

DOCTORS OF BC – SECTION OF NEUROLOGY

**ANALYSIS OF THE USE AND IMPACT OF THE  
LABOUR MARKET ADJUSTMENT FEES FOR THE  
SECTION OF NEUROLOGY**

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## EXECUTIVE SUMMARY

In 2011, as part of the Physician Master Agreement, a \$10M Labour Market Adjustment (LMA) fund was created by the provincial government and responsibility was given to the SSC to distribute the funding to Specialist Sections where recruitment and retention challenges were evidenced. In accordance with the Triple Aim and its overall mandate, the SSC added criteria that LMA funding only be used for new fees that improved patient quality of care. Nine sections received funding including the Section of Neurology, which was awarded \$1.1M create new and innovative fee codes to help the section solve some of the recruitment and retention challenges. Seven new fee codes were created by the Section of Neurology (00450, 00457, 00460, 00462, 00465, 00468, and 00469). The goal of this project was to examine the effectiveness of the LMA fee codes both in addressing the challenges of recruitment and retention, as well as their impact on patient care.

Data was gathered from the Doctors of BC Economics Department, as well as through section membership survey. Analysis of this data demonstrated that the most commonly used LMA Fee Codes were 00450 and 00457. In accordance with this information, this project focuses on these two specific fee codes. Data gathered from Doctors of BC related to billing of fee codes, as well as the population of practicing neurologists at various times and locations in the province. Across Canada information was gathered from the Canadian Medical association.

The survey conducted was compiled of five questions pertaining to personal use and impact of the LMA Fee Codes on neurologists and their practices. This survey was sent to over ninety members of the Neurology Section and resulted in forty-five replies, thus creating a large sample size of neurologists. All of the data gathered for the purpose of this project is furthered analyzed within this report.

The purpose of the implementation of the LMA Fee Codes was to address the challenges of recruitment and retention within neurology in BC. As evidenced in this report, the implementation of the LMA Fee Codes positively impacted neurologist recruitment and retention, with 45% of respondents indicating the LMA Fee Codes had influenced their decision to stay in or come to BC to practice. Since the implementation of these codes, the number of FTE neurologists in accordance with the provincial population has increased. Additionally, one third of neurologists surveyed reported improved patient access since the implementation of the codes. The analysis of data also shows 65% of neurologists found the LMA Fee Codes to be useful in their practice. The analysis of the data included in this report provides ample evidence of the benefits of the LMA Fee Codes both in addressing the challenges of recruitment and retention, as well as improving patient care. Given this demonstration of positive benefits, the recommendation of this report is to move these LMA Fee Codes into the MSP available amount.

**DEFINITIONS, ACRONYMS, AND ABBREVIATIONS**

LMA Fee Codes	Labor Market Adjustment Fee Codes
SSC	Specialist Services Committee
MSP	Medical Services Program (of BC)

**INTRODUCTION****NEUROLOGY BACKGROUND**

Neurology is the branch of medicine concerned with the study of the nervous system in health and disease. Neurologists diagnose and treat nervous system disorders involving the brain and spinal cord, and other nerve and muscular conditions. Many neurological problems are characterized by pain and are chronic, debilitating and untreatable. Neurologists are increasingly involved in rehabilitation and in the psychological and social aspects of patient care. A large portion of neurology practice is consultative.

Neurology requires that a physician be able to demonstrate diagnostic and therapeutic skills for ethical and effective patient care, access and apply relevant information to clinical practice. Neurologists are required to provide effective consultation services with respect to patient care, education and legal opinions.

A competent neurologist must be able to do the following:

- provide scientifically-based, comprehensive and effective diagnosis and management for patients with neurological disorders;
- communicate effectively with patients, their families and medical colleagues (particularly referring physicians), and other health care professionals;
- counsel patients and others on aspects of prevention of neurological disorders, including risk factors, genetic and environmental concerns;
- maintain complete and accurate medical records;
- effectively coordinate the work of the health care team;
- be an effective teacher of other physicians (including medical students and house officers), other health care personnel and patients;

- be proficient in professional and technical skills related to the specialty;
- demonstrate personal and professional attitudes consistent with a consultant physician role;
- be willing and able to appraise accurately his or her own professional performance;
- be able to critically assess and apply the neurological literature as it relates to patient diagnosis, investigation and management;
- be able to participate in clinical or basic science studies as a member of a research team.

#### LABOR MARKET ADJUSTMENT FUND BACKGROUND

As part of the Physician Master Agreement, in 2011 a \$10M Labour Market Adjustment (LMA) fund was established for the SSC to distribute to Specialist Sections who were best shown to have recruitment and retention challenges. To align with the Triple Aim and its overall mandate, the SSC added criteria that LMA funding only be used for new fees that improved quality of care. A total of nine sections received funding.

The Section of Neurology submitted an application and was awarded \$1.1M to create new and innovative fee codes to help the section retain and recruit neurologist manpower. The section subsequently developed 7 new fee codes:

Fee Code: 00450	Complex Care-Extended Consultation-per 15 minutes
Fee Code: 00457	Complex Care-Extended Visit-per 15 minutes
Fee Code: 00460	Transfer of Care from Pediatrics-Extended Consult
Fee Code: 00462	Neurological Interpretation and Written Report of Submitted X-Ray Films (including CT scans, TCD, MRI)-per case
Fee Code: 00465	Acute Stroke Intra-Arterial Thrombolysis
Fee Code: 00468	Neurology Outpatient Transcranial Doppler Ultrasound
Fee Code: 00469	Neurology Outpatient Transcranial Doppler Ultrasound-Prolonged Study-per 15 minutes

The LMA fund was established to assist sections that were having difficulties with recruitment and retention of manpower. Specifically, with regards to neurology, the assumption is that provision of satisfactory manpower will result in a more stable neurology workforce and better access to high-quality neurologic care by the patients and citizens of British Columbia. Though

improving the care of patients is a primary goal, no data was intentionally collected to assess this. We do have access to quantitative and subjective data on the change in neurology manpower and the billing of these neurology LMA fee codes. We will provide a review and analysis of this data to support the benefits that have accrued from the LMA fund as it applies to the section of neurology.

The Doctors of BC Economics Department, have been able to provide quantitative data on changes in manpower and the transition usage of these fees. We have supplemented this with a broad reaching survey of the Section of Neurology membership, and focused interviews of a number of neurologists.

This document outlines the process and results of the Neurology LMA Code Analysis project undertaken by Dr. John Falconer (Project Manager) and Samara Schmidt (Project Coordinator). The work on this project began in October 2017 and was completed in April 2019. This project was funded by the Specialist Services Committee in response to a call to evaluate the effectiveness of the Labor Market Adjustment Fee Codes introduced from 2012 to 2016 by the BC Government's Medical Services Program. This project specifically aimed to examine the effectiveness of the LMA Fee Codes 00450 and 00457, as these were the most frequently billed codes. The implementation of the LMA Fee Codes and the resulting impact on patient care (both immediate and long term), the use of follow-up codes, as well as neurologist recruitment and retention in BC are all areas of focus in the report and were assessed through physician survey, physician interview, as well as the collection and analysis of data from billings accessed through the Doctors of BC. The ultimate goal of this project is to provide a recommendation reinforced with evidence to the BC Government Medical Services Plan to permanently include the LMA Fee Codes as part of the routine billing codes available to neurologists.

## NEUROLOGY LMA CODE ANALYSIS OBJECTIVES

These are the objectives identified by the SSC to apply to the analysis of the neurology LMA fee code uses:

- Health Outcomes
- Health Care Service Delivery and Quality Care Outcomes
- Change Leadership Outcomes

These are additional objectives identified by the section of neurology:

- Changes in number of neurologists in BC associated with the use of the LMA fee codes
- The LMA code usage impact on patient to neurologists' ratios
- The impact of the LMA codes on follow up code usage of 0406 and 0407

- The usage of LMA codes in prevention of further consultations
- The analysis of what diagnostic codes were associated with the use of LMA codes
- The relationship between LMA code usage and the referral source (i.e. another neurologist or general practitioner)
- The analysis of LMA code usage in relation to whether patients were in or out of hospital
- Analyze the usage of the LMA codes in relation to the median income of neurologists utilizing those codes
- The analysis of the neurologist location in the province utilizing the LMA codes

## PLANNING

### ACCOMPLISHMENTS

- Through the completion of the LMA Evaluation Application for approval by the SSC, many of the project's main goals were identified prior to commencing work on the project. The overall goal of the project was a comprehensive analysis of the benefits surrounding the usage of the LMA Fee Codes by neurologists in BC. Due to this identification prior to project approval by the SSC, the project goals were clear and directed the development and progress of the project from its inception.
- Both an accomplishment and a challenge, the planning of this project was dynamic and had to be flexible as the team learned about the analysis once work had commenced. Originally, the survey had been set to examine a different scope of information from the neurologist participants, but once the team had reviewed the information provided from data obtained by the Doctor of BC, the questions for the survey changed to better reflect the goals of the project.

### CHALLENGES – REDUCED REPORT SCOPE TO 00450 & 00457

- Originally, the goal was to address all the LMA Fee Codes used by neurologists (00450, 00457, 00460, 00462, 00465, 00468, and 00469), but once we began gathering data from billings through the Doctors of BC, several of the codes were not used frequently enough by neurologists to have a significant impact on this analysis. As a result, the project refined its scope to concentrate mainly on the LMA Fee Codes 00450 and 00457.



## LESSONS LEARNED

- This analysis benefits from clear project goals prior to beginning work on the actual project. As was the case with this project, these goals directed the planning, development, progress, and outcome of this analysis.
- When using a survey in future projects, it would be most beneficial to review the data prior to creating the survey questions. However, if at some point the survey questions do not assess the goals of the project, it is recommended to redefine and repurpose the survey questions, as this project did for a much better outcome.
- This project provided information the team used to influence to progress of the project as work continued. This allowed the project to align with its original goals and purpose, leading to a much more preferential outcome. Allowing information to direct the project is a valuable lesson learned through this project that will be useful in future projects.

## RESOURCES

## ACCOMPLISHMENTS

- The data received from the Doctors of BC regarding past billings of the LMA Fee Codes was an integral and essential part of this analysis. Without this data, the effectiveness of the project would be questionable. This data directed and informed our analysis and the project as a whole. Having access to this data through the Doctors of BC was invaluable.
- The Section of Neurology had access to email addresses and contact information for all of the neurologists in BC. This allowed the survey included in this analysis to be made available to over 90 participants. The survey had over 40 respondents. This was unexpected, but was extremely beneficial for the analysis, as it provided insight from a large sample size of neurologists. This was made possible by having the contact information from the Neurology Section. Additionally, this information allowed the team to invite for interview several neurologists to better understand the impact of the LMA Fee Codes both on physicians and patient care. However, no successful interview volunteers were available.

## CHALLENGES

- Although the data received from the Doctors of BC was essential to this project, it was time consuming, because the team had to go through a data analyst employed by the Doctors of BC. Undoubtedly, work load and time constraints influenced when this data

could be sourced by the analyst. However, this added additional time to the completion of this analysis that had not be planned for.

## LESSONS LEARNED

- For future projects where data will need to be obtained from an outside source or agency, additional time should be added into the planning of the project to account for the data analyst's additional workload and time constraints.
- Although this project did not encounter a problem with having enough survey respondents to create a large enough sample size, this could have been a significant issue in our analysis. Having the contact information for all the neurologists in BC was beneficial both in having a large enough sample size for the survey. Unfortunately, no interview volunteers were identified.

## PROJECT MANAGEMENT/SCHEDULING

### ACCOMPLISHMENTS

- The schedule for this project was realistic and well estimated, while still allowing time to reflect on any changes needed during the process. By having clear goals set out in the beginning of the project, scheduling was successful and well planned.
- The schedule planned by the team was detailed, but remained flexible enough to adapt to any changes needed to directly address the goals of this report. This allowed the report produced to be the most effective at addressing the main goals created at the beginning of the project.
- The project progress was measured on a monthly basis and evaluated more thoroughly each quarter. These assessments allowed the team to adapt or adjust scheduling as required to complete milestones set at the beginning of the project. The responsibility for these assessments was handled primarily by the Project Manager, with information and insight being offered from the Project Coordinator.

### CHALLENGES

- Though most tasks were estimated well, tasks that directly relied upon or involved other individuals or agencies not directly associated with the team did take longer than originally scheduled. The main example of this was in the beginning phases of the project as data was requested from various sources. As identified earlier in this report,

the length of time to obtain this data was more extensive than originally envisioned or planned and scheduling had to be adapted to accommodate for this.

- The contingency plan surrounding the completion of the survey by participants consisted of the Project Coordinator contacting individual neurologists to request and encourage the participation in the survey. Fortunately, this was not required, as the survey received an adequate number of participants without further intervention. However, had this step been required, that could have been an obstacle in the scheduling and the completion milestones, due the amount of time that would have been required.

## LESSONS LEARNED

- As was evident with this project, scheduling needs to be flexible, but also clear from the outset of the project. The thorough planning and scheduling of this project, while incorporating flexibility to adapt the process to best address the goals of the project made it successful, with beneficial and effective results.
- For future projects, it will be essential to incorporate additional time into the scheduling of a project's timeline based on the involvement of outside individuals and agencies. As was evidenced with this project, though a priority to the team, obtaining data from outside sources was more time consuming than originally scheduled for in the planning phases.
- Additionally, having a team member responsible for measuring the project progress allowed the team to consistently reflect on scheduling and address how it related to achieving the goals of the project as a whole.
- Finally, including any project contingencies in the scheduling phase of the project planning, results in an accurate and concise schedule that can be more effectively adhered to for the duration of the project. This further allows the scheduling to reflect the goals of the project.

## COMMUNICATION

The communication involved in this project was conducted in three primary ways: via email, via Facetime or Skype and in person meetings. Communication was rarely conducted via telephone.

## ACCOMPLISHMENTS

- The most effective type of communication used for this project was in person meetings. This allowed team members to cover a large amount of materials and topics effectively and efficiently. This also allowed for reciprocal communication or brainstorming in real time between team members. Most status meetings were completed utilizing this method of communication.
- For the purpose of this project, communication via email was effective because it was not impacted by team member's geographical location and timing did not need to be mutually acceptable to all parties. Team members used email to communicate efficiently and effectively throughout the project.
- To address one of the challenges of communication in this project (geographical location of team members), Skype or Facetime were occasionally used. This was effective because team members were virtually face to face and it produced similar benefits to in person meetings.
- By any method used, both Program Manager and Program Coordinator effectively shared all information regarding project progress and project needs identified in communication with external groups. This allowed the team to operate in a cohesive and efficient manner for the duration of the project.

## CHALLENGES

- Varied geographical locations of team members throughout the duration of this project added a unique challenge that was not identified in the planning phases of the project. It was not feasible to have in-person status meeting at times due to this. Much of this was addressed by using Skype or Facetime to communicate while team members were unavailable to meet face-to-face. Though awkward at first, this method of communication produced effective results in the long-term completion of the project.

## LESSONS LEARNED

- For future projects, a blended variety of communication methods was most effective and beneficial for this project. Each method of communication has its own specific benefits and can be used to effectively address different matters at different times in the project.

- This project found in person meetings to be the most beneficial due to the amount of material and topics that could be covered and the direct communication that could occur in a time efficient manner.
- Email was another effective method of communication used in this project. Email offers the benefits of availability regardless of timing and location. Additionally, email is frequently most often used by outside individuals and parties.
- To address the challenge of varied geographical locations of the team members, Skype or Facetime was used and allowed for similar benefits of in person meetings regardless of location.

## TEAM/ORGANIZATION

The team for this project consisted of Dr. John Falconer (Project Manager) and Ms. Samara Schmidt (Project Coordinator).

- The make-up of the team and each member's role was identified and addressed in the beginning phases of project planning and scheduling. This clarity allowed each team member to complete their role independently, while still operating as a member of a collective team.
- The team for this project was small, consisting of only the Project Manager and the Project Coordinator. This allowed both team members to be equally integrated and invested in the development, progress and success of this project.
- The role of Dr. Falconer was primarily to be responsible for executive decisions and communications. Dr. Falconer originally brought forth the idea for this project and designed the project goals to address the outcomes identified by the SSC and the Section of Neurology. Dr. Falconer completed the original project application and submitted it for approval to the SSC. Dr. Falconer was responsible for all communications with the SSC including updates. Dr. Falconer was responsible for fund management and distribution. Dr. Falconer was also directly involved in frequent communication with Ms. Schmidt.
- The role of Ms. Schmidt was to obtain data from outside agencies and work with Dr. Falconer to analyze the corresponding data. Ms. Schmidt designed the survey for distribution, collected and analyzed the responses. Ms. Schmidt was responsible for writing the final report in all its versions. Ms. Schmidt contributed to quarterly reports and was also involved in frequent communication with Dr. Falconer.

## ANALYSIS OF OBJECTIVES AS APPLIED TO EACH LMA CODE

### BACKGROUND TO ANALYSIS

- The goal of the introduction of the LMA Fee Codes was to support recruitment and retention. The ability to use the LMA Fee Codes has allowed neurologists in BC to be better compensated for their time. This gives BC a better placement in both the national and international stage when neurologists are determining the location of their practice.

### METHODS USED

- Quantitative data was obtained from the Doctors of BC Economics Department (Analyst: Jeff McPhail)
- Survey of the membership was performed

### QUANTITATIVE DATA

We accessed data from a number of sources to enable analysis and comparisons. An initial step is to compare neurology manpower across Canada and by time:

#### NEUROLOGY MANPOWER ACROSS CANADA

Across Canada Neurology Manpower:      Total Number Neurologists      No/100K Population

Newfoundland/Labrador	11	2.1
Prince Edward Island	2	1.4
Nova Scotia	26	2.8
New Brunswick	7	0.9
Quebec	275	3.3
Ontario	325	2.4
Manitoba	28	2.2
Saskatchewan	19	1.7
Alberta	121	2.9
British Columbia	135	2.9
Territories	0	0
CANADA	949	2.7

Source: 2015 CMA Masterfile

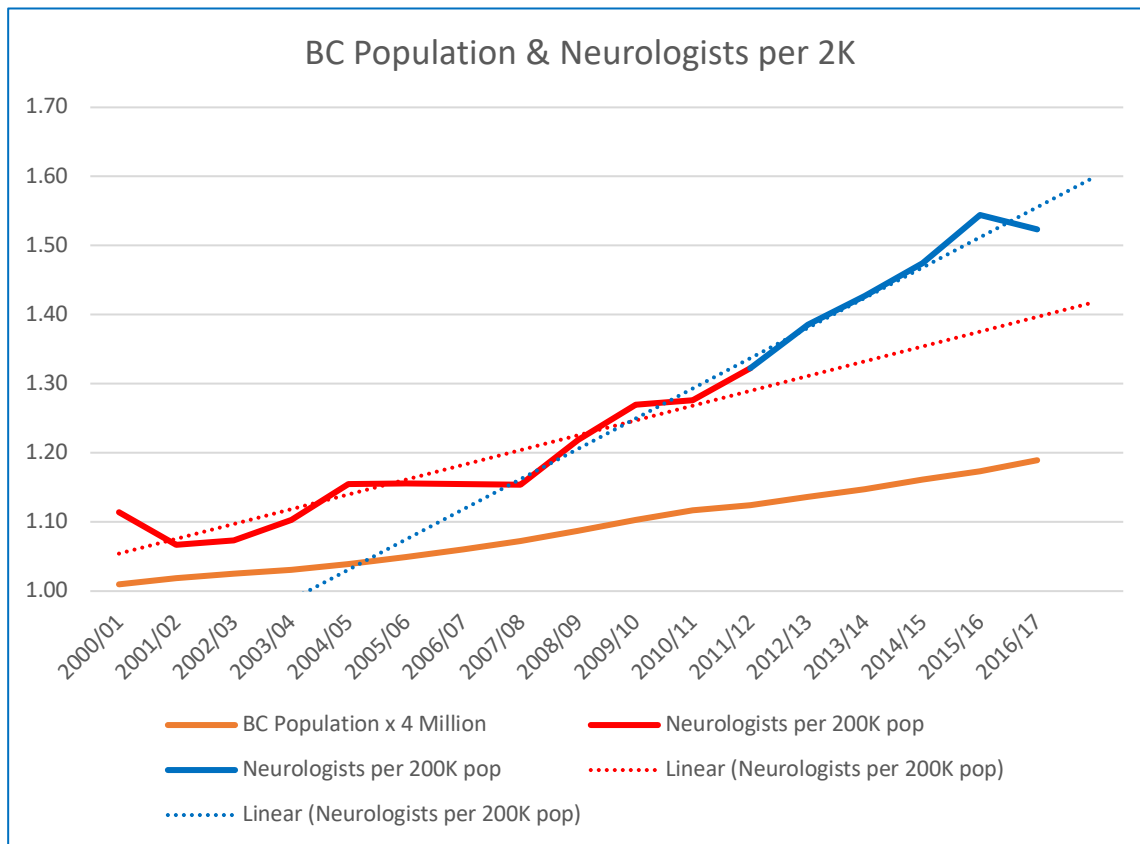
## ANALYSIS OF BC MANPOWER

## BC NEUROLOGIST AND GENERAL POPULATION 2000 - 2017

BC Population and Neurology FTE manpower from 2000/01 to 2016/17

Fiscal Year	BC Population Millions	BC Population x 4 Million	Neurologists per 200K pop	Neurologists per 200K pop	Neurologists per 100K pop
2000/01	4.04	1.01	1.11		2.2
2001/02	4.08	1.02	1.07		2.1
2002/03	4.10	1.03	1.07		2.1
2003/04	4.12	1.03	1.10		2.2
2004/05	4.16	1.04	1.16		2.3
2005/06	4.20	1.05	1.16		2.3
2006/07	4.24	1.06	1.16		2.3
2007/08	4.29	1.07	1.15		2.3
2008/09	4.35	1.09	1.22		2.4
2009/10	4.41	1.10	1.27		2.5
2010/11	4.47	1.12	1.28		2.6
2011/12	4.50	1.12	1.32	1.32	2.6
2012/13	4.55	1.14		1.39	2.8
2013/14	4.59	1.15		1.43	2.9
2014/15	4.65	1.16		1.47	2.9
2015/16	4.69	1.17		1.54	3.1
2016/17	4.76	1.19		1.52	3.0

## CHANGE IN NEUROLOGIST TO POPULATION RATIOS WITH LMA CODES



The initial hope was that the introduction of these new complex fee codes would increase the retention and recruitment of neurologists in BC. Therefore, comparing neurology manpower before the code introduction, and after the code introduction could support this hypothesis. This also needed to consider any changes in the BC population during this time. Here we note the fairly steadily rising BC population as a whole between 2000 and 2017. During the pre-LMA code period, 2000/01 – 2011/12, the number of neurologists in BC is rising very slowly. Following the introduction of the LMA fee codes starting 2012, we see a rise in number of neurologists and a corresponding increase in the number of neurologists per population. To put this in perspective, in Canada the usual rule of thumb is about 3.5 neurologists per 100,000 population. In contrast, even today, we are seeing only about 3.0 neurologists per 100,000 population. The “Trend Lines” before and after the introduction of the LMA codes shows a very different rate of change for our population of neurologists. The number of neurologists in terms of FTE or FTE: population, is made up of the number of neurologists in the province minus the number retiring or leaving neurologists and plus the number starting practice in BC. We don’t have good data differentiating those who chose not to leave or retire, versus those who chose



to start practice in B.C. We can demonstrate that the net balance was, however, to improve the number of practicing neurologists in B.C.

Therefore, when considering the stated reason for the LMA fee codes was to improve recruitment and retention, we can see that the LMA fee codes were successful.

#### ANALYSIS OF FEE CODE USAGE TRENDS

##### ALL LMA CODE BILLINGS:

FeeCode and FeeGuide Index Description	Fiscal Year					Billing per FTE Neurologist				
	2012/13	2013/14	2014/15	2015/16	2016/17	2012/13	2013/14	2014/15	2015/16	2016/17
<b>00450</b> Complex Care - Extended Consultation - per 15 minutes or major portion thereof	14760	16275	18275	21313	21539	176	186	198	222	222
<b>00457</b> Complex Care - Extended Visit - per 15 minutes or major portion thereof	4726	5667	8323	11757	12595	56	65	90	122	130
<b>00460</b> Transfer of Care from Pediatrics - Extended Consultation	98	453	1087	684	97	1	5	12	7	1
<b>00462</b> Neurological Interpretation and report of submitted x-ray films (including CT scan, TCD, MRI)/case	166	256	283	383	411	2	3	3	4	4
<b>00465</b> Acute Stroke Intra-Arterial Thrombolysis	1	7	8	2		0	0	0	0	0
<b>00468</b> Neurology Outpatient Transcranial Doppler Ultrasound (TCD)	23	17	19	10	10	0	0	0	0	0
<b>00469</b> Neurology Outpatient Transcranial Doppler Ultrasound (TCD) - Prolonged Study	4	5	3	1	0	0	0	0	0	0

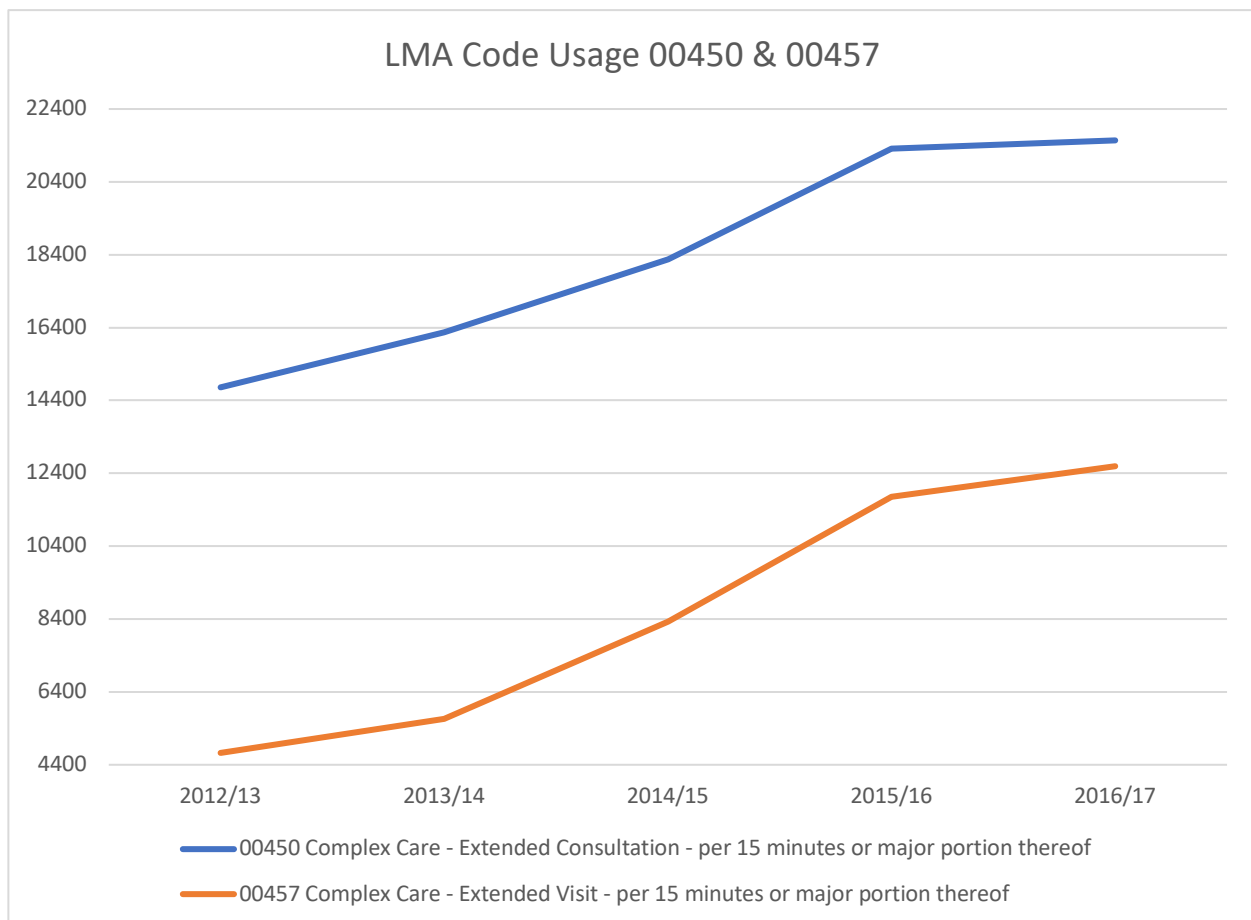
Included

Excluded

Our original goal was to analyze all seven of the neurology LMA fee codes. However, when the data was collected, we see that proportionately, the 00450 and 00457 codes were utilized vastly more than the other five codes. As a result, we have narrowed the intention analysis to the 00450 and 00457 codes only. The other codes were not utilized enough to be able to draw any comments or trends.

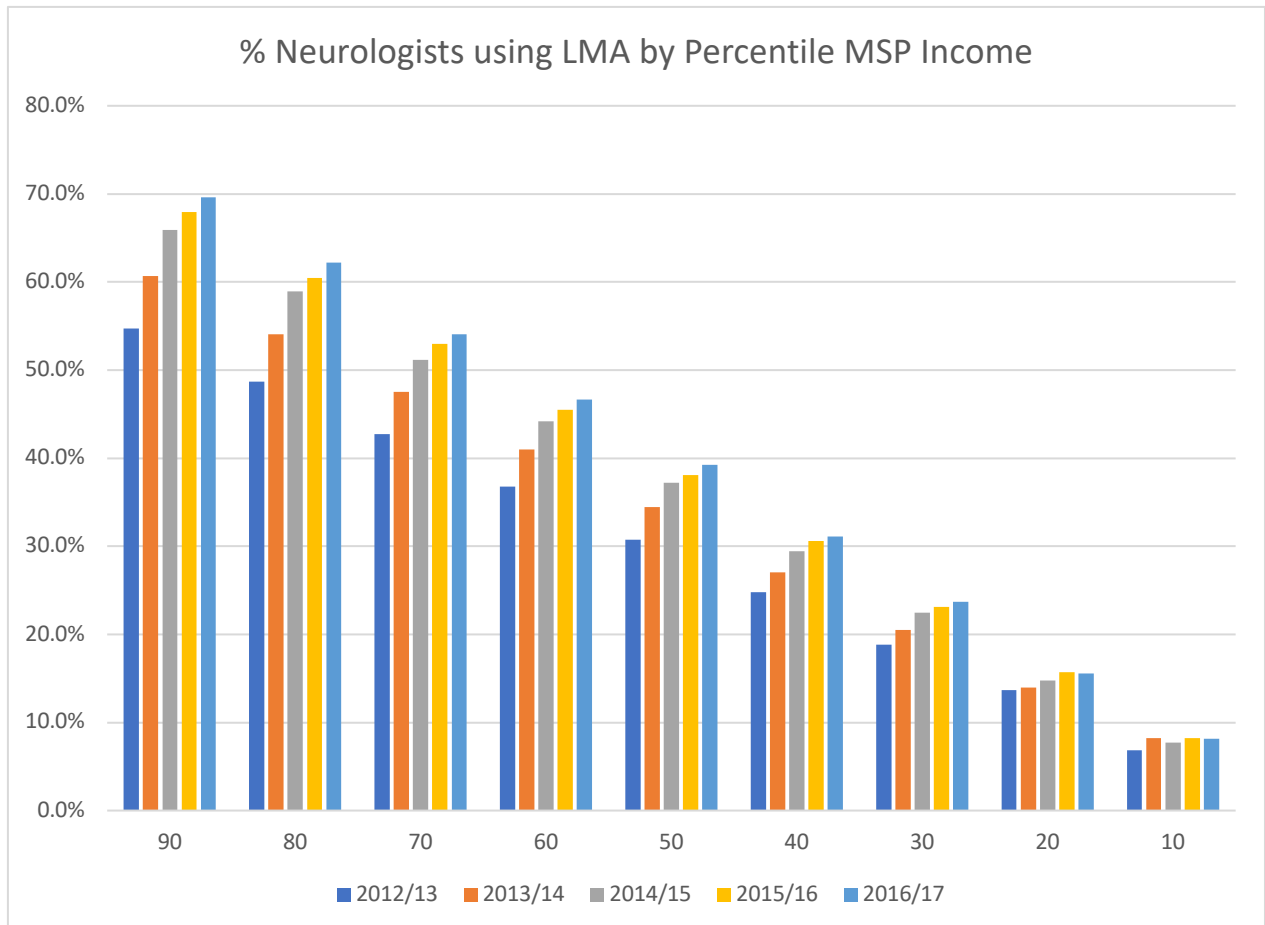
#### TRENDING OF 00450 & 00457 LMA CODES

When these codes were introduced in 2012, it was well circulated amongst the section of neurology membership. As neurologists became aware of the value available, i.e. spending more time with complex patients, the usage did modestly increase. By the time of 2017, we see the usage now leveling off as these codes establish themselves into mainstream neurology practice.



One unfortunate outcome, was that the aggregate amount billed of these two items significantly exceeded the original neurology award of \$1.1M, in fact up to \$1.7M. The section realized the significant value to patients, and has undertaken to add some of the later disparity award to this LMA funding, in order to achieve necessary funding of them. The growth of these items now appears closer to static.

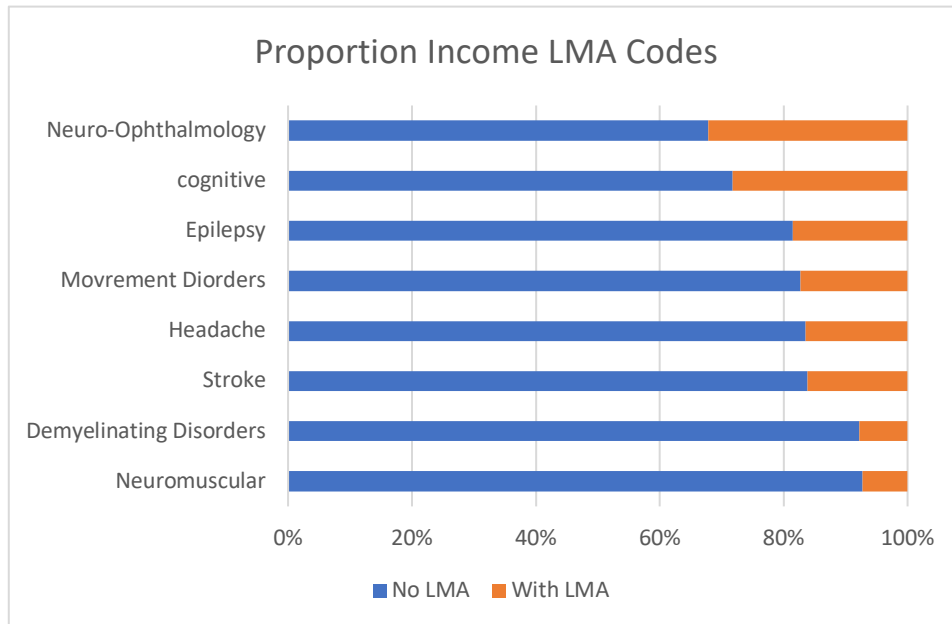
#### RELATIONSHIP OF USING LMA CODES TO PERCENTILE MSP INCOME



Which neurologists are using the LMA codes, in relation to their incomes? That is, are only high or low MSP income neurologists using the LMA fee codes?

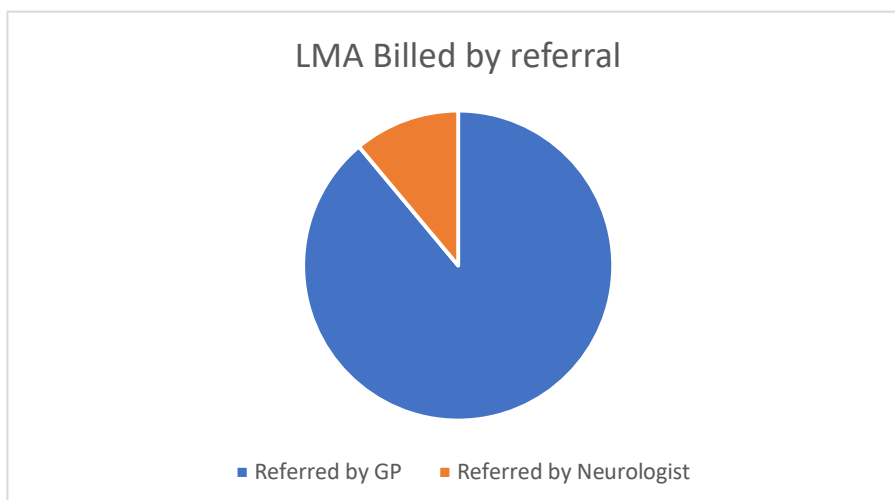
The data demonstrates there is almost a straight-line correlation from the MSP income of neurologists using the LMA fee codes, to the number of LMA fee codes being billed. This would indicate that both low, middle, and high-income earners are finding these LMA codes useful.

#### RELATIONSHIP OF LMA CODE DERIVED INCOME COMPARED TO NON-LMA INCOME



These are the main eight categories of neurologic practice utilizing the LMA codes as a significant part of practice, by diagnosis. On the left (blue bars) we see the billings by diagnostic category, in which no LMA fees are billed. On the right (orange bars), we see the amount of LMA codes billed. For example, the Ophthalmology billings utilizing LMA codes shows that ~68% of the income billed not using LMA codes, vs. ~32% of billings by LMA code usage.

#### REFERRAL SOURCE FOR WHEN LMA CODES BILLED



The majority of referrals in which an LMA code was billed, occurred when the referral was made by a GP versus from another specialist.

## MEMBERSHIP SURVEY

To better understand the self-perceived value of these codes amongst neurologists in BC, we undertook a qualitative survey of our section membership.

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## SURVEY METHODOLOGY

### SURVEY INTRODUCTION AND QUESTIONS:

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#### Introduction:

On behalf of our section of neurology, we are assessing the value and usage of the LMA billing codes introduced in 2012. These are the complex care (00450, 00457) and transfer of pediatric care (00460). This data will be helpful to support the continued availability of these codes and to determine if they can be transferred from SSC temporary codes (specialty service committee), which are tightly limited, into the MSP available amount regular fee codes. We very much appreciate you answering the following five question survey. All of this information is strictly confidential and only to be used by our section. Thank you in advance for your time and contribution!

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**1. Do you utilize any of 00450, 00457, 00460 codes? (If no, end of survey. Thank you for participating.)**

Yes

No

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**2. Did the introduction of these codes impact your practice?**

1 – No Impact 4 – High Impact

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**3. Did these codes influence you in deciding to come to BC or stay in BC to practice?**

Yes

No

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**4. Is your practice general neurology or sub-specialty?**

General Neurology

Sub-specialty

If sub-specialty, please identify:

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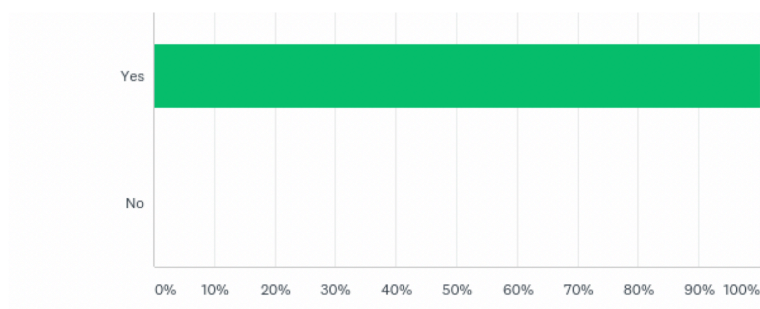
**5. Have the LMA codes changed your wait list?**1 – No Impact 4 – High Impact

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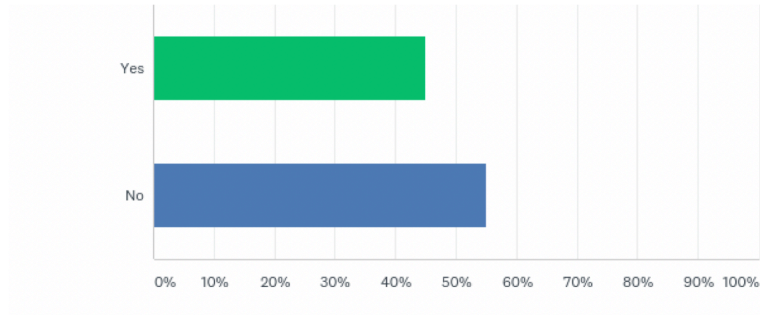
**SURVEY RESULTS****Q1: Do you utilize any of 00450, 00457, 00460 codes? (If no, end of survey. Thank you for participating.)**

Answered: 41 Skipped: 0

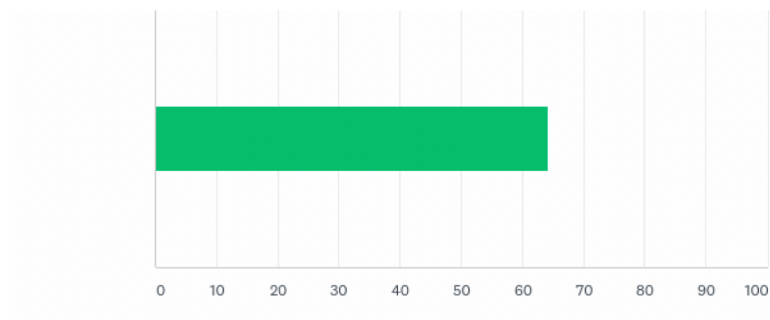


**Q3: Did these codes influence you in deciding to come to BC or stay in BC to practice?**

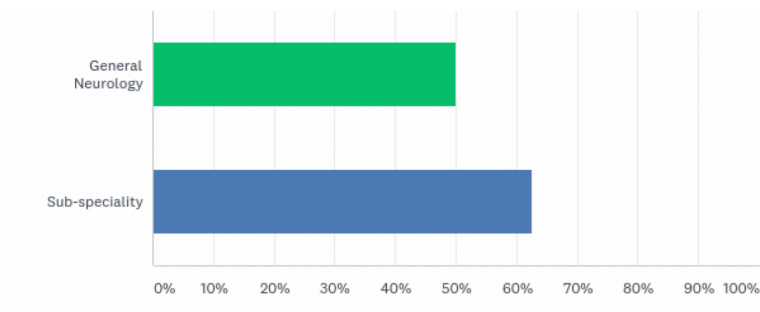
Answered: 40 Skipped: 1

**Q2: Did the introduction of these codes impact your practice?**

Answered: 41 Skipped: 0

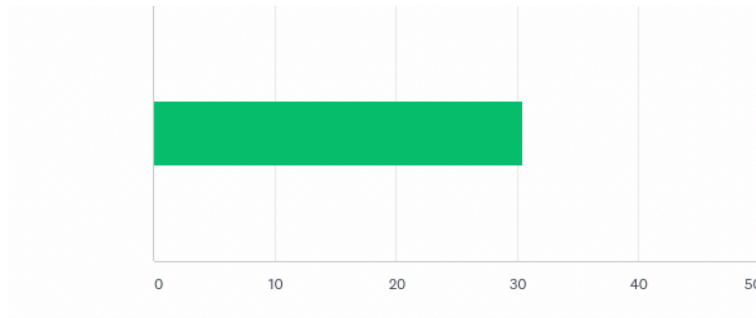
**Q4: Is your practice general neurology or sub-speciality?**

Answered: 40 Skipped: 1



## Q5: Have the LMA codes changed your wait list?

Answered: 37 Skipped: 4



### ADDITIONAL SPECIFIC SURVEY COMMENTS

- *"I do not know if this type of commentary adds to the survey or not, but my message around the 450 / 457.... (and thanks for the survey - great endeavor).*

*Through the ability to bill for time, rather than service, I am much less trepidatious in engaging patients with complex problems that might not fit into a conventional "consultation" model.*

*My ability to spend the time with patients that they require, rather than an arbitrary time that I have allotted them, has improved my ability to deal with complex issues in a single visit, and reduce the frequency of follow-ups required to address issues.*

*My patients greatly value the ability, when needed, to spend time going over multiple or complex issues in a single visit, rather than multiple visits or feeling "rushed". In turn, fewer visits are needed to achieve the same outcome.*

*I do not (and cannot) make more money with this than seeing a higher volume of patients - inherently, these codes reduce barriers to providing quality care, by relatively dis-incentivizing high-volume practice. I feel like the time-based remuneration facilitates better communication, and engaging in more complexity, than would otherwise be possible.*

*We are actively considering alternate methods of payment for doctors (such as salary) for these same reasons - quality, complexity, patient-centeredness rather than physician / business centeredness. These fee codes seem to facilitate physician accountability for time spent with patient, facilitate quality, engagement, communication.*



*My hope is the Ministry might see these codes for what I hope they are - a tool to facilitate and incentivize the best in consultants, in a patient centred way, in line with other innovative methods of physician compensation."*

- *"I rarely use 450, when doing office consults for complex neuromuscular cases. I am writing to add my opinion that these codes are important and I am very supportive of them. I don't want to sway the results of the survey (negative to most questions only because I don't use them in the context of EMG practice) - the questions don't reflect my true positive opinion so I'm sending this as a text response instead."*

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## ANALYSIS OF SURVEY RESULTS

1. Question 1: Confirmed survey responses were from those using the LMA codes.
2. Question 2: 65% of respondents indicated that the LMA codes did influence their practice. This is important, as there are not so many things we do that impact 2/3 of the doctors exposed to it.
3. Question 3: 45% of respondents indicated these codes influenced their decision to come or stay in BC. Given that this was one of the main drivers for creating these codes, again this is a very significant outcome.
4. Question 4: It is evident the use of these codes is roughly evenly distributed between both general and sub-specialty neurologists. This indicates these codes were not just for the benefit of one or another small groups of neurologists.
5. Question 5: This is an indication that 1/3 of neurologists using these LMA codes indicate a positive effect on their wait lists. Thus, not only did these codes influence manpower, but also has had a significant driving effect on increased patient access.
6. Specific comments:
  - a. Comment indicating just how useful, and the positive effects
  - b. Comment from someone who doesn't use the LMA codes, but still sees their benefit

## CONCLUSION

There were new LMA codes that were introduced in 2011 for the section of neurology, as a result of the Labor Market Adjustment funding. Within the Section of Neurology, two of these codes, 00450 and 00457, accounted for much of the influence for change. The purpose of the implementation of the LMA Fee Codes was to address the challenges of recruitment and retention within neurology in BC.

As evidenced in this report, the implementation of the LMA Fee Codes positively impacted neurologist recruitment and retention, with 45% of respondents indicating the LMA Fee Codes had influenced their decision to stay in or come to BC to practice. Since the implementation of these codes, the number of FTE neurologists in accordance with the provincial population has increased. Additionally, one third of neurologists surveyed reported improved patient access since the implementation of the codes. The analysis of data also shows 65% of neurologists found the LMA Fee Codes to be useful in their practice. The analysis of the data included in this report provides ample evidence of the benefits of the LMA Fee Codes both in addressing the challenges of recruitment and retention, as well as improving patient care. Given this demonstration of positive benefits, the recommendation of this report is to move these LMA Fee Codes into the MSP available amount.