensure reminder mailings. Please remember to save-the-date for the **in-person CTS conference in Monterey on March 11th to 13th, 2022**. As always, we are grateful to our CTS members for their continued support.

Sincerely,

Vipul V. Jain, MD, MS
UCSF Fresno

Starting a Long COVID/Post-COVID Clinic

By Lekshmi Santhosh, MD, MAEd

Assistant Professor of Pulmonary/Critical Care Medicine, University of California-San Francisco

Medical Director, Long COVID/Post-ICU Multidisciplinary OPTIMAL Clinic



Take-Home Points:

- Long COVID or PASC (post-acute sequelae of coronavirus) refers to the persistent symptoms that can remain after acute COVID-19 infection;
- Multidisciplinary clinics are popping up around the country to meet the high patient demand for integrated services to address these multi-organ system issues;
- We recommend a 'hub and spoke' model with one division taking responsibility and building collaborations with other disciplines as well as integration of clinical and research visits;
- Remember that 'all that long hauls is not COVID' and to keep a broad differential diagnosis and avoid anchoring bias when patients with presumed long COVID present to clinic;
- Our article (Santhosh et al, CHEST 2021) has concrete tips for clinicians interested in starting their own long COVID clinic so you don't have to reinvent the wheel.

It is increasingly recognized that COVID-19 is not only an acute multi-organ system illness, but may also have longer-term outcomes involving multiple organ systems, colloquially referred to as long COVID or post-COVID. In response, many long COVID/post-COVID/PASC (post-acute sequelae of coronavirus) clinics have been popping up all over the country, including at our institution at the University of California-San Francisco (UCSF).

Currently, US and British guidelines are unclear as to whether patients should be routinely referred to a multidisciplinary long COVID clinic, given that it is uncertain whether this actually improves clinical outcomes (*Bai et al, ERJ 2020; Greenhalgh et al, BMJ 2020; CDC, 2021*). Moreover, it is uncertain as to how long patients need to be followed longitudinally; some have proposed regular prospective follow-up intervals every 1-3 months (*Raghu et al, Lancet 2020*). Another challenge is that symptoms do not necessarily correlate with organ dysfunction; a patient who was intubated on mechanical ventilation for weeks may sometimes be less symptomatic on follow-up than a patient with relatively mild infection who was never hospitalized (*Amenta et al, OFID 2020*).

Given this uncertainty, many institutions, including ours at UCSF, have built multidisciplinary models for post-COVID care based on the framework applied to post-ICU syndrome (PICS). The PICS framework utilizes a holistic approach that integrates the physical function, pulmonary function, cognitive function, and mental health of both patients and caregivers alike (*Flaaten et al, PICS 2019*). Even though only a small portion of patients suffering from post-acute sequelae of COVID have been hospitalized in the ICU, the PICS framework is helpful as it provides a systematic approach to the complex multiple organ system involvement that patients with COVID-19 experience. Many clinics use a "hub and spoke" model where a centralized division or department houses the long COVID clinic and develops robust and streamlined referrals and collaborations with other disciplines. For example, our pOst-covid/PosT-Icu MultidisciplinAry cLinic (OPTIMAL) clinic is housed within Pulmonary/Critical Care and includes robust collaborations with Psychiatry, Integrative Medicine, Cardiology, Neurology, Pulmonary Rehab, Infection Control, Virtual Peer Support Groups, and of course, Primary Care. Importantly, these clinics are not meant to replace primary care, but rather to supplement primary care and even connect patients who were previously not established with PCPs.

At your post-COVID clinic, I recommend using objective instruments to systematically assess physical, pulmonary, cognitive, and mental health functions, with tools not limited to but including the MMRC, BCSS, GAD-7, PHQ-9, MOCA, AMPAC, and other measures. Some of these tools require institutional licensure, while others are freely available. The ImproveLTO.org website provides great advice for instruments to measure sequelae of chronic illness. Integration with both research and clinical arms at your institution is critical to ensure that patients are not burdened with attending too many extraneous visits.

Lastly, I recommend that clinicians working in long COVID clinics remember that “all that long hauls is not COVID.” It is critical to avoid anchoring bias and keep a broad differential diagnosis throughout. I and our other clinicians have personally diagnosed cases of metastatic cancer, inflammatory bowel disease, post-partum mood disorders, hypothyroidism, hypersensitivity pneumonitis, sarcoidosis, and multiple other conditions that were all presumed to be “just long COVID” from both patients and their providers alike.

In conclusion, setting up a long COVID clinic is not easy, but it can provide an important ‘one-stop-shop’ for patients with complex multi-organ symptoms to get holistic multidisciplinary care. This is an extremely rewarding experience for patients and providers alike, and our group has published concrete guidance, including Epic templates, on how to start a multidisciplinary long COVID clinic (Santhosh et al, CHEST 2021 [How I Do It - CHEST \(chestnet.org\)](https://www.chestnet.org)). Best of luck and don’t hesitate to reach out as you create your long COVID clinic!

SWJPCC Journal - Volume 22 Issue 5

Volume 22, Issue 5							
Title (Click on title to open the manuscript)	Journal Section	First Author	Year	Vol	Issue	Pages	Date Posted
Combating Morale Injury Caused by the COVID-19 Pandemic	Editorial	Schmitz ED	2021	22	5	106-8	5/5/21
High Volume Plasma Exchange in Acute Liver Failure: A Brief Review	Critical Care	Rockstrom MD	2021	22	5	102-5	5/4/21
Medical Image of the Month: Perforated Gangrenous Cholecystitis	Imaging	Blackley L	2021	22	5	100-1	5/2/21
May 2021 Imaging Case of the Month: A Growing Indeterminate Solitary Nodule	Imaging	Kim JJH	2021	22	5	88-99	5/1/21

California Thoracic Society

18 Bartol St. #1054 | San Francisco, CA, 94133 | 415-536-0287

Connect with CTS at <https://calthoracic.org/>

CTS Editors:

Angela Wang, MD

Chris Garvey, NP

Laren Tan, MD

Sachin Gupta, MD

Erica Lin, MD