How COVID-19 informed the future impact of the specialty of physical medicine and rehabilitation across the healthcare continuum

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Editor’s Note:
This article is one of a series published in the June 2021 issue of PM&R that collectively form a White Paper describing the vital role of Physiatry throughout the healthcare continuum during the COVID crisis.

CIRCA 1970

The effective end of the poliomyelitis pandemic in the United States. Beginning nearly 60 years earlier in 1910, a viral pathogen infected ~600,000 people and took the lives of 60,000 of those who became infected.1 People who did not succumb were left with a myriad of physical impairments including muscle weakness, fatigue, impaired breathing, and musculoskeletal pain. Although President Franklin Delano Roosevelt was undoubtedly the country’s most famous polio victim, the main protagonist of the decades-long saga was a self-trained Australian nurse by the name of Sister Elizabeth Kinney (the moniker “Sister” representing a chief nurse in WWI, not a member of the clergy) who arrived in the United States in 1940, ultimately finding symbiosis at the University of Minnesota. Sister Kinney’s then revolutionary treatment methods for the devastating effects of polio—including moist heat therapy for polio-induced muscle spasm, joint mobilization to prevent contractures, and muscle “re-education” to regain function—were not universally respected. She eschewed prolonged immobilization and became the leading proponent for early reactivation of people with polio. Many of her principles and practices aligned with the nascent field of physical medicine (soon to become physical medicine and rehabilitation, and a board-certified medical specialty, in 1947).2

CIRCA 2020

Viral and infectious diseases scientists had been concerned about a global viral pandemic for years.3 Even Jeff Skoll (former eBay president and co-producer of the movie, Contagion [2011]) believed it was possible.4 And on March 11, 2020, 50 years from the effective end of poliomyelitis in the United States, the World Health Organization (WHO) declared coronavirus disease 19 (COVID-19) a global health emergency.5 Ground zero of the pandemic was a skilled nursing facility (SNF) in Kirkland, Washington (a mere 14 miles from my present position). As of March 11, 2021, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; the virus that causes COVID-19) has been responsible for 119 million infected persons and 2.6 million deaths globally, and 29 million infected persons and 530,000 deaths in the United States. COVID-19 affects multiple systems including cardiopulmonary, vascular, central and peripheral nervous, and musculoskeletal systems. The duration and extent of the initial illness (if any) following infection have been highly variable and unpredictable. The risk of death following COVID-19 is clearly highest in persons over 65 years of age, and the risk increases exponentially beyond 85 years.6 But survival does not mean cure. Younger people are experiencing long-term sequelae of COVID-19 infections, so-called “Long Covid.”7 Cognitive difficulties, extreme fatigue and exercise intolerance, muscle and joint pains, and depression are some of the most impactful conditions that have affected our patients’ ability to sustain their pre-illness level function and to maintain their quality of life. The vaccination implementation is building but is too late for those living with the aftermath of this viral infection.
At the beginning of the COVID-19 pandemic, many physiatrists were nearly out of “rehabilitation” work, with some redeployed to offload medical colleagues who were laser focused on the medical needs of very ill, hospitalized patients. With private medical offices closed to reduce the risk of viral spread, with skilled nursing facilities closing their doors because of the ravaging effect of COVID-19 on their highly at-risk residents, and with inpatient rehabilitation facilities (IRFs) being transformed to accommodate the surge in patients with acute pulmonary infections, physiatrists needed to re-imagine how they could not only contribute to the care of patients with COVID infections, but could continue to provide essential services to the vast majority of patients who were not infected with COVID-19. From the beginning of this national crisis, physiatrists demonstrated adaptability, ingenuity, and leadership skills. Physiatrists were also among the providers who first recognized that with these broad sequelae developing in COVID-19 survivors, rehabilitation needs would become paramount. Throughout the United States, physiatrists led the development of interdisciplinary medical clinics focused on the assessment and care of people with post-acute COVID sequelae.8 Physiatrists incorporated their unique knowledge of multisystem problems, and impaired mobility and function, combined with their skillset in the implementation of a biopsychosocial approach to chronic disease and disability. Outside of the COVID spotlight, physiatrists capitalized on technology, triage, and their training in process management to keep the medical machine moving, ensuring that the 90% of citizens who were not infected with COVID-19 continued to receive necessary care.

CIRCA 20XX

The COVID-19 pandemic, long over, was both a critical and pivotal time for modern medicine. The lessons learned revolutionized earlier warning signs of “pandemics-in-situ” and instigated public health policies and procedures to mitigate the rampant spread of future viral pathogens. In addition, institutional medicine has played a key role in the distribution and administration of vaccinations, and has developed rapid response protocols to treat early and fast. Examining the past decade of recorded history, one can also appreciate how different medical specialties responded to and evolved from the pandemic. But that future has yet to be recorded. It is still 2021.

The primary goal of this publication is to demonstrate how physiatry’s response to the pandemic, still in the making, will be transformational and impactful to the house of medicine in ways that stakeholders outside of this specialty did not imagine prior to March 11, 2020. There is no other specialty so well equipped to manage such a vast array of patients (eg, medical diagnoses, age, severity, chronicity, and medical environment) throughout their continuum of care. Furthermore, this past year has underscored physiatric skills including leadership of teams; and facilitating complex processes that influence patient throughput from IRFs to SNFs to home care and to outpatient clinics. Physiatry is particularly focused on the provision of care for, and the protection of the health and well-being of, people with disabilities—one of the most vulnerable groups in our society. The COVID-19 pandemic has highlighted the immense need to continue to advocate for people who are historically underserved and who face the greatest stress from medical crises.

This White Paper collection has also been produced to inform Physiatry’s external stakeholders of the enormous role that physiatrists can fill in the United States’ evolving health care model. As devastating as the COVID-19 pandemic has been, it has introduced opportunities that should ultimately drive the improvement of the delivery of health care in this country beyond COVID-19. To that end, these papers demonstrate that the response to the pandemic has sharpened the realization of Physiatry’s impact and value to health care. In seven sections, this White Paper collection addresses the response to the COVID-19 pandemic of different domains of care and community: IRFs, SNFs, outpatient pain management, outpatient musculoskeletal care, people with disabilities, graduate medical education, and national medical societies. The sections include the top impacts of COVID-19 in each particular domain or community, the adaptations that physiatrists made to compensate for those impacts, and a look to future applications influenced through the learnings over the past year. Physiatrists work best in teams and seek partnerships with other medical providers, administrators, payors, legislators, and patients in order to achieve the goals identified in each section. One COVID-19 learning is for certain: Physiatry will no longer be the best kept secret in the United States health delivery system.

DISCLOSURE
Dr Weinstein serves as 2021 President, American Academy of Physical Medicine & Rehabilitation.

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