

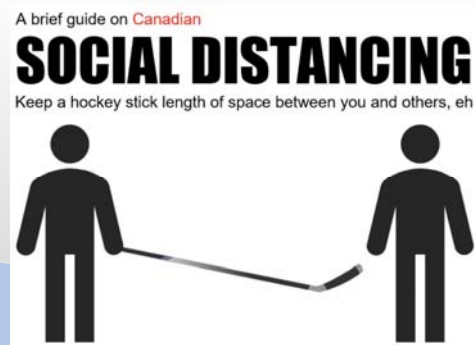
# Convention vs. Innovation I: Telemedicine/Virtual Visits Should Now Be A Preferred Option For Following Patients With PD After Diagnosis

Disagree: Susan Fox, University of Toronto




## NO

- As overtime..the Disadvantages outweigh any advantages



## Telemedicine in Movement Disorders: Leçons du COVID-19

Eoin Mulroy, MB, BCH, BAO,<sup>1\*</sup> Elisa Menozzi, MD,<sup>1</sup> Andrew J. Lees, FRCP, FRCP (Ed), FMedSci,<sup>2</sup>  
Timothy Lynch, MB, BSc, FRCPI, FRCP,<sup>3</sup> Anthony E. Lang, MD,<sup>4</sup> and Kailash P. Bhatia, MD, FRCP<sup>1</sup> 

*Movement Disorders*, Vol. 35, No. 11, 2020

- Difficulty sustaining the Dr-Patient relationship
- Difficulty with delivery of Treatment plans
- Diagnostic ability challenging
- Medical Education - limitations

## What are the Disadvantages?

- **Lack of Human Contact**
  - We are Doctors not Machines
  - Medicine is a Hands-On Profession
  - ‘Bedside manner’
  - Non-verbal clues help both Doctor and patient. ‘Seeing is believing’
  - Body language expressions are mostly lost on a computer screen; posture, body orientation, eye contact, side glances or any cross-person interaction is jeopardized

Hall JA, Horgan TG, Murphy NA. Nonverbal communication. *Annu Rev Psychol* 2019;70(1):271–294.

# What are the Disadvantages?

- **Missing possible important aspects of the Physical Examination**

- Cognitive testing – may be limited
- Eye movements
- Power/reflexes/Sensory
- Tone
- Posture
- Gait
- Pull-test
- Subtle involuntary movements – especially if poor camera set up

ORIGINAL ARTICLE

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## The Virtual Neurologic Exam: Instructional Videos and Guidance for the COVID-19 Era

*Mariam Al Hussona<sup>a</sup>, Monica Maher<sup>a</sup>, David Chan, Jonathan A. Micieli,  
Jennifer D. Jain, Houman Khosravani, Aaron Izenberg,  
Charles D. Kassardjian<sup>id</sup><sup>b</sup>, Sara B. Mitchell<sup>b</sup>*

## What are the Disadvantages?

- **Lack of learning opportunities for trainees**
  - We learn by example
  - Medicine is an Apprenticeship



## What are the Disadvantages?

- **Patient Dissatisfaction**
  - No exam – means not ‘seen properly’
  - Lack of empathy through a digital screen
  - Shorter visit
  - Language barriers are exacerbated on a virtual screen

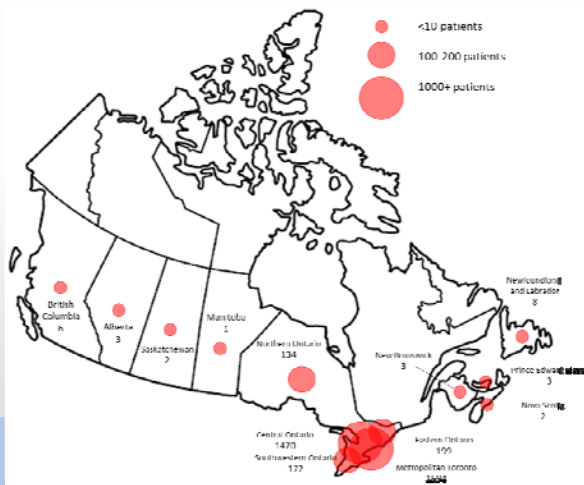


# RAMP-UP

- Survey of Patient Satisfaction at TWH MDC
- 376 emails sent to patients who were reviewed using a virtual method in April and May 2020
- 90 Responses received



## Geographic analysis



Region*	Count	Percent (%)
Metropolitan Toronto (MT)	1694	45.82
Central Ontario (CO)	1470	39.76
Eastern Ontario (EO)	199	5.38
Southwestern Ontario (SO)	172	4.65
Northern Ontario (NO)	134	3.62
Newfoundland and Labrador (NL)	8	0.22
British Columbia (BC)	6	0.16
Prince Edward Island (PEI)	3	0.08
New Brunswick (NB)	3	0.08
Alberta (A)	3	0.08
Nova Scotia (NS)	2	0.05
Saskatchewan (S)	2	0.05
Manitoba (M)	1	0.03
Total	3697	

\*See spreadsheet for breakdown of cities

Approximate Distance from TWH (km)	Count	Percent (%)
<20	1580	42.74
20-50	999	27.02
50-100	544	14.71
100-200	381	10.31
200-700	155	4.19
700-1200	0	0.00
1200+	38	1.03
Total	3697	

Question 5: How did your Telemedicine consultation compare to a traditional in-person visit?

Response	Percentage	Breakdown
Better than a traditional in-person visit	9%	<ul style="list-style-type: none"> <li>• Phone: 50%</li> <li>• OTN: 33%</li> <li>• Other platforms +/- phone : 17%</li> </ul>
<b>Just as good</b> as a traditional in-person visit	<b>50%</b>	<ul style="list-style-type: none"> <li>• Phone: 44%</li> <li>• OTN: 44%</li> <li>• Other platforms +/- phone 12%</li> </ul>
<b>Worse</b> than a traditional in-person visit	<b>30%</b>	<ul style="list-style-type: none"> <li>• Phone: 74%</li> <li>• OTN: 11%</li> <li>• Other platforms +/- phone: 15%</li> </ul>
Not sure	1%	<ul style="list-style-type: none"> <li>• Phone: 100%</li> </ul>



Question 7: What were the **negative aspects of your Telemedicine consultation** compared to the traditional in-person appointment?

Possible limitation	Response
I was not comfortable discussing all my concerns through a telephone call or a videoconference	7%
<b>My doctor was not able to do a complete and thorough physical examination, which may have precluded an accurate assessment of my condition.</b>	<b>65%</b>
My doctor was unable to perform procedures (e.g., botulinum toxin injections, adjustment of deep brain stimulation settings, etc.), which were supposed to be done in this visit.	18%
Concerns about my privacy/confidentiality	2%
Lack of user-friendly software	3%
Technical difficulties interrupted the consultation.	5%

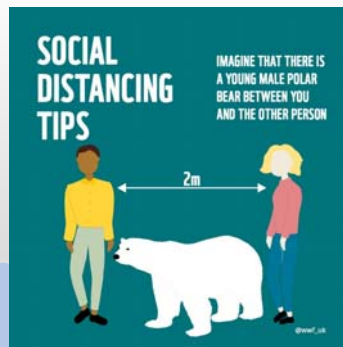


## Overall %virtual visits during covid remains less than In-Person

- MDC 41% Virtual (av 2020) vs 1% 2019
- DBS 37% Virtual (av 2020) vs 2% 2019

## What are the Disadvantages?

- **Physician Zoom Fatigue**
  - Trading burn-out for mental fatigue
  - **Will “Video kill the Radiostar” or is zooming just a pandemic transient Hype? Some cautionary notes.**
    - G Mechedo. Dig Liver Dis 2020 Oct; 52(10): 1102–1103.



## What are the Disadvantages?

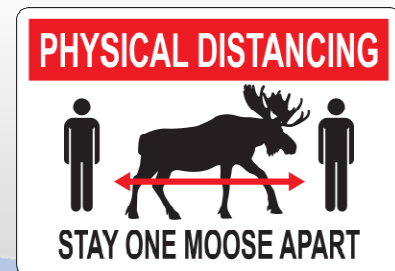
- **Technical Hitches**

- Frequently video quality is poor.
- Patients/Caregivers struggle with technical issues



## What are the Disadvantages?

- **Financial; no re-imburement** pre-covid for PHONE calls – but generally revised/improved now





## Telemedicine Use for Movement Disorders: A Global Survey.

Ester Cubo and colleagues *Telemed JE Health* 2018 Dec;24(12):979-992.

- **Methods:** online survey was sent to 6,056 Movement Disorder Society members in 2015. (Telemedicine Study Group)
- **Results:** 9.1% overall response rate from 83 countries.
- Most (85.8%) were physicians, and most (70.9%) worked in an academic or university practice.
- Half of respondents (n = 287, from 57 countries) used telemedicine for clinical care;
  - e-mail (63.2%), video visits (follow-up [39.7%] and new [35.2%]), and video-based education (35.2%).
  - One hundred five respondents personally conducted video visits, most frequently to outpatient clinics (53.5%), patient homes (30.8%), and hospital inpatients (30.3%).
- **The most common challenges were a limited neurological examination (58.9%) and technological difficulties (53.3%),** and the most common benefits were reduced travel time (92.9%) and patient costs (60.1%). **The most frequent reimbursements were none (39.0%),** public insurance (24.5%), and patient payment (9.3%). Half of respondents planned to use telemedicine in the future, and three-quarters were interested in telemedicine education.

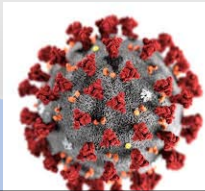


Pre-Covid

## Global survey on telemedicine utilization for movement disorders during the COVID-19 pandemic 2020

Anhar Hassan, Zoltan Mari, ....Ester Cubo, and the International Telemedicine Study Group . 2020 Oct;35(10):1701-1711

- The MDS Telemedicine Study Group surveyed telemedicine experts from 40 countries in **March-April 2020.**
- Four domains were assessed: legal regulations, reimbursement, clinical use, and barriers; comparing emerging responses to the pandemic versus the baseline scenario.
- Results: **All forms of telemedicine for movement disorders increased globally, irrespective of country income categorization,** as an immediate response to the pandemic.
- **However privacy concerns, lack of reimbursement, limited access, and lack of telemedicine training were barriers highlighted worldwide.**
- Conclusion: **Questions remain about the longevity and extent of changes in regulations and reimbursement regarding telemedicine in the aftermath of the pandemic.**



During covid

# Driven to distraction, doctors and patients are renegotiating virtual visits

■ Cite as: *CMAJ* 2020 November 2;192:E1372-3. doi: 10.1503/cmaj.1095903

Abigail Cukier, Hamilton, Ont.



Should there be different rules of engagement for virtual care appointments?



## GAPS & CONTROVERSIES

### Reply to: “A New Day: The Role of Telemedicine in Reshaping Care for Persons With Movement Disorders”

Eoin Mulroy, MB, BCh, BAO,<sup>1\*</sup> Elisa Menozzi, MD,<sup>1</sup> Andrew J. Lees, FRCP, FRCP (Ed) FMedSci,<sup>2</sup> Timothy Lynch, MB, BSc, FRCPI, FRCP,<sup>3</sup> Anthony E. Lang, MD,<sup>4</sup> and Kailash P. Bhatia, MD, FRCP<sup>1</sup>

Dorsey et al. articulate valid concerns about current models of healthcare provision. Important questions, however, remain—will telemedicine solve problems of access and equity, and does strong evidence support telemedicine becoming a new gold standard? As we recap here, the answer is *no*.

