Neuro-ophthalmology Telemedicine Utilization Survey

We are asking you to take part in a research study being done by Heather Moss at Stanford University. Being in this study is optional.

If you choose to be in the study, you will complete a survey. This survey will help us learn more about telemedicine utilization by neuro-ophthalmologists during the COVID-19 Public Health Emergency. The survey will take about 15 minutes to complete.

You can skip questions that you do not want to answer or stop the survey at any time. The survey is anonymous, and no one will be able to link your answers back to you. Please do not include your name or other information that could be used to identify you in the survey responses.

Questions? Please contact Heather Moss at **650-498-9370**. If you have questions or concerns about your rights as a research participant, you can call the Stanford Institutional Review Board at (650)-723-5244 or toll free at 1-866-680-2906.

If you want to participate in this study, click the Agree button to start the survey.

1. Agree

*(If A, continue to 1; response required to continue)*

1.    What state/province AND country are you currently practicing neuro-ophthalmology? (List all US states and country options based on NANOS membership list)

2.    What is your age?

A. <35 years

B. 35-44 years

C. 45-54 years

D. 55-64 years

E.  65+ years

3.  How do you describe yourself?

1. Female
2. Male
3. Other

4.  What is your primary board certification?

1. Ophthalmology
2. Neurology
3. Both
4. Other (fill in)

5.  How would you describe your primary practice setting?

A.Private solo/group practice

B.  Private hospital based

C.  Academic based

D.  Government based

5b. What proportion of your gross income is based on clinical collections? (i.e. percentage of income that would be eliminated if your clinical volume was zero)

1. 0-25%
2. 26-50%
3. 51-75%
4. >75%

6. **Prior** to the COVID-19 pandemic, were you utilizing live video (synchronous) telemedicine visits in your practice? **(For US members use reference date of before March 1, 2020)**

A.   Yes

B.   It was available to me, but I did not use it.

C.   No

(If yes, go to 6a)

6a. **Prior** to the COVID-19 pandemic, approximately how many video visits did you perform per week? (**For US members, use reference date of before March 1, 2020**)

A.None

B. 1-10 visits

C. 11-20 visits

D. 21-30 visits

1. 31-40
2. >40

7. **Presently**, do you use live video (synchronous) telemedicine visits in your practice?

A.  Yes. I utilize live video telemedicine visits in my practice.

B.  Live video telemedicine is available in my practice, but I do not utilize it.

C. No, but I would like to

D. No and I am not interested in doing this

*(If they selected A or B, go to 7a)*

*(If they selected B, C or D, skip to question 11)*

7a. What live video telemedicine platform system do you use? Select as many as apply

1. Telemedicine platform integrated with my EMR
2. Zoom
3. Doxy.me
4. Webex
5. Facetime
6. Skype
7. Doximity Video
8. Other (fill in)

8. **After** the COVID-19 pandemic, approximately how many video visits do you perform per week? (**For US members, use reference date of after March 1, 2020)**

1. None
2. 1-10 visits
3. 11-20 visits
4. 21-30 visits
5. 31-40
6. >40

9. **Assuming** reimbursement continues to cover live video (synchronous) telemedicine visits, do you plan to continue this after the COVID-19 public health emergency subsides?

1. Yes
2. No
3. Undecided

10. Which of the following have you experienced due to the implementation of live video (synchronous) telemedicine visits in  neuro-ophthalmology?(check all that apply)

1. Increased access to care for patients
2. Improved interprofessional communications
3. Continuity of care for patients unable to be seen in the office
4. Decreased overhead expenses
5. Increased appointment efficiency for patient (no travel rooming/screening/check in)
6. Increased appointment efficiency for doctor
7. Increased clinical volume
8. Improved patient-physician relationship
9. Other (fill in)

11. What do you perceive to be barriers for you in the implementation of live video (synchronous) telemedicine visits in neuro-ophthalmology ? (check all that apply)

1. Difficulty with implementation (eg, finding appropriate technology services, integration with EHR, learning curve for providers and staff, etc.)
2. Institutional “buy-in”
3. Reimbursement concerns
4. Medical liability concerns
5. Patient privacy concerns
6. Disruption to personal satisfaction with existing practice model without telemedicine
7. Limitations in types and quality of data collected (including exam limitations)
8. Other (fill in)

*Creation of a table of conditions (matrix question type in survey monkey), Choices A/B/C above, respondent selects their choice*

12.  For each condition, indicate if you perceive a live synchronous video visit would be suitable to ***evaluate or triage*** the condition to the appropriate level of care:

Select:  A. Yes, helpful  B.  Somewhat helpful  C. Not helpful)

1. Anisocoria
2. Binocular double vision
3. Cranial nerve palsy(ies)
4. Eye pain with normal eye exam
5. Migraine with aura
6. Non arteritic Anterior Ischemic Optic Neuropathy
7. Possible Arteritic ischemic optic neuropathy
8. Nystagmus
9. (Ocular) Myasthenia gravis
10. Optic atrophy
11. Optic neuritis with appropriate fundus photographs or   OCT/visual field and MR imaging available for you to review
12. Pituitary tumor with visual field and MR sellar imaging available for your interpretation
13. Positive visual phenomenon (e.g. visual snow) with normal imaging
14. Pseudotumor cerebri/IIH with available fundus photographs or OCT and visual fields
15. Ptosis
16. Transient visual loss (monocular or binocular)
17. Symptomatically stable established patient with afferent visual pathway disorder (IIH, compressive optic neuropathy etc.)

12. **Prior** to the COVID-19 pandemic, were you performing formal remote interpretation of diagnostic testing? (e.g. formal interpretation of fundus photography, visual fields, OCT without having a face to face encounter with the patient) (**For US members, use reference date of before March 1, 2020**)

A.  Yes

B.  I could, but I still opted to see the patient in person for whom I interpret testing.

C.  No

*(if A, go to 12a)*

*(if B or C, skip to 13)*

12a. **Prior** to the COVID-19 pandemic, approximately how many formal remote interpretations of diagnostic testing did you perform weekly? (**For US members, use reference date of before March 1, 2020**)

Numerical response

12b. **Prior** to the COVID-19 pandemic**,** what types of diagnostic testing were you performing formal remote interpretation of? (**For US members, use reference date of before March 1, 2020**) select all that apply

1. Fundus photography
2. Visual Fields
3. Optical coherence tomography
4. Visual evoked potentials
5. ERGs
6. Other (fill in)

13. **Presently**, do you perform formal remote interpretation of diagnostic testing as of? (e.g. fundus photography, visual fields, OCT)

A.  Yes, this is part of my practice

B.  I can, but I still see that patient in person for whom I interpret testing.

C.  No

*(if A go to 13a)*

*(if B or C go to 14)*

   13a. **Presently**, approximately how many formal remote interpretations of diagnostic testing did you perform weekly?

Numerical response

13b. **Presently**, what types of remote diagnostic testing are you formally interpreting? (Check all that apply)

1. Fundus photography
2. Visual Fields
3. Optical coherence tomography
4. Visual evoked potentials
5. ERGs
6. Other

13c. Do you plan to continue remote interpretation of diagnostic testing after the COVID-19 public health emergency subsides?

1. Yes
2. No
3. Unsure

14. **Prior** to the COVID-19 pandemic, did you provide fee-for-service asynchronous telemedicine “second opinions,” defined as record based review without direct interaction with the patient, including a report to the patient? (**For US members, use reference date of before March 1, 2020**)

A.  Yes

B.  No-my institution does not allow it

C.  No-other reason

15. **Presently**, do you presently provide fee-for-service asynchronous telemedicine second opinions, defined as record based review without direct interaction with the patient, including a report to the patient?

A.  Yes

B.  No-my institution does not allow it

C.  No-other reason

16.  **Prior** to the COVID-19 pandemic, did you provide and bill for interprofessional consultations **without direct interaction with the patient** with a follow up verbal or written report to the referring doctor? (**For US members, use reference date of before March 1, 2020, these would include CPT codes 99451 or 99446-99449**)

1. Yes
2. No

17.  **Presently**, do you provide and bill for interprofessional consultations **without direct interaction with the patient** with a follow up verbal or written report to the referring doctor? (**For US members, use reference date of before March 1, 2020, these would include CPT codes 99451 or 99446-99449**)

1. Yes
2. No

18.  Did you attend the 2020 NANOS Telemedicine symposium on March 9, 2020 on Amelia Island?

1. Yes
2. No

*(If A, go to 18a)*

*(If B, go to 19)*

18a. Did you participate in the audience response system questions during the symposium?

1. Yes
2. No

19. Do you utilize an electronic medical record for documenting patient care?

A.  Yes

B.  No

*(If A, go to 19a)*

*(If B, skip to END)*

19a. Which EMR do you use? (checkbox)

Allscripts

AthenaHealth

Cerner

CPRS

eClinicalWorks

EPIC

Eye Care Leaders (MedFlow/Medcare/iMedicWare/Integrity)

Greenway

Kareo

Modernizing Medicine

MD Intellesys

NextGen/TSI Healthcare

Practice Fusion

Other EMR

END.