**Appendix**

# Survey 1: Paediatric Neurologist Survey

## Needs Assessment

1. What university do you represent?
2. What is the average wait time to see a Paediatric Neurologist at your centre (new patient, routine)?
3. What are the top 3 services the General Paediatricians at your centre would want more access to? (Please ask general paediatricians)
4. How large is your catchment area?
5. On average, how many new consults (inpatient & outpatient) does your centre receive each week? On average, how many new patients are seen each week?
6. What is the breakdown of the types of patients seen? (Epilepsy, Headache, CP & Developmental Delay, Movement Disorders, Demyelination, Stroke, Neuromuscular, Other)
7. In an ideal world, how many Paediatric Neurologists would be optimal to adequately cover the patient care needs in your region?
8. With regards to the preceding question (question 6), what proportion of academic vs. community would be optimal?
9. How many Academic Paediatric Neurology Positions do you think will be in your centre in the next 5-10 years?

## Current Resources

1. How many full-time Paediatric Neurologists are currently practicing at your centre? How many part-time (0.5 Full Time Equivalents (FTE) or less)?
2. What would be the full-time clinical equivalence at your centre (e.g., 5 neurologists with 0.6 FTE of clinical work would be equivalent to 3 full-time FTEs)?
3. How many open full time positions do you currently have?
4. How many funded positions do you expect to have at your centre in the next 5 years?
5. What specialties are needed at your centre? (i.e., if you had an open position, would you hire an epileptologist, a general neurologist, a demyelination specialist, etc.) PLEASE INCLUDE ANSWERS FOR ALL FIVE AND RANK FROM 1 TO 5 (one being most desired)
6. How many residents are currently in your program (please include those in both the 3 year and 5 year program)?
7. How many subspecialty fellows? \*\* please do not include trainees that will be definitely be practising in other countries \*\*
8. Of your residents, how many would ideally like to work at an academic centre? How many would like to work in the community?
9. Of your residents, what are their planned sub-specialties?
10. How many of your residents plan to work part-time?
11. Is it currently possible to practise in the community in your region?

**Survey 2: Paediatric Neurology Trainee Survey**

*Text presented to participants prior to beginning the survey:*

“We are conducting a workforce survey on the employment landscape of Canadian Paediatric Neurology academic positions. We have sent surveys to all program directors across academic centres in Canada. We are also looking to survey all Canadian Paediatric Neurology trainees. Data from the residents will provide an important perspective that will be complimentary to the data obtained from the academic centres.

If you choose to complete this survey, you will be providing implicit consent for us to use this data for the purposes of compiling the workforce survey. This data may also be used in future abstracts, publications and/or academic presentations. Your data is completely anonymous and cannot be traced back to individual respondents”.

1. How concerned are you about the employment prospects for academic Paediatric Neurology positions in Canada?

* Very concerned
* Somewhat concerned
* Neutral
* Not very concerned
* Not at all concerned

1. Has the perceived lack of academic positions caused you to consider transferring to another residency program?

* I am in the process of arranging for transfer
* I have strongly considered transfer
* I have considered transfer
* I have not considered transfer

1. What are your future career plans regarding further training?

* I do not plan to undertake any further training after residency
* I plan on completing a clinical fellowship after residency
* I plan on completing a research fellowship after residency
* I plan on completing a Master's or PhD after residency
* I plan on completing both a clinical/research fellowship and a Master's or PhD after residency
* Unsure

1. What type of subspecialty are you planning on pursuing in fellowship training, if any?

* Epilepsy
* Neuromuscular
* Developmental
* Demyelinating
* Headache
* Stroke
* Neurogenetics
* Neurometabolics
* Neonatal neurology
* Movement disorders
* Undecided
* I do not plan on subspecializing (ie. General Neurology)
* Other – please specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What are your future career plans regarding practice setting?

* I plan on practicing in the community
* I plan on practicing in the community with part-time academic hospital privileges
* I plan on practicing in an academic hospital
* Unsure

1. If you plan on pursuing academic practice, please indicate what type of position you will be applying for:

* Primarily clinical position: >80% clinical
* Mixed clinical/research: 50-80% clinical
* Primarily research position: 10-49% clinical
* Unsure

1. What are your future career plans regarding practice location?

* I plan on practicing within Canada
* I plan on practicing in the USA
* I plan on practicing abroad (ie. outside of North America)

1. If you are planning on practicing in Canada, please indicate how strongly you would consider moving to the USA or abroad for employment should there be a lack of positions in Canada.

* Would strongly consider
* Would somewhat consider
* Neutral/unsure
* Would not really consider
* Would not consider at all

1. If you plan on practicing within Canada, please indicate how attached you are to a particular location.

* I am strongly attached to one specific location and I would not consider moving for employment
* I am strongly attached to one specific location but I would consider moving for employment
* I am somewhat attached to one specific location
* I am not attached to one specific location
* Unsure

1. If a medical student approached you and inquired about Paediatric Neurology as a career, would you recommend that they pursue this career option?

* Would strongly recommend
* Would recommend
* Would be neutral
* Would recommend against
* Would strongly recommend against

1. How much would the perceived lack of academic positions impact how you would counsel a medical student regarding a career in Paediatric Neurology?

* It would strongly impact
* It would somewhat impact
* Neutral
* It would not really impact
* It would not impact at all

1. How satisfied are you with how your centre is addressing the perceived lack of academic positions in Paediatric Neurology?

* Very satisfied
* Somewhat satisfied
* Neutral
* Not very satisfied
* Not satisfied at all

Please elaborate if needed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What do you think about the number of residents that your centre is training?

* Too many
* Just right
* Not enough

1. How much do you agree with this statement: "My centre is admitting residents with service being the priority over education"

* Strongly agree
* Agree
* Neutral
* Disagree
* Strongly disagree

1. How many residents do you think your centre should be admitting every year?

* Should no longer admit residents
* Should admit <1 resident/year (ie. alternating years or similar model)
* 1
* 2
* 3
* Other – please specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Considering the perceived lack of academic positions in Canada for paediatric neurology, do you think that the content of the residency training program should change (ex. more community rotations, more training about how to run a practice, etc)?

* No
* Yes

If yes, please elaborate: ­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Survey 3: Community-Based Paediatric Neurology Physician Workforce Survey**

Do you feel that your practice includes some proportion of community-based Paediatric Neurology?

* Yes
* No

Please list all Residency Program(s) that you completed. NOTE: Only select FULL Residency Program(s) that you completed:

* Paediatrics
* Paediatric Neurology
* Adult Neurology
* Other (specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Did you complete your Resident training in Canada?

* Yes
* No

Did you pursue any Subspecialty Fellowship Training after your Paediatric Neurology Residency? (i.e. Epilepsy, Stroke, etc)

* Yes
* No
* If Yes Which Subspecialty? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What year did you begin practicing Paediatric Neurology in Canada? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

During your Residency Training did you have any exposure to community-based Paediatric Neurology?

* Yes
* No

Please specify what your exposure to community-based Paediatric Neurology

* Mandatory, formal Rotation in community-based Paediatric Neurology
* Mandatory, formal Rotation in community-based Adult Neurology
* Elective Rotation in community-based Paediatric Neurology
* Elective Rotation in community-based Adult Neurology
* Other (specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What was your perception about Community Paediatric Neurology as a career option at that time? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Do you hold active hospital privileges at one or more hospitals?

* Yes
* No

Please indicate in which of the following settings where you currently see patients:

* Ambulatory clinic located in a private office
* Ambulatory clinic located in a hospital
* Inpatient
* Emergency Room
* Other (specify): Please indicate other setting \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Do you provide overnight, on-call services for your patients and/or for hospital consults?

* Yes
* No

What proportion of time do you spend in paediatric neurology? \_\_\_\_\_ %

What proportion of time do you spend in general paediatrics? \_\_\_\_\_ %

What proportion of time do you spend in adult neurology? \_\_\_\_\_ %

What are the most common diagnoses that you see? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

On average, how many full days do you work each week? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Please include ALL activities: clinic, administration, teaching, research)

On average, how many full days of CLINIC do you have each week? \_\_\_\_\_\_\_\_\_\_\_\_

Approximately how many new consults do you see each week? \_\_\_\_\_\_\_\_\_\_\_\_

Approximately how many follow-up patients do you see each week? \_\_\_\_\_\_\_\_\_\_\_\_

What is your estimated waiting time for non-urgent consults (in weeks)? \_\_\_\_\_\_\_\_\_\_\_\_

Do you read and/or perform any electrodiagnostic EEG tests as part

of your current clinical practice?

* Yes
* No

If yes, please specify which: (Check all that apply)

* EEG
* NCS/EMG
* Evoked potentials
* Other (specify)

If yes, please describe the setting where these tests are performed

* At my own private office
* At a hospital at which I have privileges

What challenges did you face when starting / joining a practice? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Do you perceive any challenges / obstacles at this time that a young Physician may face if they intend to open a 100% Paediatric Neurology in your province? (e.g. with regards to billing/remuneration, number of referrals, etc) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Do you feel that a Physician can generate sufficient billings from Paediatric Neurology consults / follow up alone?

* Yes
* No

Residents have asked what Community Paediatric Neurologists earn after expenses. If you are comfortable sharing please specify your net, take-home income:

* < $150,000 / year
* $150-200,000/year
* $200-250,000/year
* $250-300,000/year
* >$300,000
* Not comfortable sharing this information

Are you incorporated?

* Yes
* No

Do you practice alone or in a group?

* Alone
* Group

Do you share any of the following to conduct your practice:

* Office space
* Receptionist
* Nurse
* Technologist

Do you currently have an affiliation with a university / teaching hospital?

* Yes
* No
* If yes, which institution(s) are YOU affiliated with? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Do you supervise residents?

* Yes
* No

Please select all programs that you supervise residents:

* Paediatrics
* Paediatric Neurology
* Adult Neurology
* Family Medicine
* Other (specify)

Would you be interested in developing a relationship with a university and/or supervising residents?

* Yes
* No

We are investigating the possibility of developing a country-wide network of Physicians who practice Community Paediatric Neurologists with the goal of encouraging Residents to pursue this career option. We hope to provide a teleconference or opportunities

every 6 months. Would you consider giving a presentation or leading a discussion about some aspect of Community Paediatric Neurology once every few years?

* Yes
* No