**Clinical Genetic Counselor Experience in the Adoption of Telehealth in the US and Canada during the COVID-19 Pandemic**

This study aims to capture the new adoption or expansion of telehealth in the clinical setting during the time period that you worked remotely the most due to the COVID-19 pandemic; however, this time period may vary amongst your state and practice. When answering questions related to the pandemic, please focus on the time period specific to your practice.

**Definition of Terms**

*Service delivery model* is defined as the method(s) in which GC services are delivered, such as in-person, telephone, group and televideo.

*Telehealth* is defined as any electronic communications such as telephone or video conferencing that allows you to provide genetic counseling remotely.

*Patient Encounters* are defined as new or follow-up sessions. Brief phone calls for results should not be included.

**Screening questions:**

1. Are you currently in a genetic counseling role that involves direct patient care?
   - __ YES
   - __ NO (If this, the respondent is not eligible for this study. End)

2. Since COVID-19, has your service delivery model CHANGED for your patient encounters?
   - __ Yes
   - __ No (If this, the respondent is not eligible for this study. Go to Q45-51 demographic section)

**Service Delivery Models**

**Prior to COVID-19:**

3. Prior to the COVID-19 pandemic, what estimated percentage of your patient encounters were done with the following delivery models? Should add up to 100% sliding scale 0-100%
   - ___% telephone
   - ___% audio + visual
   - ___% in-person
___ % in-person, group setting
___% other, specify__________

4. Prior to COVID-19 pandemic, did you provide genetic counseling in conjunction with another provider such as a physician, physician assistant or nurse practitioner?

_ YES
_ NO

5. Prior to the COVID-19 pandemic, where were you located when you provided genetic counseling for patient encounters? (Choices should add up to 100%.) sliding scale 0-100%

__% medical campus, outpatient
__% medical campus, inpatient
__% satellite office, off campus
__% at a private doctor’s office
__% home office
__% other (Please specify.) ________________________________________________

6. Prior to COVID-19, where were your patients located when receiving genetic counseling? (Choices should add up to 100%.) sliding scale 0-100%

__% main campus, outpatient
__% medical campus, inpatient
__% satellite office, off campus
__% at a private doctor’s office
__% at home
__% other (Please specify.) ________________________________________________

After the onset of COVID-19

Please consider the time period that you worked remotely the most after the onset of the COVID-19 pandemic for the following questions:

7. Since the onset of the COVID-19 pandemic, what percentage of your patient encounters have been done with the following delivery models? (Choices should add up to 100%.)sliding scale (0-100%)

___% telephone
8. Since the onset of the COVID-19 pandemic, have you been providing genetic counseling in conjunction with another provider such as a physician, physician assistant or nurse practitioner?

__ YES

__ NO

9. Since the onset of the COVID-19 pandemic, where have you been located when you provide genetic counseling for patient encounters? (Choices should add up to 100%) sliding scale (0-100%)

__% medical campus, outpatient
__% medical campus, inpatient
__% satellite office, off campus
__% at a private doctor’s office
__% home office
__% other (Please specify.) ________________________________________________

10. Since the onset of the COVID-19 pandemic, where have your patients been located when receiving genetic counseling? (Choices should add up to 100%) sliding scale (0-100%)

__% medical campus, outpatient
__% medical campus, inpatient
__% satellite office, off campus
__% at a private doctor’s office
__% home
__% other (Please specify.) ________________________________________________

11. Moving forward, are there any permanent plans to maintain the type of service delivery model you’ve adopted since the onset of COVID-19?
12. Moving forward, are there any permanent plans to maintain WHERE you provide genetic counseling?
   __ YES, specify ____________________________________
   __ NO
   __ Not sure.

**Genetic Counseling Sessions**

13. Since the onset of COVID-19, I've been using the following service delivery model for patient encounters. (Select one) Repeat Question 1 to 3 to tabulate data for each of the following categories -- a) telephone only, b) audiovisual, and c) other method; for those that use BOTH telephone and audiovisual, participants would answer questions 1 to 3 TWICE, one for each method.
   __ Telephone only (if this, then go to Q14-16)
   __ Audio + visual only (i.e. Zoom or Skype) (if this, then go to Q17-19)
   __ Mix of telephone and audiovisual methods (if this, then go to Q14-19)
   __ Other. Specify type. ___________________________

14. Since the onset of the COVID-19 pandemic, has your MONTHLY VOLUME of TELEPHONE patient encounters changed compared to a year ago? (Sliding scale 0-100%)
   __ Yes, the monthly volume increased.
   __ Yes, the monthly volume has decreased.
   __ NO.

   If participant select “Yes it has increased”, then go to
   By what percentage has the monthly volume increased? (sliding scale 0-100%)
   Why do you think it has increased? Specify ___________

   If participate select “Yes it has deceased:” then go to
   By what percentage has the monthly volume decreased? (sliding scale 0-100%)
   Why do you think it has decreased? Specify ___________

15. Since the onset of the COVID-19 pandemic, has the DURATION of your TELEPHONE patient encounters changed compared to a year ago?
   __ YES, the encounter has been longer.
   __ Yes, the encounter has been shorter.
   __ NO.

   If participant select “yes.. longer” →
By what percentage are the encounters longer? (Sliding Scale 0-100%)
Why do you think it has changed? Specify ______________

If participant selects “yes... shorter” →
By what percentage are the encounters shorter? (Sliding scale 0-100%)
Why do you think it has changed? Specify ______________

16. Since the onset of the COVID-19 pandemic, has the process of placing genetic testing orders for telephone patient encounters changed?
   __ YES
   __ NO
   __ N/A I do not place genetic testing orders.

   If “Yes” -->, How is it different?
   __ I place order online
   __ I ask someone else to place order
   __ Other, specify ______________

17. Since the onset of the COVID-19 pandemic, has your MONTHLY VOLUME of clinical patients by AUDIOVISUAL format changed compared to a year ago?
   __ Yes, the monthly volume increased.
   __ Yes, the monthly volume has decreased.
   __ NO.
   __ n/a I did not see patients by audiovisual format.

   If participant select “Yes it has increased”, then go to
   By what percentage has the monthly volume increased? (sliding scale 0-100%)
   Why do you think it has increased? Specify ______________

   If participate select “Yes it has decreased:” then go to
   By what percentage has the monthly volume decreased? (sliding scale 0-100%)
   Why do you think it has decreased? Specify ______________

18. Since the onset of the COVID-19 pandemic, has the DURATION of your patient encounters by AUDIOVISUAL format changed compared to a year ago?
   __ YES, the encounter has been longer.
   __ Yes, the encounter has been shorter.
   __ NO.

   If participant select “yes.. longer” →
   By what percentage are the encounters longer? (Sliding Scale 0-100%)
   Why do you think it has changed? Specify ______________
If participant selects “yes... shorter” →
By what percentage are the encounters shorter? (Sliding scale 0-100%)  
Why do you think it has changed? Specify _______________

19. Since the onset of the COVID-19 pandemic, has the process of placing genetic testing orders for patients encounters by audiovisual format changed?  
__ YES  
__ NO  
__ N/A I do not place genetic testing orders.

If “Yes” -->, How is it different?  
__ I place order online  
__ I ask someone else to place order  
__ Other, specify _______________

20. Since the onset of the COVID-19 pandemic, has your MONTHLY VOLUME of clinical patients by OTHER format changed compared to a year ago?  
__ Yes, the monthly volume increased.  
__ Yes, the monthly volume has decreased.  
__ NO.

If participant select “Yes it has increased”, then go to  
By what percentage has the monthly volume increased? (sliding scale 0-100%)  
Why do you think it has increased? Specify _______________

If participate select “Yes it has deceased:” then go to  
By what percentage has the monthly volume decreased? (sliding scale 0-100%)  
Why do you think it has decreased? Specify _______________

21. Since the onset of the COVID-19 pandemic, has the DURATION of your patient encounters by OTHER format changed compared to a year ago?  
__ YES, the encounter has been longer.  
__ Yes, the encounter has been shorter.  
__ NO.

If participant select “yes.. longer” →  
By what percentage are the encounters longer? (Sliding Scale 0-100%)  
Why do you think it has changed? Specify _______________

If participant selects “yes... shorter” →  
By what percentage are the encounters shorter? (Sliding scale 0-100%)  
Why do you think it has changed? Specify _______________
22. Since the onset of the COVID-19 pandemic, has the process of placing genetic testing orders for patients encounters by OTHER format changed?
   __ YES
   __ NO
   __ N/A I do not place genetic testing orders.

If “Yes” -->, How is it different?
   __ I place order online
   __ I ask someone else to place order
   __ Other, specify _______________

23. Since the onset of COVID-19, how have you obtained genetic testing consent for telehealth patients? (Check all that apply.)
   __ Patients provide verbal consent
   __ Patients consent via e-signature or another electronic method
   __ Patients consent via paper
   __ Other (Please specify.) __________________________________________________

Benefits and Challenges in Utilizing Telehealth

24. Please rate your level of agreement with the following changes from the recent adoption or expansion of a telehealth service delivery model being BENEFICIAL to YOU or YOUR PRACTICE

strongly disagree 1

disagree 2

neutral 3

agree 4

strongly agree 5

   __ I can practice with more autonomy.
   __ I am more efficient.
   __ I save on my commute time.
   __ There has been a lower patient no-show rate.
   __ It’s easier to schedule multiple family members at once.
   __ Wait times are lower
   __ Increase in patient volume.
25. Please rate your level of agreement about the following changes from the new adoption or expansion of a telehealth service delivery model being BENEFICIAL to YOUR PATIENTS?

strongly disagree 1
disagree 2
neutral 3
agree 4
strongly agree 5

__ Reduced wait time.
__ It’s safer for my high-risk patients since they don’t need to visit the clinic.
__ My patients enjoy the convenience.
__ My patients do not need to travel as far to see me.
__ My patients require less time away from work.
__ Multiple family members can attend the session

26. Please rate your level of agreement with the following changes from the new adoption/expansion of a telehealth service delivery model being CHALLENGING to YOU or YOUR PRACTICE?

strongly disagree 1
disagree 2
neutral 3
agree 4
strongly agree 5

__ Billing issues (reimbursement, coverage, etc)
__ Identification of an appropriate platform to deliver telehealth.
__ Cost/ability to get appropriate equipment.
__ Difficult to convince my institution to set up telehealth for genetic services.
__ Technical difficulties (i.e. downloading an app, Internet speed, etc)
__ Getting licensure in multiple states.
__ Lack of visual cues/difficult with rapports.
__ Difficult to conduct a physical exam/coordinating with HCP.
__ Decrease in test uptake.
__ Need extra follow-up to remind patient to submit sample or explain instructions
__ Understanding regulations around telehealth.
__ Patient workflow: Logistics in scheduling, getting medical records, checking patient in/out.
__ Acceptance by patients.
__ Difficulty addressing non-English speaking patients (scheduling, setting up, appointment log-in, integrating interpreters into sessions, etc.)
__ Other (Please specify.) ____________________________________________________________________________

27. Please rate your level of agreement with the following changes from the new adoption/expansion of a telehealth service delivery model being CHALLENGING to YOUR PATIENTS?

strongly disagree 1

disagree 2

neural 3

agree 4

strongly agree 5

__ Poor internet speed
__ Inequality of access to services - people don’t have the access to devices and data plans to allow for telehealth
__ Lack of patient comfort with technology
__ Concerns with confidentiality
__ More difficult to make emotional connection with the genetic counselor compared to in-person model
__ Challenge in understanding instructions to submit DNA sample for testing at home
__ Other, specify ____________________________________________________________________________
28. How satisfied are you with using telehealth as part of your clinical practice since the onset of the COVID-19 pandemic? (pick one)

1 = Not at all satisfied
2 = Slightly dissatisfied
3 = neither satisfied or dissatisfied
4= Slightly Satisfied
5 = Very satisfied

29. Please rate your level of agreement with whether the following have been helpful to you in your transition to the new adoption/expansion of telehealth for your practice?

strongly disagree 1
disagree 2
neutral 3
agree 4
strongly agree 5

__ Available Information on types of telehealth delivery models
__ Available Information on how to implement telehealth
__ Available information on telehealth reimbursement
__ Information on telehealth regulations
__ Open communication and coordination from office staff
__ Other (Please specify.) __________________________________________________

**Billing Practice**

**Prior to COVID-19**

30. Prior to COVID-19, did you bill for telehealth encounters?

__ YES (If this, then go to questions 31-34.)
__ NO (if this, then go to question 35)
__ I don’t know. (if this, then go to question 35)
__ I did not offer telehealth encounters prior to COVID-19 (if this, then go to question 35)
31. How did you or your institution bill for your TELEPHONE patient encounters? (Choose all that apply)  
   __ In GCs name and NPI  
   __ Incidental to physician/ supervising MD only  
   __ Bundled charge  
   __ Patient self-pay/direct patient/client billing  
   __ Research study, did not bill  
   __ Other (Please specify.) __________________________
   __ I did not have telephone patient visits.

32. How did you or your institution bill for your AUDIOVISUAL patient encounters? (Choose all that apply.)
   __ In GCs name and NPI  
   __ Incidental to physician/ supervising MD only  
   __ Bundled charge  
   __ Patient self-pay/direct patient/client billing  
   __ Research study, did not bill  
   __ Other (Please specify.) __________________________
   __ I did not have audiovisual patient visits.

33. If you or your institution billed for GC services, what code(s) did you use?
   __ 96040 CPT code (genetic counseling code)  
   __ 99201 – 99215 CPT code(s): Office/Outpatient visit, new or established patient EVALUATION AND MANAGEMENT (E&M) SERVICES  
   __ 99241 – 99255 CPT code(s): New or Established Patient Office or Other Outpatient Consultation Services.
   __ 99441-99443 telephone CPT code  
   __ I don’t know  
   __ Other CPT code(s), specify____

34. Did you use a modifier code for telehealth visits?
   __ Yes (if this, please specify which modifier)  
     -95  
     -GT  
     -other  
     -unsures  
   __ No  
   __ I don’t know

Since the onset of COVID-19
35. Since the onset of COVID-19, have you or your institution bill for telehealth encounters?
   __ YES (Display Q36-8.)  
   __ NO (if this, go to question 40) 
   __ I don’t know. (if this, go to question 40)
36. Since the onset of COVID-19, how did you bill for TELEPHONE consult (Choose all that apply.)
   __ In GCs name and NPI;
   __ Incidental to physician / supervising MD only
   __ Bundled charge
   __ Direct patient/client billing
   __ Research study, did not bill
   __ Other, specify ___
   __ I don’t know.
   __ N/A. I did not provide telephone patient consults.

37. Since the onset of the COVID-19 pandemic, how have you or your institution billed for AUDIOVISUAL encounters? (Choose all that apply.)
   __ In GCs name and NPI;
   __ Incidental to physician / supervising MD only
   __ Bundled charge
   __ Direct patient/client billing
   __ Research study, did not bill
   __ Other, specify ___
   __ I don’t know.
   __ N/A. I did not provide audiovisual patient consults.

38. Since the onset of COVID-19, which code(s) have you used?
   __ 96040 CPT genetic counseling code
   __ 99201 – 99215 CPT code(s): Office/Outpatient visit, new or established patient EVALUATION AND MANAGEMENT (E&M) SERVICES
   __ 99241 – 99255 CPT code(s): xxx code
   __ Other CPT code(s), specify____
   __ I don’t know

39. Do you use a modifier code?
   __ Yes (if this, please specify which modifier)
      -95
      -GT
      -other, please specify____
      -unsure
   __ No
   __ I don’t know

**Other**

40. Since the onset of COVID-19, have you been collecting outcome data?
Yes (if this, go to Question 41-43)

__ No (if this, go to Question)

41. What outcome data have you been collecting? (Choose all that apply)

__ Patient experience
__ Genetic counselor experience using telehealth
__ Number of patients served
__ Time spent in a session
__ Distance patient is from clinic
__ Wait time for an appointment
__ Other, specify ______

42. How have you been collecting outcome data? Choose all that apply.

__ Electronically
__ Verbal
__ Other, specify ______

43. What measures have you used to collect outcome data? Choose all that apply.

__ Questions we developed
__ Validated measures; if yes, specify__________

44. Would you be willing to share the measures you are using?

__ Yes, if yes please share your email address ____________
__ No

Demographics of Respondents

45. What is your gender identity?

__ Male
__ Female
__ Non-binary / third gender
46. How many years have you been practicing as a genetic counselor?
   __ <1
   __ 1-4
   __ 5-9
   __ 10-14
   __ 15-19
   __ 20-24
   __ 25+c

47. What is the state/province of where you live? Choose from drop down

48. What is your Primary Work Setting: (pick 1 choice only)
   __ Diagnostic Laboratory
   __ Federal, state, county office
   __ Group private practice
   __ Individual private practice
   __ Private hospital or facility
   __ University medical center
   __ Telephone Genetic Service Company
   __ DTC Genetic Testing Company
   __ Other (Please specify.) ___________________________________________________

49. What is your primary Area of Clinical Practice: pick 1 choice only
   __ Cancer Genetics
   __ Cardiology
   __ General Adult Genetics
   __ Prenatal
   __ Pediatrics
   __ Neurogenetics
50. What is your licensure status?
   __ I have a license in the state where I practice.
   __ I have licenses in multiple states.
   __ Licensure not required in the state(s) where I practice.

51. How are you currently credentialed?
   __ I am credentialed by my employer / institution
   __ I am credentialed by a third party payor
   __ I am not credentialed.
   __ I don’t know.

(below question is only for those who are eligible for the study)
52. Thank you for sharing your experience with us! We would like to learn how your clinical experience with telehealth changes over time. Would you like to be re-contacted by our research team in one year?
   __ Yes → please enter your personal email address__________
   __ No