Neurological Surgery Case Log Defined Case Categories and Required Minimum Numbers

Review Committee for Neurological Surgery

Effective 7/1/2019[1]

Defined Case Category	Required Minimum Number	
Cranial	**Senior + Lead Cases***	**Lead Cases***
Cranial: Tumor General	60	30
Cranial: Tumor Sellar/Parasellar	20	10
Cranial: Trauma/Other	60	30
Cranial: Vascular Open	10	--
Cranial: Vascular Endovascular	10	--
Total Cranial Vascular	**60**	**30**
Cranial: CSF Diversion/ETV/Other	20	10
Cranial/Extracranial: Pain	10	5
Cranial/Extracranial: Functional Disorder	10	5
Cranial/Extracranial: Epilepsy	10	5
Total Cranial	**300**	**150**
Spinal	**Senior + Lead Cases**	**Lead Cases**
Spinal: Anterior Cervical	30	15
Spinal: Posterior Cervical	30	15
Spinal: Thoracic/Lumbar/Sacral/Instrumentation/Fusion	30	15
Spinal: Lumbar Laminectomy/Laminotomy	30	15
Spinal: Stimulation/Lesion/Pump/Other	10	5
Total Spinal	**300**	**150**
Peripheral Nerve	**10**	**5**
Radiosurgery	**10**	**5**
Peripheral Device Management	**20**	**10**
Critical Care	**Senior + Lead Cases**	**Lead Cases**
Airway Management	--	10
Angiography	--	20
Arterial Line Placement	--	10
CVP Line Placement	--	10
EVD/Transdural Monitor Placement	--	30
Lumbar/Other Puncture/Drain Placement	--	10
Percutaneous Tap of CSF Reservoir	--	10
Total Critical Care	**--**	**100**
Pediatric* **	**Senior + Lead Cases**	**Lead Cases**
Pediatric: Cranial Tumor	5	-
Pediatric: Cranial Trauma/Other	10	5
Pediatric: CSF Diversion/ETV/Other	10	5
Pediatric: Spinal	5	-
Total Pediatric	**40**	**20**
TOTAL ALL DEFINED CASE CATEGORIES	**800**	**400**
Intradural Microdissection**	**--**	**80**

***See Case Log Guidelines for participation level definitions**

****See Case Log Guidelines for microdissection definition and case types that could potentially involve microdissection and count toward microdissection; must be designated when logging a case**

*****Pediatric cases must be designated when logging a case in order to count toward pediatric minimums**

[1]Residents graduating in 2021 and beyond reviewed for compliance with these minimums.

09/2019

Case Log Guidelines
Review Committee for Neurological Surgery

Resident Role
Resident surgical procedures must be entered into the ACGME Case Log System. Residents must indicate their major role in each case: Assistant Resident Surgeon; Senior Resident Surgeon; or Lead Resident Surgeon. The definitions for these roles are:

- **Assistant Resident Surgeon**: includes positioning, sterile preparation, placement of monitoring devices, microscope preparation, participation in the initial (opening) or final (closing) portions of the case, and/or assisting the resident or staff surgeon(s)
- **Senior Resident Surgeon**: must include participation in the surgical procedure between opening and closing
- **Lead Resident Surgeon**: must include participation in the *critical portion* of the case

To claim a case, a resident must scrub in for the procedure (i.e., scrub hands, use sterile gloves, with or without gown). There can be several residents per case, but each resident may claim only one role per case (Assistant, Senior, or Lead). There can be only one Lead Resident Surgeon and only one Senior Resident Surgeon per case, but the Assistant role is not limited in number per case. Only those cases completed in the role of Senior Resident Surgeon or Lead Resident Surgeon will count towards the required minimum Case Log numbers. However, the Review Committee expects that the Case Log data will demonstrate increasing participation and progressive responsibility. Therefore, accurate reporting of resident role in each case is expected and advised.

Credit
The **Case ID** field must be completed for the case to be claimed. Each resident may enter one or more CPT codes per case, but may claim credit for only one CPT code per case. If more than one resident participated in the same case, each resident may claim the same CPT code for credit for that case as appropriate, as long as the claimed roles (except for the Assistant Resident Surgeon role) are not the same. For example, one Assistant Resident Surgeon may claim a CPT code for credit when participating in the initial (opening) portion of the case, while another Assistant Resident Surgeon may claim the same CPT code for credit when participating in the final (closing) portion of the same case. See critical care guidelines below for further information.

Patient Type
- The Review Committee defines a pediatric patient as one who is less than 21 years old at the time of the procedure.
- An adult patient is defined as one who is 21 years or older at the time of the procedure.
- A pediatric patient who is 21 years or older at the time of a follow-up procedure must be logged as an adult patient.

Specific Coding Guidelines
- **Microdissection:** A minimum of 80 Lead cases must involve microdissection, which is defined as use of the operating microscope, exoscope, or endoscope for intradural dissection requiring high magnification. A “Case Type” box has been added to the case

entry screen. When a case involves microdissection, the box must be checked for it to count toward the microdissection minimum. The case areas and case types within those areas that could potentially involve microdissection and count toward the microdissection minimum are limited to:

- **Adult Cranial Tumor: Type extra-axial**
- **Adult Cranial Tumor: Type intra-axial**
- **Adult Cranial Tumor: Type skull base and other**
- **Adult Vascular Lesion Open: All types**
- **Adult Sellar/Parasellar Tumor**
- **Adult Cranial Treatment for Pain**
- **Epilepsy**
- **Adult Posterior Cervical**
- **Adult Thoracic/Lumbar Instrumentation and Fusion**
- **Adult Lumbar Laminectomy/Laminotomy**
- **Pediatric Cranial Tumor: Type craniotomy**
- **Pediatric Spinal**

- Airway Management: The requirement for 10 procedures in this defined case category can be met by multiple procedures, including intubation, tracheostomy, thoracentesis, tube thoracostomy, and bronchoscopy. Bundling of CPT codes occasionally prevents a granular description of a procedure that is of interest to the Review Committee and central to neurological surgery education. Simple intubation, now bundled with anesthesia or critical care provision, is an example. Residents should search for the following code:

  31575 (laryngoscopy, flexible fiberoptic; diagnostic)

  Though direct laryngoscopy is only a component of intubation and may not be performed fiber-optically, coding intubation in this manner will ensure appropriate credit.

- Critical Care: Residents are required to log 100 care critical procedures as lead resident surgeon. Residents can pair one or more of these minor procedure codes with the primary code for a major procedure for a particular patient care episode. For example, if a resident intubates a patient, places a central line, and participates in a lumbar fusion, he or she may log a primary code for airway management as one case, a primary code for central line placement as a separate case, and a primary code for the lumbar fusion as a third case. Other elements of the spine surgery must still be included as secondary codes within the lumbar fusion case.

Review Committee Expectations

Residents graduating in 2018-2019 are expected to demonstrate compliance with the current minimum requirements for all current defined case categories (DC1-27). Residents graduating in 2019-2020 will be monitored for compliance with both the current and new minimum requirements, but programs will be subject to citation only in regard to the former. *Beginning with residents graduating in 2020-2021 and beyond, compliance with all new minimum requirements will be monitored and programs may be subject to citation.*

Monitoring Case Logs
Programs must monitor the accurate and timely entry of cases into the system. As part of monitoring resident progress towards developing competence in surgical skills, cumulative operative experience reports must be generated from the Case Log System and reviewed with each resident as part of his or her semiannual review. More frequent monitoring and feedback is highly recommended.

A variety of Case Log reports are available in the system, each providing useful information for monitoring.

- **Minimums Report**
  To track resident progress toward achieving minimum numbers, a separate report should be generated for each resident using the default settings ("credit" should be "primary"). The report shows senior cases and lead cases separately as well as the total senior plus lead cases. Note that this report can be generated to include a dated signature line for the resident and program director. (The default setting is to hide the signature line.) Programs are advised to use this feature to generate individual resident reports to review and discussion at each semiannual review and to keep signed reports on file along with other resident evaluations.
- **Activity Report**
  This summary report provides total number of cases, total number of CPT codes, last procedure date, and last update date for each resident or for a selected resident. This report is a quick way to keep tabs on how frequently residents are entering their cases. For example, if the program requires residents to enter cases each week, the report can be run weekly; a resident who has not entered a case within the past week would be quickly identified.
- **Case Brief Report**
  This report lists the procedure date, case ID, CPT code, institution, resident role, attending, and description for each case for each selected resident. By using filters selectively, information such as attending activity, performance of sites related to expectations in terms of case types, and resident activity can be gathered and used to monitor the program or evaluate the program for change.
- **Case Full Detail Report**
  All information for each case entered into the Case Log System is displayed in this report, making it most useful for getting an in-depth view of a resident's surgical experience during a defined period. For example, this report could be generated for each resident for the preceding six-month period and used as part of the semi-annual evaluation meeting with the program director or designated faculty mentor. The use of filters is therefore recommended.
- **Code Summary Report**
  This report provides the number of times each CPT code is entered into the Case Log System by a program's residents. Filtering by specific CPT code, resident year, attending, participating site, etc. can provide useful information on surgical activity in the program that might, for example, be used to make targeted changes in rotation schedules, curriculum, faculty member assignments, etc.
- **Experience by Role Report**
  This report is very similar to an expanded version of the Minimums Report, but in addition to the number of Senior and Lead cases, it also shows the number of Assistant cases for each case type within each minimum category. It is a quick way to see evidence for progressive responsibility for each defined case category (number of cases logged for each participation level) as well as evidence for balanced experiences within each defined case category (number of case types within each category that residents are logging).

- **Experience by Year Report**
  This report summarizes the number of cases for each defined case category for each of the seven post-graduate (PG) years. It provides a quick way to see which procedures are most common for each PG year. Like the Code Summary Report, the Experience by Year Report will provide useful information for monitoring surgical activity in the program, and could be used to determine if changes to curriculum rotation schedules, etc., are needed.
- **Tracked Codes Report**
  This report generates the CPT codes currently mapped to each defined case category by area and type. Codes that can be counted for microdissection when the microdissection box is checked are also shown. (Note that use of such a CPT code alone will NOT result in credit for microdissection.) This report should be generated any time a complement increase or a change in participating sites is being considered, since both requests require completion of the Institutional Case Report Form. The Tracked Codes Report will provide real-time information on all the codes that should be counted within each case area/type listed in the Institutional Case Report Form.
- **Graduate Statistical Reports**
  These are static reports (no filters) generated each year after all current graduate Case Logs have been archived. They include National Reports going back to 2008-2009, Program, Resident, and Minimum Reports for each year the program had graduates, and a Minimums Ratio Report (beginning with 2017-2018). The National Reports are also publically available, and permission to use them for research purposes is not required. However, because the reports are copyrighted, the source of data must be included in all forms of publications.

The use of filters allows a program to get specific information to use for targeting needed program improvements. For example, selecting a specific institution would provide data on that institution's contribution to the surgical activity in the program. If the institution was added with the goal of providing functional procedures, the program could determine if this goal was being met. Similarly, the number of pediatric patients contributed by each institution could be tracked using the patient type filter. Programs are encouraged to incorporate these tools as part of their program improvement activities.