



## Telemedicine and Movement Disorders: The Impact of the Coronavirus Pandemic

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Since the emergence of the COVID-19 pandemic, many countries have taken radical measures to slow down infection rates. These range from social distancing to a lock-down of non-essential business and marked restrictions on social and economic life.<sup>1</sup> While these measures are necessary to contain the pandemic, they come with particular concerns around the increased vulnerability of the many patients living with chronic diseases, including neurodegenerative diseases like Parkinson's disease (PD) and other movement disorders.<sup>1,2</sup>



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Changes in healthcare have been to limit access to clinics and neurology wards to protect fragile PD and other movement disorder patients from infection exposure. In some regions, the shortage of medical staff has required movement disorders neurologists to provide care for COVID-19 patients instead.<sup>3</sup> During this time of crisis, many patients with PD and other movement disorders are likely to benefit from restored access to subspecialty care via telemedicine, whether this is videoconferencing or simply telephone consultations. Also, even after the immediate threats of the current COVID-19 outbreak have been brought under control, we may likely be facing a need for continued restrictions on public and social life for the foreseeable future, as COVID-19 re-emergence or other outbreaks remain possible. It is too early to know how COVID-19, either directly or indirectly (via social and healthcare restriction measures), will impact patients with PD and other movement disorders in the long-term.<sup>2</sup> The observation of new-onset anosmia with COVID-19 is intriguing, given this is a common feature of prodromal PD. However thus far, coronaviruses have not been linked to specific long-term neurological sequelae.<sup>2,4,5</sup>

Since the crisis, use of telemedicine for the delivery of urgent and ongoing healthcare has speedily scaled upwards.<sup>1</sup> Many neurologists and other healthcare professionals are using a variety of telemedicine healthcare tools at their disposal to continue delivering patient care. These include phone calls, use of email or text message, and video visits. Telemedicine can be used for routine follow-up, urgent and research visits, new subspecialty consultations, psychotherapy, genetic counseling, social services, rehabilitation, education, and can produce care outcomes comparable to traditional visits. The merits and benefits of telemedicine are supported by a small but growing body of evidence.<sup>6-9</sup> However, telemedicine has yet to be established universally for virtual management of device-aided therapies in PD and other movement disorders, which will require the additional technological implementation of a secure remote digital interface within deep brain stimulation and infusion pump devices.<sup>10,11</sup>

In order to assist MDS members, the Telemedicine Study Group has created a "[step-by-step](#)" guide, including specific requirements for reimbursement and regulation, incorporating the latest information available in several countries and global regions. The Telemedicine Study Group has posted an [educational webinar](#) to reflect recent telemedicine changes related to the unfolding COVID-19 pandemic, and how to set up a successful Movement Disorders telemedicine practice. The Telemedicine Study Group also has developed a network of regional experts covering the globe to continue to provide updated information as telemedicine guidelines continue to evolve. In this regard, a [web form](#) to post questions is available on the MDS website. Continuously updated regulatory information and guidelines, and a robust question and answer section addressing all relevant questions posted by MDS members is available on the [MDS website](#). We hope to hear about the hands-on experience with telemedicine from many colleagues in the field, as this will help to further shape optimal delivery of telemedicine services for both patients and healthcare workers, and holds great promise of becoming a routine part our work-life in the future.

## MDS Telemedicine Resources

- [Telemedicine in Movement Disorders Practice: A Step-by-Step Guide](#)
- [Free MDS OnDemand Webinar: Telemedicine for Movement Disorders during the COVID-19 crisis: How does this affect us?](#)
- [Submit Questions to the Telemedicine Study Group](#)
- [MDS COVID-19 Pandemic: MDS Statement, References and Resources](#)
- [Implementation of Telemedicine for Urgent and Ongoing Healthcare for Patients With Parkinson's Disease During the COVID-19 Pandemic: New Expectations for the Future \(Cubo E, et al. J Parkinsons Dis. 2020.PMID: 32417800\)](#)

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