

TELEMEDICINE FOR EPILEPSY CARE IN THE COVID-19 ERA

Telemedicine (TM) has been increasingly used in Neurology as a tool to implement medical care and monitor our patients¹. It has been valued as a friendly tool for clinical evaluation by our patients^{2,3}. TM has shown no inferiority compared to the usual face-to-face visits in terms of significant difference in number of seizures, hospitalizations, emergency room visits, or medication compliance.^{2,4}

In this current time of the pandemic caused by SARS-CoV-2, it is becoming a more usual tool in our clinical practice. Avoiding face to face consultations and visits to emergency services, that are not necessary, are our principal aims. Many of follow-up consultations and doubts can be solved with TM. It also allows the organization of face-to-face medical care for those who really need it..

In this context, from the ILAE Task Force of COVID- 19, we aim her to facilitate access to open resources available regarding Telemedicine as well as counselling with regard to the main topics in TM.

FAQ:

1. Is telemedicine useful in epilepsy?

Telemedicine is a tool by which we can deliver care. The duty to our profession and to our patients is to guide the development of teleneurology in the safest and most meaningful ways possible. Telemedicine, whether by telephone or videoconference, has the capacity to improve the quality of epilepsy management and increase patient and caregiver satisfaction.

2. Is there a difference in telemedicine tracking versus face-to-face?

There are no differences. Follow-up outpatient epilepsy visits often focus on description of seizure semiology initially and seizure control, adherence, monitoring of serum antiepileptic drug serum levels, antiepileptic drug side effects, and counseling more than physical examination. The same for telemedicine. There are some specific issues that can be that can be reviewed below, in the specific links of telemedicine applied to neurology

3. What platforms can I use to perform telemedicine?⁵

a) Internet solutions

Webex (CISCO), Zoom, Skype, Live class, Go-to-meeting, High-five ,Go-to-webinar, Hangouts, WhatsApp, Viber, SMS, etc.

These software offer flexible audio and video conferencing. The basic forms are often offered as a free service.

b) Satellite connection

Used in isolated locations where coverage of other types of networks is nonexistent

c) Backbone of digital service provided to the end user (T-1 system)

“This is the backbone of digital service provided to the end user (typically business) in USA today which transmits voice and data digitally at 1.554 megabits per second (Mbps), connecting centers and hospitals for short distances (around 30 km), widely used also in India. It can be used to carry analog and digital voice, data, and video signal”⁵

d) Others

In cases where it is not possible to use these modalities, we can use telephone calls or letter correspondence.

3. What practical aspects would you recommend with regard to telemedicine management?

It is important that the patient feels well cared for, so aspects related to the caused impression and communication are essential. In these links you will find some very useful tips such as: prolonged silences need somefilling ('uh huh', 'yes'), or patients can misinterpret the mindset of a clinician who ends a consultation too abruptly; it seems better for the patient to hang up first.

* Smith P. [Telephone review for people with epilepsy](#). *Pract Neurol* 2016;16:475–7. doi 10.1136/practneurol-2016-001504.

* N. Kissani, Y.T.M. Lengané, V. Patterson, et al., [Telemedicine in epilepsy: How can we improve care, teaching, and awareness?](#) *Epilepsy & Behavior*, doi.10.1016/j.yebeh.2019.106854

* S. Sabesan, D. Allen, P. Caldwell, P. K. Loh, R. Mozer, P. A. Komesaroff, P. Talman, M. Williams, N. Shaheen, O. Grabinski on behalf of The Royal Australasian College of Physicians Telehealth Working Group. [Practical aspects of telehealth: doctor–patient relationship and communication](#). *Internal Medicine Journal*. First published:23 January 2014 doi.10.1111/imj.12323

5. What legal aspects do I have to take into account?

Always consult and adhere to your organizations' policy and procedure with respect to any recordings involving patients and/or personal health information

6. Where can I find more resources?

Here are some resources that may be useful

Online resources:

[Telemedicine and Remote Care COVID-19 Webinar](#)

Other Links/Resources:

Teleneurology and COVID-19 (updated April 10, 2020)

[Telemedicine and COVID-19 Implementation Guide \(AAN\)](#)

[Telemedicine FAQ \(AAN\)](#)

[NeuroBytes: The Neurologic Exam via Telemedicine \(AAN\)](#)

[COVID-19 is Catalyzing the Adoption of Teleneurology](#). B.C. Klein, N. A. Busis. *Neurology*. April 1, 2020

Continuum® Practice Issues: [Coding in the World of COVID-19: Non-Face-to-Face Evaluation and Management Care](#)

OTHERS:

[Telemedicine: opportunities and developments in Member States](#): report on the second global survey on eHealth 2009

[AAN Position: Telemedicine](#)

[Capitol Hill Report: AAN Leading Telehealth Efforts to Fight COVID-19](#)

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