

THE AMERICAN BOARD OF NEUROLOGICAL SURGERY

BYLAWS

Table of Contents

PREAMBLE 1

ARTICLE I BOARD MEMBERSHIP 1

 1.1 NUMBER..... 1

 1.2 ABNS EXAMINERS 1

 1.3 NOMINATIONS..... 2

 1.4 APPROVAL AND TERM..... 3

 1.5 NOMINATING SOCIETY MEMBERSHIP/DIRECTOR QUALIFICATIONS 3

 1.6 CONSECUTIVE TERMS PROHIBITED 3

 1.7 CHANGES TO BOARD COMPOSITION 3

 1.8 VACANCIES 3

 1.9 PARTICIPATION IN CONTINUOUS CERTIFICATION 4

ARTICLE II BOARD OPERATIONS..... 4

 2.1 AUTHORITY 4

 2.2 MEETINGS OF THE DIRECTORS..... 4

 2.3 EXECUTIVE COMMITTEE OF THE BOARD OF DIRECTORS 5

 2.4 INDEMNIFICATION OF DIRECTORS, OFFICERS, AND OTHERS 5

 2.5 DIRECTOR REMOVAL..... 6

 2.6 PROCESS FOR DISCRETIONARY DIRECTOR REMOVAL 6

ARTICLE III OFFICERS 7

 3.1 OFFICERS 7

 3.2 ELECTIONS 7

 3.3 DUTIES OF CHAIR..... 7

 3.4 DUTIES OF VICE CHAIR(S) 7

 3.5 DUTIES OF SECRETARY 7

 3.6 DUTIES OF TREASURER..... 8

 3.7 APPOINTMENT AND DUTIES OF EXECUTIVE DIRECTOR 8

ARTICLE IV COMMITTEES 8

 4.1 COMMITTEE(S) ON THE WRITTEN EXAMINATION 8

 4.2 COMMITTEE ON THE ORAL EXAMINATION 9

 4.3 COMMITTEE ON CREDENTIALS..... 9

 4.4 ADVISORY COUNCIL 10

 4.5 RECOMMENDATIONS FOR NEW OFFICERS 10

 4.6 BYLAWS COMMITTEE 10

 4.7 ADMINISTRATION AND FINANCE COMMITTEE 10

 4.8 COMMITTEE ON CONTINUOUS CERTIFICATION..... 10

 4.9 PROFESSIONAL PRACTICE DATA COMMITTEE 11

4.10	EDUCATIONAL REQUIREMENTS AND SUB-SPECIALIZATION COMMITTEE	11
4.11	QUALITY AND INFORMATION TECHNOLOGY COMMITTEE	11
4.12	ADDITIONAL COMMITTEES	11
4.13	COMMITTEE COMPOSITION.....	11
ARTICLE V	RULES AND REGULATIONS	11
ARTICLE VI	ISSUANCE AND REVOCATION OF CERTIFICATES.....	12
6.1	ISSUANCE OF INITIAL CERTIFICATES	12
6.2	ISSUANCE OF RENEWAL CERTIFICATES	13
6.3	REVOCATION OF CERTIFICATES	14
ARTICLE VII	CANDIDATE AND DIPLOMATE FILES	14
ARTICLE VIII	AMENDMENTS.....	15

THE AMERICAN BOARD OF NEUROLOGICAL SURGERY

BYLAWS

PREAMBLE

NEUROLOGICAL SURGERY constitutes a medical discipline and surgical specialty that provides care for adult and pediatric patients in the treatment of pain or pathological processes that may modify the function or activity of the central nervous system (e.g., brain, hypophysis, and spinal cord), the peripheral nervous system (e.g., cranial, spinal, and peripheral nerves), the autonomic nervous system, the supporting structures of these systems (e.g., meninges, skull and skull base, and vertebral column), and their vascular supply (e.g., intracranial, extracranial, and spinal vasculature).

Treatment encompasses both non-operative management (e.g., prevention, diagnosis—including image interpretation—and treatments such as, but not limited to, neurocritical intensive care and rehabilitation) and operative management with its associated image use and interpretation (e.g. endovascular surgery, functional and restorative surgery, stereotactic radiosurgery, and spinal fusion—including its instrumentation).

The broad aim of the AMERICAN BOARD OF NEUROLOGICAL SURGERY is to encourage the study, improve the practice, elevate the standards, and advance the science of neurological surgery and thereby to serve the cause of public health.

A neurosurgeon who has been certified by the AMERICAN BOARD OF NEUROLOGICAL SURGERY has completed an approved educational training program and an evaluation process, including oral and written or computer examinations, designed to assess the knowledge, skills, and experience necessary to provide quality patient care in neurological surgery. Neurosurgeons who continuously participate and successfully fulfill the requirements of the ABNS Continuous Certification program demonstrate that they are taking steps following their initial certification to preserve and enhance their knowledge and skills. However, board certification is not a measure or guarantee of competence for a particular patient's needs. Patients, therefore, should consider certification as only one factor in selecting a neurological surgeon.

ARTICLE I BOARD MEMBERSHIP

1.1 NUMBER

The Corporation (also referred to herein as the American Board of Neurological Surgery or the "ABNS") shall have fifteen (15) Directors until such time as the number of Directors shall be changed as provided in Article 1.7 or by amendment of these Bylaws.

1.2 ABNS EXAMINERS

All ABNS Directors will be nominated and selected from among the pool of "ABNS Examiners." The nomination and selection process is set forth in Article 1.3. ABNS Examiners are those ABNS Diplomates who have been granted that title because they have devoted significant

volunteer time to one or more of the following ABNS activities: (a) development and submission of questions for the ABNS primary (written) examination; (b) development and submission of questions for the ABNS oral examination; (c) review of case logs submitted by candidates for certification; and/or (d) serving as examiners for the ABNS oral examination. Any neurosurgical professional society or similar organization may nominate ABNS Diplomates to be ABNS Examiners and ABNS Diplomates may also self-nominate. Once accepted by the ABNS Directors to the position of ABNS Examiner, an ABNS Examiner may be removed from that role by the ABNS Directors in situations where the Diplomate has ceased to make meaningful contributions in one or more of the above-enumerated areas, or where concerns have been raised regarding an ABNS Examiner's interactions with Directors, other ABNS Examiners, candidates for certification or ABNS staff, or where other concerns have been raised regarding the ABNS Examiner's professionalism.

1.3 NOMINATIONS

Directors shall be nominated by the following societies (hereinafter called "Nominating Societies") and by the ABNS, in each case in the numbers listed below. All individuals nominated by a Nominating Society or the ABNS (as applicable) must be from the pool of then-current ABNS Examiners. For each vacancy or replacement for which a particular Nominating Society is to offer nominations, the Board shall request the names of five (5) or more individuals and may request that such nominations be ranked as to preference.

American Association of Neurological Surgeons	3
Society of Neurological Surgeons	3
Congress of Neurological Surgeons	3
American Board of Neurological Surgery	3
American Academy of Neurological Surgery	1
Neurosurgical Society of America	1
American Society of Pediatric Neurosurgeons	1

The ABNS Executive Committee will initially evaluate the slate of nominations provided by each Nominating Society for any vacancy or replacement. Nominees will be evaluated with the goal of maintaining a Board of Directors that is diverse (as to demographics, geography, subspecialty, institutional employer type and range of Board competencies) and that gives highest preference to those nominees who have excelled in their role as ABNS Examiners (the "Nomination Criteria"). In the event that less than five (5) nominees for a particular vacancy are deemed acceptable by the Executive Committee, the ABNS Secretary will so advise the applicable Nominating Society and the Nominating Society will provide replacement nominees until a slate of at least five (5) nominees for the vacancy is accepted.

For vacancies to be filled by the ABNS, the Executive Committee will select at least five (5) nominees, utilizing the Nomination Criteria.

Each accepted slate of nominees for a vacancy shall be presented to the full Board of Directors for a vote. The nominee receiving a majority of votes of the Directors present during the vote (provided that a quorum is present) shall be elected to the vacancy. If no nominee receives a majority of votes, the nominee receiving the lowest number of votes will be eliminated, and a second

round of voting will take place. This process will continue until a nominee receives a majority of votes.

In the event that a Nominating Society fails within a one (1) year period to submit names of nominees initially or in substitution for nominees who have not been approved by the Executive Committee, the Board of Directors may designate by majority vote any member of such Nominating Society who is an ABNS Examiner as a nominee for approval by the Board.

1.4 APPROVAL AND TERM

Directors for new terms shall be approved at an annual meeting of the Board of Directors by majority affirmative vote of the Directors present, provided that a quorum is present. Directors shall serve for a term of six (6) years and until their successors are approved. Terms of Directors begin on the next June 1 following the meeting at which they are approved. Terms shall be staggered so that in any year, two (2) or three (3) Directors will have their terms expire and will be replaced by two (2) or three (3) incoming Directors. The Board also shall be staggered, if reasonably feasible, to avoid any one Nominating Society or the ABNS nominating replacements for more than one vacancy in any year.

1.5 NOMINATING SOCIETY MEMBERSHIP/DIRECTOR QUALIFICATIONS

Each nominee for Director shall (a) be a member in good standing of the Nominating Society that he or she represents (as applicable); (b) hold an ABNS Certificate in good standing; (c) be current on all requirements of the ABNS' Continuous Certification program (for those nominees with time-limited Certificates); (d) be duly licensed by law to practice medicine without restriction in one (1) or more states of the United States; and (e) be ABNS Examiners.

1.6 CONSECUTIVE TERMS PROHIBITED

No Director may serve consecutive terms, except that a Director appointed by the Board to fill a vacancy may serve a full term following the completion of the partial term to which he or she was appointed as provided in Article 1.8 below.

1.7 CHANGES TO BOARD COMPOSITION

The Board of Directors shall have authority to change, by the affirmative vote of two-thirds (2/3) of its entire Directors, the size or composition of the Board of Directors, provided that such a change does not reduce the total number of Directors to less than five (5).

1.8 VACANCIES

If a vacancy among the Directors should arise by reason of death, resignation, removal, increase in the number of Directors, or otherwise, such vacancy may be filled by a majority affirmative vote of the remaining Directors for the unexpired term or for any interim term as the Board of Directors may designate. Any interim term shall allow time for nominations of a successor and for the Board of Directors to approve a permanent Director to fill such vacancy.

1.9 PARTICIPATION IN CONTINUOUS CERTIFICATION

Every Director of the Board holding a non-time-limited Certificate is required during their term to participate in the Continuous Certification program.

ARTICLE II BOARD OPERATIONS

2.1 AUTHORITY

The Board of Directors shall be vested with the authority to manage and control the property, business, and affairs of the Corporation, including but not limited to the authority to establish subsidiaries and enter into joint ventures in furtherance of the Corporation's purposes.

2.2 MEETINGS OF THE DIRECTORS

The Board of Directors shall meet annually at such place, inside or outside of the State of Delaware, and at such time as may be designated by the Board of Directors for the purpose of electing Directors and Officers of the Corporation and for the transaction of such other business as shall come before the meeting.

2.2.1 Regular meetings of the Board of Directors shall be held from time to time at such place, inside or outside of the State of Delaware, as may be fixed from time to time by resolution adopted by a majority of the Board of Directors. In addition to its annual meeting, as provided in Article 2.2 above, the Board of Directors shall also meet each fall. Both the annual and the fall meeting shall be held in conjunction with biannual oral examinations and typically shall be scheduled three (3) years in advance.

2.2.2 Special meetings of the Board of Directors may be called by the Chair or by a majority of Directors then in office. Special meetings shall be held at such time and place, inside or outside the State of Delaware, as may be designated in the notice of such meeting.

2.2.3 Notice of a special meeting of the Board of Directors shall be given by the Secretary to each Director at his or her address as shown on the books of the Corporation by mail, telephone, telegraph, facsimile transmission, electronic mail, or in person not less than twenty (20) days prior to such meeting.

2.2.4 Notice of any meeting of the Board of Directors may be waived either before, at, or after such meeting by a writing signed by all Directors, or in the case of a conference call by unanimous consent of all Directors recorded by the Secretary. Each Director, by his or her attendance and participation in the action taken at any meeting of the Board of Directors, shall be deemed to have waived notice of such meeting.

2.2.5 At any meeting of the Board of Directors a quorum must be present to conduct business. Eight (8) Directors shall constitute a quorum of the Board of Directors, except that, when a vacancy or vacancies exist, a majority of the remaining Directors shall constitute a quorum. The Executive Director and Chief Administrative Officer shall be invited to attend all meetings of the Board of Directors but shall not be entitled to vote on any matter. Other individuals with an interest in the proceedings of the ABNS may be invited to attend meetings of the Board of Directors from time to time.

2.2.6 Any action that might be taken at a meeting of the Board of Directors may be taken without a meeting if done:

- (a) in writing and signed by all Directors or via e-mail; or
- (b) by conference call or other means that permits all participating Directors to hear one another, provided that the proceedings are recorded by the Secretary, a quorum of the Directors participate, proper notice has been given, and a majority of participating Directors consent to any decision made during each conference call.

2.2.7 All Directors shall receive reimbursement for their expenses, if any, for attendance at meetings of the Board of Directors. Nothing herein contained shall be construed to preclude any Director from serving the Corporation, or any subsidiaries or affiliates, in any other capacity and receiving proper compensation, provided that all Directors comply with any conflict of interest policies that may be promulgated and adopted by the Corporation from time to time.

2.3 EXECUTIVE COMMITTEE OF THE BOARD OF DIRECTORS

There shall be an Executive Committee of the Board of Directors. The Chair, Vice Chair(s), Secretary and Treasurer of the Board shall be members of such Committee. During the period between meetings of the Board, the Executive Committee shall be vested with all powers and authority that the Board may exercise, except with respect to such matters that require action by the entire Board, or a majority or supermajority of the entire Board, pursuant to Delaware law or these Bylaws. In addition, the Executive Committee shall have the role set forth in Article 1.3 with respect to the selection of nominees for Director positions, and shall have the role set forth in Article 4.5 with respect to the nomination of new officers. The Executive Committee shall advise all Directors of substantive actions taken during intervals between meetings of the full Board. The Executive Director and Chief Administrative Officer shall attend all meetings of the Executive Committee (except where the Chair and the Secretary mutually determine that the Executive Director's or Chief Administrative Officer's non-attendance is warranted, such as where the purpose of the meeting is to discuss the Executive Director's or Chief Administrative Officer's performance, possible renewal or termination/replacement), but shall not be entitled to vote on any matter.

2.4 INDEMNIFICATION OF DIRECTORS, OFFICERS, AND OTHERS

The Board of Directors may exercise the full extent of the powers that the Corporation has under Delaware law, as such law exists from time to time, to indemnify Directors, Officers, employees, and agents (and persons who previously served in any such capacity) for expenses incurred by reason of the fact that they are or were Directors, Officers, employees, or agents of the Corporation. Such expenses shall include attorney's fees, judgments, fines, amounts paid in settlement, and amounts otherwise reasonably incurred. The Board of Directors may make advances against such expenses upon terms decided by it. The Board of Directors may exercise the full extent of the powers that the Corporation has under Delaware law, as such law exists from time to time, to purchase and maintain insurance against the risks above described on behalf of its Directors, Officers, employees, and agents.

2.5 DIRECTOR REMOVAL

An individual automatically shall be removed from his or her position as Director upon the occurrence of any of the following:

- (a) Revocation or suspension of the Director's Certificate for any reason, including but not limited to those set forth in Rule 13.1 of the Board's Rules and Regulations;
- (b) Director's failure to remain at all times a member in good standing of the Nominating Society that he or she represents (where applicable);
- (c) Director's failure to be duly licensed by law to practice medicine without restriction in one (1) or more states of the United States; or
- (d) Director's failure to continue to meet any other eligibility requirement for Directors set forth in these Bylaws or in the Rules and Regulations.

In addition, upon a two-thirds (2/3) affirmative vote of the entire Board of Directors, the Board may remove or suspend a Director from participation in Board activities, including but not limited to the examination process, if the Director fails to participate in three (3) or more consecutive meetings of the Board, or for other good cause.

2.6 PROCESS FOR DISCRETIONARY DIRECTOR REMOVAL

When presented with probable cause to believe that a Director has engaged in an activity that might lead to removal, the Board may investigate and gather facts concerning the possible existence of grounds for removal of that Director. If it finds reason to believe that a Director should be removed, the Board may at its discretion institute proceedings for removal of the Director by mailing written notification to him or her that a hearing will be held to determine whether he or she should be removed. Such notice shall specify the grounds upon which the proceeding is being instituted and the date upon which the hearing shall be held. Such notice shall be mailed to the Director not less than thirty (30) days prior to the date of the hearing. If the Director to whom the notice is addressed wishes to be present personally and/or represented by counsel at the hearing, he or she shall notify the Board in writing not less than ten (10) days prior to the date of the hearing. If, within the time specified, the Board receives notice that the Director desires to be present, said Director may be present at the hearing personally and/or represented by counsel and may cross-examine any witness(es) appearing against him or her. If, within the time specified, the Board fails to receive notice that the Director desires to be present, the Board may hold the proceeding at the scheduled time and reach a decision, even though said Director is not present and/or represented by counsel. The Board shall not be bound by technical rules of evidence usually employed in legal proceedings but may accept any evidence it deems appropriate. After the hearing, the Board shall render its decision in writing as to whether the Director should be removed. A copy of the decision shall be mailed to said Director. The Board's decision following a hearing shall be final. The provisions of this Article 2.6 shall apply only to proposed actions against a Director that are discretionary under Article 2.5 of these Bylaws. A Director shall not be entitled to a hearing in those instances where removal is automatic pursuant to Article 2.5.

ARTICLE III OFFICERS

3.1 OFFICERS

The Officers of the Corporation shall consist of a Chair, a Vice Chair, a Secretary, a Treasurer, and an Executive Director. Another Vice Chair may be elected by the Board of Directors at its discretion from time to time.

3.2 ELECTIONS

At each annual meeting of the Board of Directors by majority affirmative vote of the Directors present (provided that a quorum is present), the Directors shall elect Officers from within their number (other than the Executive Director, who shall not be a member of the Board of Directors and shall be appointed as set forth in Article 3.7). The Chair and the Vice Chair shall be elected to hold office until the next annual meeting of the Directors. When deemed advisable, another Vice Chair may also be elected to hold office until the next annual meeting of the Directors. The Secretary or the Treasurer shall be elected to a two (2) or three (3) year term of office, before the term of the existing Secretary or Treasurer has expired. This election shall occur at a regular or special meeting of the Directors prior to the annual meeting at which the term of the newly elected Secretary or Treasurer shall commence. Such election shall permit the newly elected Secretary or Treasurer a period of some months in which to become familiar with the requirements of the office before assuming office at the annual meeting. The terms of office of the Secretary and the Treasurer shall not coincide.

3.3 DUTIES OF CHAIR

The Chair shall preside at all meetings of the Directors and of the Board of Directors. He or she shall be the Chief Executive Officer of the Corporation. The Chair shall appoint members of all Committees, unless otherwise stated in the Bylaws or in the resolution creating a particular Committee, and the Chair shall be an ex-officio member of all Committees other than the Executive Committee of which he or she shall be the Chair. The Chair shall have the power to sign checks drawn on the accounts of the Corporation in the absence or disability of the Secretary, the Treasurer and the Executive Director. He or she shall have such other duties as may be prescribed by the Board of Directors from time to time.

3.4 DUTIES OF VICE CHAIR(S)

The Vice Chair(s) shall perform the duties and have the powers of the Chair during the absence or disability of the Chair. The Vice Chair(s) shall have such other duties as may be prescribed by the Board of Directors from time to time.

3.5 DUTIES OF SECRETARY

The Secretary works with the Executive Director and Chair in developing strategies for the ABNS and executing, with the Executive Director, the business and administrative decisions made by the Directors with respect to the principal functions of the ABNS. The Secretary also works with the Directors to move forward the mission of the ABNS. This includes but is not limited to defining neurological surgery challenges, proposing solutions, organizing meetings, conference calls and conference agenda. The ABNS Secretary records meeting notes and ABNS records, takes all

Director votes, ensures all stakeholders positions are heard and records them, and works directly with Executive Director and Chief Administrative Officer in ensuring the smooth, professional day-to-day functioning of the ABNS. The Secretary shall have such other duties as may be prescribed by the Board of Directors from time to time.

3.6 DUTIES OF TREASURER

The Treasurer shall keep records of the financial affairs of the Corporation, have power to sign checks on the accounts of the Corporation, and periodically furnish to each Director of the Board of Directors statements of the financial affairs of the Corporation. The Treasurer shall serve as Chair of the Administration and Finance Committee.

3.7 APPOINTMENT AND DUTIES OF EXECUTIVE DIRECTOR

3.7.1 One (1) individual shall be appointed from time to time by the Board of Directors to serve as the Executive Director of the Corporation. The Executive Director shall serve until his or her removal by the Board of Directors, or until his or her earlier resignation, retirement, death or disability. The Executive Director shall serve at the pleasure of the Board of Directors and may be removed by the Board of Directors at any time. The Executive Director shall be an Officer of the Corporation but shall not be a Director. The Executive Director may attend meetings of the Board of Directors at the invitation of the Board of Directors, but shall not be entitled to a vote on any item of business at any meeting of the Board of Directors.

3.7.2 The Executive Director (along with the Chief Administrative Officer), and upon consultation with the Secretary, the Chair and/or the entire Executive Committee as necessary or appropriate, shall have primary responsibility for the day-to-day operation of the Corporation, including supervision of other Corporation employees, and shall have such other responsibilities and authority as the Board of Directors may prescribe from time to time. The Executive Director shall have the authority to enter into contracts and sign checks on the accounts of the Corporation. The Executive Director shall be an employee or contractor of the Corporation and shall receive compensation in such amounts as may be established by the Board of Directors from time to time. The Board of Directors also may authorize reimbursement of any reasonable expenses incurred by the Executive Director in the performance of his or her duties.

3.7.3 The Executive Director shall have the authority to retain and dismiss other Corporation employees/independent contractors, to set their compensation, and to delegate certain functions to such employees/independent contractors (such as authorizing the Corporation's Chief Administrative Officer to enter into contracts and sign checks on the accounts of the Corporation), in each case subject to the direction and oversight of the Board of Directors.

ARTICLE IV COMMITTEES

4.1 COMMITTEE(S) ON THE WRITTEN EXAMINATION

There shall be one or more committees charged with preparing the Primary Examination, the Continuous Certification Adaptive Learning Tool(s), and other similar examinations and/or learning aids in written, computer or other formats. Such Committee(s) shall consist of such number of Directors as the Board of Directors shall determine. Such (s) shall be vested with such powers and

authority to create and administer such examinations as may be delegated to it by the Board of Directors from time to time.

4.1.1 With the approval of the Board of Directors, the Written Examination Committee(s) may from time to time appoint or retain non-Directors of the Corporation to assist with the preparation and/or administration of examinations.

4.2 COMMITTEE ON THE ORAL EXAMINATION

There shall be a committee on the Oral Examination consisting of such number of Directors as the Board of Directors may determine from time to time. Such Committee shall be vested with such power and authority to create and administer the oral examinations as may be delegated to it by the Board of Directors from time to time.

4.2.1 With the approval of the Board of Directors, the Oral Examination Committee may from time to time appoint or retain non-Directors of the Corporation to act as examiners and to assist with the preparation, administration and/or psychometrics of examinations. Certain non-Directors with an ongoing, significant role in the preparation, administration and/or psychometrics of the oral examinations may be designated by the Board of Directors as "ABNS Examiners."

4.3 COMMITTEE ON CREDENTIALS

There shall be a Committee on Credentials consisting of such number of Directors as the Board of Directors may determine from time to time. With the assistance of the Secretary and in accordance with the Rules and Regulations of the Board of Directors, such Committee shall have the authority to conduct an initial review and make recommendations to the full Board regarding but not limited to:

- (a) Applicants' eligibility to take the oral examinations, as well as requests for extensions of time or exemptions from requirements for initial certification;
- (b) Diplomates' eligibility to participate on an ongoing basis in the Board's CC program, as well as requests for extensions of time or exemptions from requirements for CC as recommended by the Continuous Certification Committee;
- (c) Possible disciplinary actions against Diplomates of the Board; and
- (d) Requests concerning training requirements.

For applicants seeking, or for Diplomates who have received, both a Certificate from the ABNS and an additional credential in pediatric neurological surgery, with such additional credential issued by (and containing the names and logos of) both the ABNS and the American Board of Pediatric Neurological Surgery (the "ABPNS"), the activities set forth in this Section 4.3 shall be performed by a Joint Credentials Committee of the ABNS and the ABPNS, which for purposes of the ABNS Bylaws and Rules shall be deemed to be comprised of (i) all of the Directors of the ABPNS; and (ii) the ABNS Director who was nominated for his or her seat on the ABNS Board by the American Society of Pediatric Neurosurgeons.

4.4 ADVISORY COUNCIL

This Council shall be made up of the immediate past Directors of the Board and the current Officers of the Board. Its members shall advise the current Directors on Board affairs and may also perform any other functions that the Board or its Executive Committee may reasonably request. The Advisory Council may meet from time to time at the time and place designated by the Chair of the Board. Its members may also attend Board meetings in a non-voting capacity at the invitation of the Chair; they shall receive reimbursement for their reasonable expenses in connection with their attendance at such meetings.

4.4.1 The term on the Advisory Council for past Directors shall be six (6) years.

4.5 RECOMMENDATIONS FOR NEW OFFICERS

The Executive Committee shall make recommendations to the Board of Directors regarding potential new officers to fill upcoming or existing vacancies. If the Board of Directors does not approve a recommended slate of officers, the Executive Committee shall propose an alternative slate until such time as a recommended slate is approved.

4.6 BYLAWS COMMITTEE

There shall be a Bylaws Committee consisting of such number of Directors as the Board of Directors may determine from time to time. Such Committee shall review the Bylaws and Rules and Regulations of the Corporation from time to time for the purpose of proposing additions, deletions, and changes to be presented to Directors as prescribed in Articles V and VIII.

4.7 ADMINISTRATION AND FINANCE COMMITTEE

There shall be an Administration and Finance Committee consisting of such number of Directors as the Board of Directors may determine from time to time. Such Committee shall review reports of the income and expenses of the Corporation as received from the Treasurer and, at regular meetings of the Board of Directors, it shall present and make recommendations regarding acceptance of such reports. The Committee shall advise the Board of Directors regarding all financial matters, including fees for examinations and assessments and/or dues of Diplomates. The Treasurer shall serve as Chair of the Administration and Finance Committee.

4.8 COMMITTEE ON CONTINUOUS CERTIFICATION

There shall be a committee on Continuous Certification composed of such number of Directors as the Board of Directors may determine from time to time. Such Committee shall be vested with the power and authority to develop, and recommend to the Board of Directors for adoption, such additions or modifications to the CC program of the Board as the Committee deems necessary or appropriate from time to time. It may make recommendations to the Committee on Credentials regarding Diplomates' eligibility to participate on an ongoing basis in the ABNS CC program (and/or, the ABNS/ABPNS CC program, as applicable), as well as make recommendations on requests for extensions of time or exemptions from requirements of CC.

4.9 PROFESSIONAL PRACTICE DATA COMMITTEE

There shall be a Professional Practice Data and Technology Committee composed of such number of Directors as the Board of Directors may determine from time to time. Such Committee shall be vested with the responsibility for reviewing candidate practice data submitted in conjunction with application for initial certification, as well as case data, if any, submitted in conjunction with the Board's CC program.

4.10 EDUCATIONAL REQUIREMENTS AND SUB-SPECIALIZATION COMMITTEE

There shall be an Educational Requirements and Sub-Specialization Committee composed of such number of Directors as the Board of Directors may determine from time to time. Such Committee shall consider matters relating to the educational and training requirements for candidates for Certification (and possible modification of same), as well as possible mechanisms by which the Board may formally recognize sub-specialists (and possible requirements relating to any such formal recognition). The Committee shall from time to time, upon the Board's request or upon its own initiative, make reports and recommendations to the Board regarding educational requirements and sub-specialty recognition.

4.11 QUALITY AND INFORMATION TECHNOLOGY COMMITTEE

There shall be a Quality and Information Technology Committee composed of such number of Directors as the Board of Directors may determine from time to time. Such committee shall be responsible for oversight and revision of existing IT platforms such as the ABNS' Practice and Outcomes of Surgical Therapies ("POST") system and data submissions relevant to the ABNS Oral Examination. The Committee also shall consider technology issues relating to the submission, review and storage of practice data and administrative data, as well as other technology issues that arise from time to time in connection with ABNS activities. The Committee will make recommendations to the Board of Directors from time to time regarding new technologies to help the ABNS advance its mission. The Committee shall also make recommendations regarding the use of ABNS POST data, including in cases where third parties have requested the use of such data for research or other purposes.

4.12 ADDITIONAL COMMITTEES

By resolution, the Board of Directors may create such additional Committees as may be deemed expedient from time to time.

4.13 COMMITTEE COMPOSITION

Except as expressly set forth elsewhere herein, the then-current officers of the ABNS shall appoint the Chair of each committee and the members of each committee for the upcoming year. In light of the work load of each committee, some or all committees (other than the Executive Committee) may be comprised of all current Directors.

ARTICLE V RULES AND REGULATIONS

The Board of Directors shall have the authority to adopt such Rules and Regulations as it deems necessary and appropriate, provided that such Rules and Regulations shall be consistent with these Bylaws, the Certificate of Incorporation of the Corporation, and Delaware law.

ARTICLE VI ISSUANCE AND REVOCATION OF CERTIFICATES

6.1 ISSUANCE OF INITIAL CERTIFICATES

The Board shall issue initial Certificates to individuals who:

- (a) Meet all of the Board's credentialing and other requirements for board certification, or have received exemptions from certain of those requirements: and
- (b) Successfully pass (i) the neuroanatomy examination, which must be passed by each resident prior to the resident first taking the ABNS Primary Examination for credit (this requirement applies to all residents taking the Primary Examination for credit for the first time on or after July 1, 2025); (ii) the ABNS Primary Examination (commencing in July 1, 2023, this examination must be passed in residency and prior to the commencement of the chief resident year) and; (iii) the ABNS Oral Examination.

6.1.1 Commencing on July 1, 2017, in addition to their initial Certificate from the ABNS in general neurological surgery, individuals may concurrently apply to receive a separate initial credential in pediatric neurological surgery issued jointly by the ABNS and the ABPNS in addition to their ABNS Certificate. In order to receive the additional credential in pediatric neurological surgery, the individual must, *in addition to meeting the requirements in Section 6.1*: (i) successfully complete a post-residency pediatric neurological surgery fellowship of at least twelve (12) months duration accredited by the Accreditation Council for Pediatric Neurosurgical Fellowships (the "ACPNF"); (ii) successfully pass a primary pediatric neurological surgery written examination following completion of their fellowship and prior to submitting their practice data for approval in connection with their application for the ABNS Oral Examination; (iii) demonstrate through their case submission that a significant portion of their practice is devoted to pediatric patients; (iv) have their credentials approved by the Joint Credentials Committee of the ABNS and the ABPNS, prior to taking and passing the ABNS Oral Examination; and (v) select pediatrics for the subspecialty portion of the ABNS Oral Examination. The ABNS and ABPNS may for time to time in its discretion impose other requirements to obtain or maintain the ABNS/ABPNS credential in pediatric neurosurgery.

6.1.2 The ABNS may from time to time recognize a Diplomate's focused practice in other areas in addition to pediatric neurosurgery, including but not limited to neurocritical care and endovascular surgery. Individuals interested in such recognition of focused practice may concurrently apply to receive a separate initial credential in their area of focused practice in addition to their ABNS Certificate. In order to receive the additional credential, the individual must, *in addition to meeting the requirements in Section 6.1*: (i) successfully complete a fellowship, the length, timing (e.g. partially or fully enfolded with residency, or all post-residency) and accreditation requirements of which may vary by area of focused practice, or demonstrate practice experience that reflects an equivalent level of training; (ii) successfully pass a primary written examination in their area of focused practice, the timing for taking and passing such examination may vary by area of focused practice; (iii) demonstrate through their case submission that a significant portion of their practice is devoted to their applicable area of focused practice; and (iv) select their applicable area of focused practice for the subspecialty portion of the ABNS Oral Examination. The ABNS may for time to time

in its discretion impose other requirements to obtain or maintain the ABNS credential in any ABNS recognized area of focused practice.

6.2 ISSUANCE OF RENEWAL CERTIFICATES

The Board shall issue new time-limited Certificates as defined in the Board's Rules and Regulations to those Diplomates who:

- (a) Both (i) hold time-limited Certificates that are about to expire or have expired, and (ii) have successfully completed all elements of the Board's CC program for the relevant time period or have received exemptions for certain of those requirements; or
- (b) Hold non-time-limited Certificates, but who (i) have been involved in disciplinary proceedings before the Board and in conjunction with such proceedings have been required by the Board to, or have agreed to, enter into the Board's CC program and exchange their non-time-limited Certificates for time-limited Certificates; and (ii) have successfully completed all elements of the Board's CC program for the relevant time period or have received exemptions for certain of those requirements.

6.2.1 Diplomates with both a time-limited Certificate in general neurosurgery issued by the ABNS and a time-limited credential in pediatric neurological surgery issued jointly by the ABNS and the ABPNS, must successfully complete (i) all elements of the ABNS CC program in order to receive a new time-limited ABNS Certificate upon the expiration of their then-current ABNS Certificate; and (ii) all elements of the joint ABNS/ABPNS CC program in order to receive a new jointly issued time-limited ABNS/ABPNS credential upon the expiration of their then-current ABNS/ABPNS Certificate. The requirements of the ABNS CC program and the ABNS/ABPNS CC program shall be largely identical and overlapping (so as to avoid duplication), except that (a) those who seek to successfully complete the ABNS/ABPNS CC program will need to complete the annual Adaptive Learning Tool module focused on pediatric neurological surgery; and (b) those who seek to successfully complete the ABNS/ABPNS CC program in any ten year cycle must, in addition to completing all CC elements that apply to ABNS Diplomates, submit a case log to the ABPNS periodically (which must be approved by the ABPNS) to demonstrate that their practice remains geared to pediatrics.

6.2.2 Diplomates with both a time-limited Certificate in general neurosurgery issued by the ABNS and a time-limited credential in a non-pediatric area of ABNS recognized focused practice (e.g., neurocritical care or endovascular surgery) must successfully complete (i) all elements of the ABNS CC program in order to receive a new time-limited ABNS Certificate upon the expiration of their then-current ABNS Certificate; and (ii) any additional requirements imposed by the ABNS from time to time (which may include without limitation the submission of case logs to confirm the ongoing focus of their practice). Those who seek to retain or renew their credential in a recognized area of focused practice will have their CC Adaptive Learning Tool, if reasonably feasible, geared to their area of focused practice.

6.3 REVOCATION OF CERTIFICATES

The Board of Directors shall have the authority to revoke or suspend any Certificate or credential issued by the Corporation (including credentials issued jointly by the ABNS and the ABPNS), or impose lesser sanctions, if:

- (a) Such Certificate and/or credential was issued contrary to or in violation of any Rule or Regulation of the Board; or
- (b) The person to whom the Certificate and/or credential was issued was not eligible to receive or has since become ineligible to hold such Certificate; or
- (c) The person to whom the Certificate and/or credential was issued made any misstatement of fact to the Board in his or her application or in other material presented to the Board or violated any pledge made in conjunction with any application; or
- (d) The person to whom the Certificate and/or credential was issued is convicted of, or pleads guilty or nolo contendere to any felony or any crime related to the provision of health care services, or is excluded from participation in any federal or State health care program; or
- (e) Any license to practice medicine of the person to whom the Certificate and/or credential was issued is revoked, suspended, placed on probation, restricted in any way, or voluntarily relinquished in order to avoid potential sanctions; or
- (f) The person to whom the Certificate and/or credential was issued is expelled from any of the Nominating Societies, a county medical society, or a state medical association for any reason other than nonpayment of dues or lack of meeting attendance; or
- (g) The person to whom the Certificate was issued has engaged in professional misconduct, a pattern of negligence or other serious misconduct adversely reflecting on professional competence or integrity (which, for avoidance of doubt, may include without limitation performing unnecessary or contraindicated procedures or engaging in intentional or grossly negligent miscoding); or
- (h) The person to whom the Certificate was issued has violated any Rule, Regulation or Code of Ethics provision of the Board or has violated the terms of any written agreement with the Board, including but not limited to any agreement relating to the person's status as "Retired" or "Inactive."
- (i) The person to whom the Certificate was issued has provided a negative reference or complaint to the ABNS regarding a candidate or another Diplomate that is not submitted in good faith (e.g., motivated by economic considerations such as the desire to harm a competitor) and/or is intentionally factually inaccurate or misleading.

ARTICLE VII CANDIDATE AND DIPLOMATE FILES

The contents of current and former candidate and Diplomate files are confidential and are not disclosed to anyone other than the current Board of Directors, employees, and counsel, except as required by law or court order.

ARTICLE VIII AMENDMENTS

These Bylaws may be amended by the unanimous written consent of all of the Directors or by the affirmative vote of two-thirds (2/3) of the entire Board of Directors at any annual, regular, or special meeting, provided that written notice of the proposed amendment shall have been given to all Directors at least twenty (20) days prior thereto.

These Bylaws were updated in May 2022 to include all additions, deletions, and changes approved by the Directors of the American Board of Neurological Surgery since the Bylaws had last been approved in November 2021.

AMERICAN BOARD OF NEUROLOGICAL SURGERY

RULES and REGULATIONS

Table of Contents

RULE I.	CERTIFICATION PROCESS.....	1
1.1	BASIS OF CERTIFICATION.....	1
1.2	RULES AND REGULATIONS	2
RULE II.	EXAMINATION AUTHORITY	2
RULE III.	CERTIFICATES AND ADDITIONAL FOCUSED PRACTICE CREDENTIALS.....	2
3.1	ISSUANCE	2
3.2	JOINT ABNS/ABPNS CREDENTIAL.....	3
3.3	ADDITIONAL ABNS CREDENTIAL IN OTHER AREAS OF FOCUSED PRACTICE ..	4
RULE IV.	TRAINING REQUIREMENTS FOR INITIAL CERTIFICATION.....	4
4.1	PROGRAM ACCREDITATION	4
4.2	TRAINING REQUIREMENTS (FOR CANDIDATES WHO BEGAN TRAINING ON OR AFTER JULY 1, 2013)	5
4.3	ADDITIONAL REQUIREMENTS.	6
4.4	TRAINING REQUIREMENTS (FOR CANDIDATES WHO BEGAN TRAINING ON OR AFTER JULY 1, 2009 BUT BEFORE JULY 1, 2013).....	7
4.5	ADDITIONAL REQUIREMENTS.	8
4.6	TRAINING REQUIREMENTS (FOR CANDIDATES WHO BEGAN TRAINING PRIOR TO JULY 1, 2009)	8
4.7	SPECIAL CONSIDERATIONS IN TRAINING REQUIREMENTS	10
4.8	NOTIFICATION BY PROGRAM DIRECTOR	10
4.9	TRANSFERS AND CREDIT FOR PRIOR TRAINING	10
4.10	NON-STANDARD TRAINING.....	11
4.11	PRECEPTORSHIPS	11
4.12	PROGRAM DEPARTURES.....	11
4.13	GRADUATES FROM CANADIAN PROGRAMS	11
4.14	OSTEOPATHIC PHYSICIANS	11
RULE V.	NEUROANATOMY EXAMINATION; PRIMARY EXAMINATION	13
5.1	NEUROANATOMY EXAMINATION	13
5.2	PRIMARY EXAMINATION; CONTENT	13
5.3	ELIGIBILITY FOR EXAMINATION	13
5.4	INELIGIBLE CANDIDATES	14
5.5	EXAMINATION TAKEN FOR CREDIT TOWARD CERTIFICATION	14
5.6	APPLICATIONS	15
5.7	PLEDGE	15
5.8	REPRODUCTION OF EXAMINATION PROHIBITED	15

5.9	ADDITIONAL REQUIREMENT FOR CANDIDATES SEEKING ADDITIONAL CREDENTIAL IN AN AREA OF ABNS RECOGNIZED FOCUSED PRACTICE	15
RULE VI.	PRACTICE REQUIREMENTS FOR INITIAL CERTIFICATION.....	18
6.1	PRACTICE DATA	18
6.2	REFERENCE LETTERS.....	19
6.3	REVIEW OF PRACTICE.....	20
6.4	LICENSURE.....	20
6.5	HOSPITAL PRIVILEGES.....	20
6.6	PROGRAM DIRECTOR'S ENDORSEMENT	21
6.7	PROFESSIONALISM.....	21
6.8	REPRESENTATIONS TO THE PUBLIC	21
6.9	SCHEDULING FOR ORAL EXAMINATION.....	22
6.10	REQUIREMENTS FOR STATUS AS "TRACKING TOWARD CERTIFICATION" (a/k/a "BOARD ELIGIBLE").....	22
6.11	CREDENTIALS REVIEW FOR CANDIDATES SEEKING ADDITIONAL CREDENTIAL IN PEDIATRIC NEUROLOGICAL SURGERY	25
RULE VII.	PROFESSIONAL CONDUCT AND SATISFACTORY PRACTICE.....	25
7.1	REVIEW OF INFORMATION.....	25
RULE VIII.	APPLICATION REQUIREMENTS FOR INITIAL CERTIFICATION	25
8.1	APPLICATION	25
8.2	PLEDGE.....	27
8.3	ACCOMPANYING MATERIALS.....	28
8.4	EXAMINATION FEE	28
8.5	TIME LIMITS	29
RULE IX.	APPROVAL OF CREDENTIALS	30
9.1	VERIFICATIONS AND INQUIRIES	30
9.2	COMMITTEE REVIEW OF CREDENTIALS.....	30
9.3	BOARD REVIEW OF CREDENTIALS.....	31
9.4	SCHEDULING OF ORAL EXAMINATION	31
9.5	HOSPITAL NOTIFICATIONS	31
RULE X.	APPEAL ON CREDENTIALS	31
10.1	APPEAL OF ADVERSE DETERMINATIONS	31
10.2	DECISIONS ON APPEAL.....	32
10.3	RECONSIDERATION OF APPLICATIONS	32
RULE XI.	THE ORAL EXAMINATION	33
11.1	PURPOSE AND PROCESS.....	33
11.2	REQUIREMENTS FOR RE-EXAMINATION.....	33
11.3	EXCEEDING TIME LIMITS OR REPEAT FAILURES.....	34

11.4	LIMITATION ON REFERRING TO ONESELF AS “BOARD ELIGIBLE” IN CERTAIN CIRCUMSTANCES.....	35
11.5	REPRODUCTION OF EXAMINATION PROHIBITED	36
RULE XII.	CONTINUOUS CERTIFICATION	36
12.1	MANDATORY VERSUS VOLUNTARY PARTICIPATION	36
12.2	ENROLLMENT.....	38
12.3	CONTINUOUS CERTIFICATION CYCLES	38
12.4	CONTINUOUS CERTIFICATION ELEMENTS	38
12.5	PLEDGE	41
12.6	CLASSIFICATIONS	41
12.7	RE-ENTRY PROCESS	46
12.8	UNETHICAL BEHAVIOR	48
12.9	EXEMPTIONS AND EXTENSIONS	49
RULE XIII.	REVOCAION OF A CERTIFICATE	49
13.1	GROUND FOR REVOCATION	49
13.2	PROCEEDINGS.....	50
13.3	LESSER SANCTIONS.....	51
RULE XIV.	NOTIFICATION TO THIRD PARTIES	51
14.1	MATERIAL SUBJECT TO DISCLOSURE IN RARE CIRCUMSTANCES	52
14.2	BOARD’S DISCRETION; NO WAIVER OF PEER REVIEW PRIVILEGE	52
14.3	DISCLOSURES ARISING FROM FAILURE TO COMPLY WITH BOARD DECISIONS.....	52
RULE XV.	CANDIDATE AND DIPLOMATE FILES	52
RULE XVI.	AMENDMENTS.....	52

AMERICAN BOARD OF NEUROLOGICAL SURGERY

RULES and REGULATIONS

RULE I. CERTIFICATION PROCESS

1.1 BASIS OF CERTIFICATION

The primary purposes of the American Board of Neurological Surgery (“ABNS” or the “Board”) are to:

- (a) Review the credentials and practice experience of, and conduct examinations of, eligible candidates who seek certification by the ABNS;
- (b) Issue Certificates to those individuals who meet the Board’s eligibility and other requirements for certification and satisfactorily complete its certification examinations, thereby conferring Diplomate status;
- (c) Issue additional time-limited credentials in certain focused areas of practice (which, in the case of pediatric neurosurgery, will be jointly issued by the ABNS and the American Board of Pediatric Neurosurgery (the “ABPNS”)) to individuals who meet the Board’s eligibility and other requirements for such credentials and satisfactorily complete its examinations relating to such credentials;
- (d) Implement and administer a program for Continuous Certification;
- (e) Issue new time-limited Certificates to Diplomates who successfully complete the Board’s CC program, upon expiration of time-limited Certificates; and
- (f) Issue new time-limited credentials in ABNS-recognized areas of focused practice to Diplomates who meet the Board’s requirements for renewal of such credentials.

1.1.1 Initial certification by the Board is based upon its approval of an applicant's educational and training qualifications, supporting documents from his or her program director, opinions as reflected in the statements of his or her colleagues, licenses to practice medicine, hospital privileges, review and approval by the Professional Practice and Technology Committee of the applicant's practice data, and the applicant's successful completion of written and oral ABNS examinations.

1.1.2 The issuance of additional credentials in certain focused areas of practice is based on fulfilling the requirements set forth in Rule 1.1.1 and also fulfilling any additional requirements mandated by the ABNS (and the ABPNS, as applicable) for recognition in that area of focused practice, which typically will include: (i) successful completion of a fellowship, the length, timing (e.g. partially or fully enfolded with residency, or all post-residency) and accreditation requirements of which may vary by area of focused practice, or the demonstration of practice

experience that reflects an equivalent level of training; (ii) successful completion of an additional primary written examination in the area of focused practice, the timing of taking and passing of which may vary by area of focused practice; (iii) demonstration through practice data that a significant portion of the candidate's then-current practice is devoted to the applicable area of focused practice; and (iv) selection of the applicable area of focused practice for the subspecialty portion of the ABNS Oral Examination.

1.1.3 The issuance of new Certificates by the Board to individuals who have time-limited Certificates is based upon the Diplomate's successful completion of all elements of the ABNS' CC Program within the time frames established by the Board.

1.1.4 The issuance by the Board of new credentials in certain focused areas of practice to individuals who have time-limited focused practice credentials is based on Diplomate's successful completion of any additional or modified elements of the ABNS' CC Program, as mandated by the ABNS from time to time, within the time frames established by the Board, or in the case of new credentials issued jointly by the ABNS and the ABPNS, successful completion of all elements of the joint ABNS/ABPNS CC program, within the time frames established by the Board and the ABPNS.

1.2 RULES AND REGULATIONS

These Rules and Regulations set forth the requirements and procedures for issuance, maintenance and renewal of Certificates, the issuance of additional focused practiced credentials, and the revocation thereof (or the imposition of other sanctions) by the ABNS.

RULE II. EXAMINATION AUTHORITY

The Board shall conduct examinations at such times and at such locations as it deems appropriate. Within a reasonable time after completion of such examinations, each applicant shall be notified by the Secretary of the Board as to the results thereof.

RULE III. CERTIFICATES AND ADDITIONAL FOCUSED PRACTICE CREDENTIALS

A Certificate signifies that, at the time of issue, the recipient fulfilled the requirements for certification by the Board. Certificates shall be in such form as the ABNS shall prescribe from time to time; shall be signed by the Chair, Vice Chair(s), Secretary, and Treasurer; and shall bear thereon the official seal of the Board at the time of certification. Additional focused practice credentials signify that, at the time of issue, the recipient fulfilled the requirements for recognition of focused practice in that area. Additional focused practice credentials shall be in such form as the ABNS (and, in the case of pediatric neurosurgery, the ABPNS) shall prescribe from time to time; shall be signed by the Chair, Vice Chair(s), Secretary, and Treasurer (and, in the case of pediatric neurosurgery, by appropriate officers of the ABPNS); and shall bear thereon the official seal of the Board (and the ABPNS, as applicable) at the time the credential is issued.

3.1 ISSUANCE

A Certificate is issued to candidates who have satisfactorily completed neurosurgical training and practice requirements as prescribed by the Board, who have fulfilled licensure requirements, whose applications (including practice data) and credentials have been approved by the Board, and

who have successfully passed the Board's written and oral examinations. It is the obligation of all applicants/candidates (i.e., those individuals who have submitted applications and are in the certification process) and all Diplomates (i.e., those individuals who have successfully completed the certification process and who have received Certificates) to ensure that the ABNS at all times has their current address on file and to promptly notify the Board of all changes of address.

3.1.1 Certificates issued before 1999 shall not expire and shall be considered non-time-limited Certificates. Diplomates who hold non-time-limited Certificates may be required to exchange such Certificates for time-limited Certificates in the event that they are disciplined by the Board pursuant to the provisions of Rule XIII.

3.1.2 Certificates issued during or after 1999 shall expire ten years after issuance and shall be considered time-limited Certificates. Upon expiration, new 10-year time-limited Certificates shall be issued to those holders of time-limited Certificates who have participated in and timely and successfully completed all elements of the ABNS' CC program.

3.2 JOINT ABNS/ABPNS CREDENTIAL

3.2.1 Commencing on July 1, 2017, in addition to applying to receive an initial Certificate from the ABNS in general neurological surgery, individuals may concurrently apply to receive an additional, separate credential in pediatric neurological surgery issued jointly by (and containing the names and logos of both) the ABNS and the American Board of Pediatric Neurological Surgery (the "ABPNS"). In order to receive the additional ABNS/ABPNS credential, individuals must meet modified or additional requirements, as set forth in these Rules and Regulations.

3.2.2 Neurological surgeons who devote a significant portion of their practice to pediatric cases are encouraged to seek the additional credential from the ABNS/ABPNS in pediatric neurological surgery, in addition to certification from the ABNS in general neurological surgery. However, the absence of an additional credential from the ABNS/ABPNS in pediatric neurological surgery does not imply that a neurological surgeon is not competent to perform pediatric cases. The Certificate from the ABNS in general neurological surgery is given to neurological surgeons who have met ABNS requirements across the full range of neurological surgery practice.

3.2.3 Diplomates with both a time-limited Certificate in general neurosurgery issued by the ABNS and a time-limited additional credential in pediatric neurological surgery issued jointly by the ABNS and the ABPNS, must successfully complete (i) all elements of the ABNS CC program in order to receive a new time-limited ABNS Certificate upon the expiration of their then-current ABNS Certificate; and (ii) all elements of the joint ABNS/ABPNS CC program in order to receive a new jointly issued time-limited ABNS/ABPNS credential upon the expiration of their then-current ABNS/ABPNS credential. The requirements of the ABNS CC program and the ABNS/ABPNS CC program shall be largely identical and overlapping (so as to avoid duplication), except that (a) those who seek to successfully complete the ABNS/ABPNS CC program in any ten year cycle will have their Adaptive Learning Tool, if reasonably feasible, geared to their pediatric practice; and (b) those who seek to successfully complete the ABNS/ABPNS CC cycle must, in addition to completing all CC elements that apply to ABNS Diplomates, submit a case log to the ABPNS periodically (which must be approved by the ABPNS) to demonstrate that their practice remains geared to pediatrics. It is therefore possible that a Diplomate may successfully complete

the ABNS CC program but not the ABNS/ABPNS CC program, in which event the Diplomate would receive a renewal Certificate in general neurological surgery from the ABNS at the end of the ten-year ABNS CC period but not a renewal credential in pediatric neurological surgery from the ABNS/ABPNS at the end of such ten-year ABNS/ABPNS CC period.

3.3 ADDITIONAL ABNS CREDENTIAL IN OTHER AREAS OF FOCUSED PRACTICE

3.3.1 The ABNS may from time to time recognize a Diplomate's focused practice in certain areas other than pediatric neurosurgery, including but not limited to neurocritical care and endovascular surgery. Individuals interested in such recognition of focused practice may concurrently apply to receive a separate initial ABNS credential in their area of focused practice in addition to their general ABNS Certificate. In order to receive the additional credential in their area of focused practice, individuals must meet modified or additional requirements, as set forth in these Rules and Regulations.

3.3.2 Neurological surgeons who devote a significant portion of their practice to areas of focused practice recognized by the ABNS (e.g., neurocritical care and endovascular surgery) are encouraged to seek the additional credential from the ABNS in their area of focused practice, in addition to certification from the ABNS in general neurological surgery. However, the absence of an additional credential from the ABNS in a recognized area of focused practice does not imply that a neurological surgeon is not competent to perform cases in those areas. The Certificate from the ABNS in general neurological surgery is given to neurological surgeons who have met ABNS requirements across the full range of neurological surgery practice.

3.3.3 Diplomates with both a time-limited Certificate in general neurosurgery issued by the ABNS and a time-limited credential in a non-pediatric area of ABNS recognized focused practice (e.g., neurocritical care or endovascular surgery) must successfully complete (i) all elements of the ABNS CC program in order to receive a new time-limited ABNS Certificate upon the expiration of their then-current ABNS Certificate; and (ii) any additional requirements imposed by the ABNS from time to time (which may include without limitation the submission of case logs to confirm the ongoing focus of their practice) in order to receive a new time-limited ABNS credential in their area of focused practice upon the expiration of their then-current ABNS focused practice credential. Those who seek to retain or renew their credential in a recognized area of focused practice will have their CC Adaptive Learning Tool, if reasonably feasible, geared to their area of focused practice. It is therefore possible that a Diplomate may successfully complete the ABNS CC program but not the additional requirements for renewal of his or her additional credential in his or her area of focused practice, in which event the Diplomate would receive a renewal Certificate in general neurological surgery from the ABNS at the end of the ten-year ABNS CC period but not a renewal credential in his or her area of focused practice at the end of such ten-year ABNS CC period.

RULE IV. TRAINING REQUIREMENTS FOR INITIAL CERTIFICATION

4.1 PROGRAM ACCREDITATION

To be eligible to take the oral examination and become certified, an applicant must successfully complete neurosurgical residency training in a program that is accredited by the Accreditation Council for Graduate Medical Education (ACGME) after review and recommendation by the Residency Review Committee for Neurological Surgery (RRC). Any training conducted at an

institution not part of the individual's own training program must be approved in advance in writing by the Board.

4.2 TRAINING REQUIREMENTS (FOR CANDIDATES WHO BEGAN TRAINING ON OR AFTER JULY 1, 2013)

NOTE: The provisions of this Rule 4.2 and Rule 4.3 apply to all applicants who begin post-graduate training on or after July 1, 2013. Applicants who began training between July 1, 2009 and June 30, 2013 must comply instead with the somewhat different requirements set forth in Rules 4.4 and 4.5, and applicants who began training prior to July 1, 2009 must comply instead with the somewhat different requirements set forth in Rule 4.6.

Each applicant must successfully complete eighty-four (84) months of post-graduate (i.e., residency) training. The eighty-four (84) months are comprised of the following:

- (a) A minimum of three (3) months of basic neuroscience education (e.g., neurology, neuro-otology, neuroradiology, neuropathology), which must be taken in the first eighteen (18) months of residency training.
- (b) A minimum of three (3) months training in critical care education relevant to the neurosurgery patient, which must be taken in the first eighteen (18) months of residency training.
- (c) A minimum of six (6) months of structured education in general patient care, which may (but need not) include neurosurgery (e.g. trauma, general surgery, neurosurgery, orthopedic surgery, otolaryngology, plastic surgery).
- (d) Forty-two (42) months of training in clinical neurosurgery, with progressive responsibility culminating in twelve (12) months as chief resident during the last two years of training (PGY-6 or PGY-7). Training in clinical neurosurgery must be progressive and not obtained during repeated short periods in a number of institutions. At least twenty-one (21) months must be obtained in the applicant's primary clinical site.
- (e) The remaining thirty months (30) months ("elective time"), which can be taken at any time subject to the requirements of subsections (a), (b) and (c), must be devoted to elective clinical education or research. At the discretion of the resident's program director, this thirty (30) months may include: (i) additional training in neuro-critical care; (ii) additional training in clinical neurosurgery above the forty-two (42) month minimum set forth in subsection (d); (iii) additional training in neuropathology, neuroradiology or other disciplines related to the nervous system; and/or (iv) research. Applicants shall be expected during the course of their training to acquire basic knowledge and skills in neuropathology and neuroradiology.

4.3 ADDITIONAL REQUIREMENTS.

In addition to meeting the training requirements set forth in Rule 4.2, an applicant's training must comply with the following:

4.3.1 All post-graduate training described in Rule 4.2 must be acquired by the resident as a participant in a neurological surgery training program or programs accredited by the ACGME, and all such training must be under the ultimate direction and control of the resident's neurosurgery program director. However, a training experience of at least 6 months but not more than 12 months may be obtained at an ACGME-approved neurosurgery training program other than the candidate's primary neurosurgery training program, and depending on the particular rotation undertaken at such other training program, the 6-12 months may count toward any part of the 84 month neurosurgical education requirement (i.e., upon approval, the time spent at the non-primary program may be used to fulfill some of the requirements of Rule 4.2(a), (b), (c) or (d), or it may be used as part of elective time). However, time spent at a non-primary program cannot count toward part or all of the chief resident experience. Such a rotation must be requested by the resident's primary neurosurgery program director and approved in advance by the Board. During such a rotation, the applicant shall have all the educational opportunities and responsibilities of a resident in that program and be under the immediate supervision of that neurosurgery program director.

4.3.2 Training time devoted to neuroscience education (Rule 4.2(a)), critical care (Rule 4.2(b)) and/or patient care disciplines related to neurosurgery (Rule 4.2(c)) also may be acquired as a full time resident in conjunction with other ACGME accredited training programs (e.g., ACGME-accredited programs in general surgery and neurology) in the same institution as the resident's neurosurgery program, without the Board's advance approval, so long as such training remains under the ultimate direction and control of the resident's neurosurgery program director. Except as set forth in the preceding sentence, any training undertaken in other than the resident's parent neurosurgery program (including any training undertaken at other training programs pursuant to Rule 4.3.1) shall not count towards fulfilling the requirements of Rule 4.2 unless specifically requested by the resident's neurosurgery program director and approved by the Board in advance of such training.

4.3.3 As senior resident in the PGY-6 or PGY-7 Year, the trainee shall have major responsibility for patient management as deemed appropriate by the neurosurgery program director. The senior resident shall also have administrative responsibilities as designated by the program director.

4.3.4 Commencing July 1, 2017, individuals who wish to receive an additional, initial credential in an ABNS-recognized area of focused practice (e.g., pediatric neurological surgery, neurocritical care, endovascular surgery) must, in addition to the requirements set forth in Rule 4.2 and the other subsections of this Rule 4.3, successfully complete a fellowship in their area of focused practice or demonstrate practice experience that reflects an equivalent level of experience and training in such area. The ABNS shall develop requirements for such fellowships and/or practice experience (e.g., for fellowships such requirements as duration of fellowship, enrolled within residency or not, and any fellowship accreditation requirements; and for a clinical practice track, such requirements as years out of training, proportion of cases devoted to the area of focused practice, and any required references), which requirements may vary depending on the area of

focused practice. For pediatric neurosurgeons, the fellowship requirements shall be developed jointly, and the credential will be issued jointly, by the ABNS and the ABPNS.

4.3.5 Commencing on July 1, 2021, enfolded fellowships (i.e., fellowships taken concurrently with residency training) must be taken after the trainee's chief resident year. As a practical matter, this means that an enfolded fellowship will be possible only in the PGY-7 year and then only if the trainee has been chief resident during his or her PGY-6 year. A focused training experience prior to the chief residency year is considered to be an elective and not a fellowship.

4.3.5.1 The above restriction does not apply to enfolded fellowships in neurocritical care, which may be taken prior to the trainee's chief resident year. In addition, CNS endovascular training requires an initial training experience in the performance of angiography. This training period may occur prior to the chief resident year. The second year of CNS endovascular interventional training, as of July 1, 2021, must occur after the chief resident year, thus PGY-7.

4.3.5.2 For avoidance of doubt, the ABNS does not require fellowships (enfolded or otherwise) as a requirement for initial ABNS certification. However, a fellowship may be required for neurosurgeons who wish to achieve an ABMS "Focused Practice Designation" in certain areas of neurological surgery practice.

4.4 TRAINING REQUIREMENTS (FOR CANDIDATES WHO BEGAN TRAINING ON OR AFTER JULY 1, 2009 BUT BEFORE JULY 1, 2013)

NOTE: The provisions of this Rule 4.4 and Rule 4.5 apply to all applicants who began post-graduate training on or after July 1, 2009 but before July 1, 2013. Applicants who began training on or after July 1, 2013 must comply instead with the somewhat different requirements set forth in Rules 4.2 and 4.3, and applicants who began training prior to July 1, 2009 must comply instead with the somewhat different requirements set forth in Rule 4.6.

Each applicant must successfully complete seventy-two (72) months of post-graduate training. The seventy-two (72) months are comprised of the following:

- (a) A minimum of three (3) months of fundamental (i.e., non-neurosurgical) surgical skills training, which must be taken in the first year of post-graduate training (PGY-1) (an additional three (3) months is recommended but not required).
- (b) Three (3) months training in clinical neurology. It is recommended that this clinical neurology training occur during PGY-1, but it must be completed no later than the end of the third post-graduate year (PGY-3).
- (c) Forty-two (42) months of training in clinical neurosurgery, with progressive responsibility culminating in twelve (12) months as chief resident during the last two years of training (PGY-5 or PGY-6). Training in clinical neurosurgery must be progressive and not obtained during repeated short periods in a number of institutions. At least twenty-one (21) months must be obtained in one institution. Up to six (6) months of clinical neurosurgery training may occur during the PGY-1 Year.

- (d) The remaining twenty-four (24) months (“elective time”) may be taken at any time subject to the requirements of subsections (a), (b) and (c) and must be devoted to aspects of the basic or clinical neurological sciences. At the discretion of the trainee’s program director, this twenty-four (24) months of elective time may include: (i) additional training in clinical neurology above the three-month minimum set forth in sub-section (b); (ii) additional training in clinical neurosurgery above the forty-two (42) month minimum set forth in sub-section (c), including specific areas of interest such as endovascular, neurocritical care and peripheral nerve surgery; (iii) training in neuropathology, neuroradiology or other disciplines related to the nervous system; and/or (iv) research. Applicants shall be expected during the course of their training to acquire basic knowledge and skills in neuropathology and neuroradiology.

4.5 ADDITIONAL REQUIREMENTS.

In addition to meeting the training requirements set forth in Rule 4.4, an applicant’s training must comply with the following:

4.5.1 All post-graduate training described in Rule 4.4 must be acquired by the trainee as a resident in a neurological surgery training program or programs accredited by the ACGME/RRC. All such training must be under the ultimate direction and control of the trainee’s neurosurgery program director. Training time devoted to fundamental surgical skills (Rule 4.4(a)) and neurology (Rule 4.4(b)) may be acquired as a full time resident in conjunction with other ACGME accredited training programs, such as general surgery and neurology, in the same institution as the trainee’s neurosurgery program, so long as such training remains under the ultimate direction and control of the trainee’s neurosurgery program director. Except as set forth in the preceding sentence, any training undertaken in other than the trainee’s parent neurosurgery program shall not count towards fulfilling the requirements of Rule 4.2 unless specifically requested by the trainee’s neurosurgery program director and approved by the Board in writing in advance of such training.

4.5.2 As chief resident in the PGY-5, PGY-6, or (as applicable to a particular residency program) PGY-7 Year, the trainee shall have major responsibility for patient management as deemed appropriate by the neurosurgery program director. The chief resident shall also have administrative responsibilities as designated by the program director.

4.6 TRAINING REQUIREMENTS (FOR CANDIDATES WHO BEGAN TRAINING PRIOR TO JULY 1, 2009)

NOTE: The provisions of this Rule 4.6 apply to applicants who began post-graduate training before July 1, 2009. Applicants who began training on or after July 1, 2009 but before July 1, 2013 must comply instead with the somewhat different requirements set forth in Rules 4.4 and 4.5. Applicants who began training on or after July 1, 2013 must comply instead with the somewhat different requirements set forth in Rules 4.2 and 4.3.

4.6.1 Twelve (12) months must be devoted to acquiring adequate knowledge in fundamental clinical skills. The year of fundamental clinical skills training is preferably taken prior to

beginning neurosurgical residency training; it must be done prior to beginning the third year of neurosurgical training. This training must be acquired in a program accredited by the ACGME. It may be acquired, for instance, by training for one or more years in a general surgery program accredited by the ACGME in the United States.

4.6.1.1 This twelve (12) months of fundamental clinical skills training also may be acquired during the course of training in a neurosurgical residency program accredited by the ACGME. Such training must include not less than six (6) months in surgical disciplines other than neurosurgery. The remaining six (6) months should include other fundamental clinical skills approved by the neurosurgical training program director, but this portion of the year may not include more than three (3) months of neurosurgery, which will not count toward the 36 months described in 4.6.2.1. It may include up to three (3) months of neurology.

4.6.2 Each applicant must complete a minimum of sixty (60) months of training in neurological sciences, in addition to the twelve (12) months of fundamental skills training set forth in Rule 4.6.1.

4.6.2.1 Of the sixty (60) months of training in neurological sciences, at least thirty-six (36) months must be devoted to clinical neurosurgery in a neurosurgical training program or programs accredited by the ACGME, with progressive responsibility culminating in twelve (12) months as most senior/chief resident.

4.6.2.2 As chief resident, the trainee shall have major or primary responsibility for patient management as deemed appropriate by the program director. The senior resident shall also have administrative responsibilities as designated by the program director.

4.6.2.3 Training in clinical neurosurgery must be progressive and not obtained during repeated short periods in a number of institutions. At least twenty-four (24) months of training in clinical neurosurgery must be obtained in one institution.

4.6.2.4 A minimum of three (3) months must be devoted to clinical neurology. This period must be taken as a full time assigned resident in a neurology training program accredited by the ACGME. Six (6) months are recommended, but three (3) months are required. Up to three (3) months may be acquired during the twelve (12) months of training in fundamental clinical skills, thus fulfilling that requirement.

4.6.2.5 The remaining twenty-one (21) or twenty-four (24) months (see 4.6.2.2) must be devoted to aspects of the basic or clinical neurological sciences, which, at the discretion of the program director, may include neurology, neuropathology, neuroradiology, research, additional neurosurgery such as neurocritical care and peripheral nerve surgery, and/or other disciplines related to the nervous system. Trainees shall be expected to acquire basic knowledge and skills in each of these disciplines.

4.6.2.6 Training undertaken during elective time in other than the parent program shall not count toward fulfilling the requirement of 4.6.2.3 unless specifically requested by the trainee's program director and approved by the Board in writing in advance of such training. Thirty-six (36) months of clinical training in neurological surgery must be acquired in a program or programs accredited by the ACGME.

4.7 SPECIAL CONSIDERATIONS IN TRAINING REQUIREMENTS

Modifications of the requirements of Rules 4.2 and 4.3 (or, for candidates who began training prior to July 1, 2013, Rules 4.4, 4.5 and/or 4.6, as applicable) to fulfill specific training goals for an individual resident must be requested in advance by the trainee's neurosurgery program director and must be approved in writing in advance by the Board. Such approvals shall be at the Board's sole discretion. Except in rare and extraordinary circumstances pursuant to Rule 4.10, the Board shall not waive the requirement that a minimum of forty-two (42) months of clinical training in neurological surgery (or thirty-six (36) months for candidates who began training prior to July 1, 2009) must be acquired in a neurosurgical program or programs accredited by the ACGME.

4.8 NOTIFICATION BY PROGRAM DIRECTOR

The program director must notify the Secretary of the Board of each appointment to a neurosurgical training program. The program director shall also indicate to the Board at the time of notification of the appointment whether that trainee is entering the program with the intention of becoming qualified for examination and certification by the ABNS. If so, the program director must inform the trainee of the requirements attendant thereto. As noted in Rules 4.3.1, 4.5.1 and 4.6.2.6, it is the responsibility of the program director to ensure that training outside the trainee's parent program is approved by the Board in writing in advance.

4.9 TRANSFERS AND CREDIT FOR PRIOR TRAINING

Upon recommendation of the program director of a neurosurgical residency program accredited by the ACGME, the Board may at its discretion consider and give retroactive credit to a trainee if the trainee:

- (a) Has had, before entering an accredited neurosurgical training program, substantially more than the prerequisite training in general surgery, medical neurology, or the basic neurological sciences in institutions acceptable to the Board;
- (b) Transfers from one accredited neurosurgical training program to another accredited program with the consent of the directors of both programs and notification to the Board; or
- (c) Transfers from one accredited neurosurgical training program to another accredited program without the consent of one of the program directors provided the Board approves of such transfer.

4.9.1 Credit for time previously spent in an institution or program that is not accredited by the ACGME pursuant to Rule 4.9(a) must be requested in writing by the trainee's program director. Such credit, if granted, will count only towards the trainee's elective time (Rule 4.2(e)), and not toward any core training required pursuant to Rules 4.2(a) through (d).

4.9.2 Before accepting a resident in transfer from another ACGME accredited neurosurgical residency, the new program director shall receive a written evaluation of the resident's past performance from the previous program director(s). The letter to the new program director

should specify the credit for training, both in respect to time and category, that the previous program director is prepared to certify that the trainee has successfully completed. A copy of such statement shall be submitted to the ABNS for the trainee's file. The new program director may or may not honor such credit, depending upon his or her appraisal of the trainee's professional and educational progress in the program to which he or she has transferred. The new program director shall then write to the Board indicating what credit he or she has accepted in the transfer.

4.9.2.1 In the case of a conflict between a program director and a trainee with respect to his or her training and qualifications, the Board may at its sole discretion serve as arbiter. Appeal to the Board may be made by either the program director or the trainee. The decision of the ABNS in such cases shall be final and not subject to further appeal.

4.10 NON-STANDARD TRAINING

At its sole discretion and under extraordinary circumstances, the ABNS may consider training formats not specified in these Rules and Regulations. In rare cases where the applicant's training, practice, and professional stature leave no doubt as to his or her exceptional qualifications, the Board may grant permission for the applicant to be examined for certification.

4.11 PRECEPTORSHIPS

Training by preceptorship is not considered as fulfilling the requirements of these Rules and Regulations. No credit shall be given for any time spent in such training.

4.12 PROGRAM DEPARTURES

An individual who leaves an accredited training program prior to successful completion of all training requirements is considered to be no longer actively involved in the certification process from the time of leaving until resuming formal training in an ACGME accredited program. Oral examination shall be deferred or withheld for a candidate who has been dismissed from a training program until both (a) the candidate successfully completes his or her training requirements, as set forth herein, in an ACGME-accredited program; and (b) the circumstances of the candidate's dismissal have been resolved to the satisfaction of the Board.

4.13 GRADUATES FROM CANADIAN PROGRAMS

Individuals who graduated from Canadian neurosurgical residency training programs may be eligible for ABNS certification provided such individuals entered Canadian neurosurgical training prior to July 16, 1997. These individuals who wish to seek certification by the ABNS must, in addition to satisfying all requirements listed above, obtain a Fellowship in neurosurgery from the Royal College of Surgeons (Canada) before applying for oral examination and certification.

4.14 OSTEOPATHIC PHYSICIANS

4.14.1 Osteopathic Physicians who successfully complete residency training in a program that was accredited, for the entire period of their residency, by the ACGME are eligible to become ABNS Certified. Residents in this category participate in the ABNS Certification process on the same basis and through the same procedures as any other resident who successfully completes an ACGME-accredited training program in neurological surgery.

4.14.2 Osteopathic Physicians who complete residency training in programs that were not accredited by the ACGME at any point during their residency are not eligible to become ABNS Certified unless they complete at least 54 months of training in an ACGME-accredited program. This can only be accomplished through additional years in an ACGME-accredited program.

4.14.3 For Osteopathic Physicians who began residency training in an American Osteopathic Association (“AOA”) accredited residency program which, during the resident’s training period, transitioned to become ACGME accredited, the following applies:

4.14.3.1 The ABNS requires 54 months of core neurosurgery training in an ACGME accredited residency program with 30 months of elective time. Residents who began training in AOA accredited programs that transitioned to ACGME accreditation, and spent a minimum of 54 months in the program after it became ACGME accredited, are considered to have fulfilled the core neurosurgical training requirement and may participate in the usual ABNS certification process, without complying with the additional conditions below. Residents in this category participate in the ABNS Certification process on the same basis and through the same procedures as any other resident who successfully completes an ACGME-accredited training program in neurological surgery.

4.14.3.2 This leaves a small number of residents who began training in AOA accredited programs three to six years prior to conversion to ACGME accreditation of their program. It is recognized that the AOA accredited programs that have successfully converted to ACGME accreditation devoted significant effort to programmatic improvement in the years prior to ACGME accreditation and that a resident’s participation in the program in the years leading up to ACGME accreditation has educational value that should be acknowledged for ABNS Certification purposes. The ABNS therefore has determined that residents who spend at least 24 months (but less than 54 months) in an ACGME accredited program be allowed to participate in in the ABNS Certification process, subject to the following conditions:

- (a) The resident must have spent the entirety of his or her training at the program that converted from AOA to ACGME accreditation;
- (b) The resident must meet or exceed all ACGME Neurological Surgery case minimum requirements and pass the ABNS written examination during residency;
- (c) The resident must provide a letter from the ACGME program director to the ABNS describing the educational background of the candidate and attesting to the candidate’s suitability to participate in the ABNS Certification process;
- (d) The ACGME program director must also communicate with the ACGME Residency Review Committee for Neurological Surgery that the request to the ABNS has been made; and
- (e) This exception only applies to residents in AOA programs that convert to ACGME accreditation on or before June 30, 2020.

4.14.3.3 Finally, residents who began training in an AOA accredited program and spend less than 24 months in the program following ACGME accreditation can become eligible for ABNS Certification only by completing at least 54 months of training in an ACGME-accredited program. This can be accomplished through additional years either at their newly ACGME-accredited program or at another ACGME-accredited program.

RULE V. NEUROANATOMY EXAMINATION; PRIMARY EXAMINATION

5.1 NEUROANATOMY EXAMINATION

Each resident must pass the ABNS' written examination in neuroanatomy prior to the date that the resident first takes the ABNS' Primary Examination for credit. This requirement applies to all residents who first take the ABNS' Primary Examination for credit on or after July 1, 2025,

5.1.1 The ABNS recommends that residents take and pass the neuroanatomy examination no later than their PGY2 year, but this is not required.

5.1.2 Residents taking the neuroanatomy examination must sign the following pledge:

PLEDGE

1. *I understand and agree that no neuroanatomy examination questions may be recorded, copied, and/or reproduced in any form, including reproducing memorized items, in part or in whole by any individual or organization without the written permission of the American Board of Neurological Surgery. I hereby represent that I will not reproduce any examination questions and that, in preparation for the neuroanatomy examination, I have not and will not use or review questions that may have been reproduced by others without permission. I further understand and agree that violation of this pledge may cause me to be disqualified from the examination and/or to be ineligible ever to become certified.*

2. *I agree that the Board and/or its test administration/scoring service may release the results of the neuroanatomy examination to my program director.*

5.2 PRIMARY EXAMINATION; CONTENT

Each applicant for initial Certification must successfully pass for credit toward certification the Primary Examination. This Examination includes material on fundamental clinical skills, neuroanatomy, neurobiology, neurocritical care, neuroimaging, neurology, neuropathology, neuropharmacology, neurophysiology, neurosurgery, and other relevant disciplines deemed suitable and appropriate by the Board.

5.3 ELIGIBILITY FOR EXAMINATION

The Primary Examination is open to all residents (beginning in the PGY-1 year) in neurosurgical training programs accredited by the ACGME. Any resident in such a training program may take the Primary Examination for self-assessment or credit toward certification as determined by the resident's program director. Individuals beginning neurosurgical residency training after June 30, 1998 must pass the Primary Examination for credit during residency in order to complete

training. Those individuals who began training after June 30, 1998 but do not pass the Primary Examination when taken for credit while in the residency program are not considered by the Board to be involved in the certification process. In addition, commencing July 1, 2023, individuals must pass the Primary Examination for credit prior to commencing their chief resident year. Any resident who serves as chief resident on or after July 1, 2023 and who has not successfully passed the Primary Examination for credit prior to commencing his or her chief resident year will not be considered by the Board to be in the certification process.

5.3.1 The Primary Examination may also be taken for self-assessment or for credit by neurosurgeons who began neurosurgical residency training before July 1, 1998 and who have successfully completed ACGME accredited neurosurgical residency training programs. Such individuals who do not pass the Primary Examination when taken for credit within two (2) years after completing neurosurgical residency training are no longer considered by the Board to be actively involved in the certification process.

5.3.2 Graduates of Canadian neurosurgical residency training programs who began their first year of neurosurgical residency before July 16, 1997 are eligible to take the Primary Examination for self-assessment or for credit, provided they fulfill all of the training requirements as set out in Rule IV above. Such individuals who do not pass the Primary Examination when taken for credit within two (2) years after completing neurosurgical residency training are no longer considered by the Board to be actively involved in the certification process.

5.3.3 Individuals who are no longer eligible to take the Oral Examination because (a) the time limits for taking it have expired (see Rules 8.5.1 and 11.2); or (b) because they have failed the Oral Examination three (3) or more times (see Rule 11.3); or (c) because they have failed to complete the certification process within seven (7) years of completing residency (see Rule 11.3); or (d) because their credentials have been rejected (see Rule 9.3 and Article X), are eligible to re-take the Primary Examination for credit toward certification. See Rule 11.4 for limitations on how such individuals may refer to themselves after losing their eligibility to take the Oral Examination.

5.3.4 Individuals whose time-limited Certificates have expired and who have not been successful and/or timely in completing all elements of the Board's CC program (and who fail to successfully complete the re-instatement process set forth in Rule 12.7) are eligible to re-take the Primary Examination for credit toward certification. But see Rule 11.4 for limitations on how such individuals may refer to themselves after expiration of their time-limited Certificates.

5.4 INELIGIBLE CANDIDATES

Individuals who do not meet the applicable eligibility criteria set forth in Rules 5.3, 5.3.1, 5.3.2, 5.3.3 or 5.3.4 are not eligible to take the Primary Examination.

5.5 EXAMINATION TAKEN FOR CREDIT TOWARD CERTIFICATION

Only by passing the Primary Examination when it has been designated as being taken for credit toward certification shall the candidate fulfill the requirements of Rule 5.2.

5.6 APPLICATIONS

Any individual qualified to take the Primary Examination, whether for credit or self-assessment, may do so by requesting an application from his or her program director or directly from the Board. The individual must mark the application to indicate whether the Examination will be taken for self-assessment or credit, and whether any request for accommodation is being made under the Americans with Disabilities Act. Resident applications must be signed by the resident and his or her program director. The signed and completed applications must be sent to the Board prior to the application deadline, along with a fee in the amount that has been designated by the ABNS as being in effect at that time. Such fee will not be refunded even if the applicant fails to appear for or fails the examination.

5.7 PLEDGE

Each individual applicant must sign a pledge when applying to take the Primary Examination. This pledge reads as follows:

PLEDGE

- 1. I understand and agree that taking the Primary Examination does not bind the American Board of Neurological Surgery to accept my credentials for the final examination leading to certification. I further agree to be bound by the ruling of the ABNS regarding my credentials irrespective of my score on the Primary Examination.*
- 2. I understand and agree that no Primary Examination questions may be recorded, copied, and/or reproduced in any form, including reproducing memorized items, in part or in whole by any individual or organization without the written permission of the American Board of Neurological Surgery. I hereby represent that I will not reproduce any examination questions and that, in preparation for the Primary Examination, I have not and will not use or review questions that may have been reproduced by others without permission. I further understand and agree that violation of this pledge may cause me to be disqualified from the examination, to have any Certificate revoked, and/or to be ineligible ever to become certified.*
- 3. I agree that the Board and/or the National Board of Medical Examiners (or other test administration/scoring service) may release the results of this Examination to my program director.*

5.8 REPRODUCTION OF EXAMINATION PROHIBITED

The Primary Examination may not be reproduced or copied in any form, in part or in whole, by any individual or organization without the written permission of the Board.

5.9 ADDITIONAL REQUIREMENT FOR CANDIDATES SEEKING ADDITIONAL CREDENTIAL IN AN AREA OF ABNS RECOGNIZED FOCUSED PRACTICE

In addition to passing the ABNS' Primary Examination, individuals who seek to receive an additional initial credential in an ABNS-recognized area of focused practice (e.g., pediatric neurological surgery, neurocritical care, endovascular surgery) also must pass a Written Focused Practice Examination. Except for graduates of Canadian neurosurgical residency training programs

who met the criteria set forth in Rule 5.9.3, in order to be eligible to take the Written Focused Practice Examination, a candidate must have first successfully passed the ABNS Primary Examination. Depending on the area of focused practice, the ABNS may require the Written Focused Practice Examination to be successfully passed during the individual's fellowship (as described in Rule 4.3.4), or the ABNS may permit the Written Focused Practice Examination to be taken within some time period after the individual has successfully completed his or her fellowship. For "practice track" candidates for a focused practice credential, the ABNS shall determine when the Written Focused Practice Examination must be taken and passed. For pediatric neurosurgeons, the Written Focused Practice Examination will be jointly developed by, and the credential in focused practice will be jointly issued by, the ABNS and the ABPNS.

5.9.1 The Written Focused Practice Examination must be taken for credit, and must be passed prior to the candidate's submission of his or her practice data pursuant to Rule 6.1 in conjunction with his or her application for the ABNS Oral Examination (except that the ABNS, in its sole discretion, may allow candidates who were in the certification process as of July 1, 2017 to take the Written Focused Practice Examination after they have submitted their practice data, subject to the provisions of Rule 6.1.4.1). Applicants who do not successfully pass the Written Focused Practice Examination within the timeframes mandated by the ABNS for a particular area of focused practice (or mandated by the ABNS and the ABPNS for pediatric neurological surgery), or who fail the Written Focused Practice Examination twice, will not be eligible to receive an additional initial credential in their area of focused practice, but such candidates will remain eligible to receive ABNS Certification if they have successfully passed the ABNS Primary Examination and meet all other requirements for ABNS Certification.

5.9.2 If individuals are required to retake the ABNS Primary Examination (after previously successfully passing both the ABNS Primary Examination and a Written Focused Practice Examination) due to the circumstances set forth in Rule 5.3.3 or 5.3.4, and if such individuals wish seek to receive an additional initial credential in an ABNS-recognized area of focused practice (with the credential being jointly issued by the ABNS and the ABPNS in the case of pediatric neurological surgery), then such individuals also must retake and successfully pass the Written Focused Practice Examination in their area of focused practice. In such circumstances, the Written Focused Practice Examination must be passed within the first two (2) attempts and prior to the candidate's submission of new practice data pursuant to Rule 6.1 in conjunction with his or her new application for the ABNS Oral Examination. For individuals in this circumstance, the restrictions set forth in Rule 11.4 will apply unless and until the individuals successfully complete all elements of the Certification process, including passing the Oral Examination. If an individual in this circumstance re-passes the ABNS Primary Examination but fails to successfully re-pass the Written Focused Practice Examination within the required timeframes set forth in this Rule 5.9.2, the individual will not be eligible to receive an additional initial credential in an ABNS-recognized area of focused practice, but such individual will remain eligible to receive ABNS Certification if he/she successfully completes all elements of the ABNS Certification process, including passing the Oral Examination.

5.9.3 Graduates of Canadian neurosurgical residency training programs who successfully complete a post-residency pediatric neurological surgery fellowship as described in Rule 4.3.4 are eligible to take the Pediatric Written Focused Practice Examination, which must be successfully passed within the first two (2) attempts and after completing their post-residency pediatric neurological surgery fellowship. Such individuals shall not be eligible for ABNS certification

(unless they began their first year of neurosurgical residency before July 16, 1997 and successfully passed the ABNS Primary Examination when taken for credit within two (2) years after completing neurosurgical residency training), but such individuals may be eligible for a credential in pediatric neurological surgery by the ABPNS and the Royal College of Physician and Surgeons of Canada (the "RCPSC") if they successfully pass the Pediatric Written Focused Practice Examination within the first two (2) attempts after completing their post-residency pediatric neurological surgery fellowship and if they meet the other requirements of the RCPSC and the ABPNS for obtaining such credential.

5.9.4 Any individual qualified to take a Written Focused Practice Examination may do so by requesting an application from the ABNS. The application must indicate whether any request for accommodation is being made under the Americans with Disabilities Act. The signed and completed applications must be sent to the ABNS prior to the application deadline in each year, along with a fee in the amount that has been designated by the ABNS (and the ABPNS in the case of the Pediatric Written Focused Practice Examination) as being in effect at that time. Such fee will not be refunded even if the applicant fails to appear for or fails the examination.

5.9.5 Each individual applicant must sign a pledge when applying to take the Written Focused Practice Examination. This pledge reads as follows:

PLEDGE

1. *I understand and agree that taking the Written Focused Practice Examination does not bind the American Board of Neurological Surgery (or, as applicable, the American Board of Pediatric Neurological Surgery or the Royal College of Physician and Surgeons of Canada) to accept my credentials for the final oral examination leading to Certification. I further agree to be bound by the rulings of the American Board of Neurological Surgery (and, as applicable, the American Board of Pediatric Neurological Surgery and/or the Royal College of Physician and Surgeons of Canada) regarding my credentials irrespective of my score on the Written Focused Practice Examination.*

2. *I understand and agree that no Written Focused Practice Examination questions may be recorded, copied, and/or reproduced in any form, including reproducing memorized items, in part or in whole by any individual or organization without the written permission of the American Board of Neurological Surgery (and, as applicable, the American Board of Pediatric Neurological Surgery). I hereby represent that I will not reproduce any examination questions and that, in preparation for the Written Focused Practice Examination, I have not and will not use or review questions that may have been reproduced by others without permission. I further understand and agree that violation of this pledge may cause me to be disqualified from the examination, to have any ABNS, ABNS/ABPNS, or ABPNS/RCPSC Certificate or credential revoked, and/or to be ineligible ever to become Certified by, or receive additional focused practice credentials from, those organizations.*

3. *I agree that the American Board of Neurological Surgery (and, as applicable, the American Board of Pediatric Neurological Surgery and the Royal College of Physicians and Surgeons of Canada) and/or the National Board of Medical Examiners (or other test*

administration/scoring service) may release the results of this Examination to my fellowship director.

5.9.6 The Written Focused Practice Examination may not be reproduced or copied in any form, in part or in whole, by any individual or organization without the written permission of the ABNS (and, as applicable, the ABPNS).

RULE VI. PRACTICE REQUIREMENTS FOR INITIAL CERTIFICATION

6.1 PRACTICE DATA

6.1.1 Each applicant for an initial Certificate must submit to the Board a chronological, consecutive list of either one hundred fifteen (115) or one hundred twenty-five (125) major surgical cases for which the applicant was the responsible surgeon, excluding minor procedures (a list of minor procedures that should be excluded from the applicant's data shall be maintained by the Board and made available to candidates). Please see Rule 6.10 for a description of whether one hundred fifteen (115) or one hundred twenty-five (125) cases are required. Each applicant's list of consecutive surgical cases should include all cases performed by the candidate during the period logged but must include at least one hundred fifteen (115) or one hundred twenty-five (125) cases (as applicable) where the patient was seen for follow-up at three (3) months, except where the patient was lost to follow-up due to death, patient relocation or other legitimate reasons (and even then the ABNS would typically expect to see no more than 10% of the candidate's cases lost to follow-up for legitimate reasons). If a candidate has an excessive number of cases lost to follow-up, he or she may be required to submit additional cases in order to have a sufficient number that include three (3) month follow-up).

6.1.2 All cases on the consecutive case list must have been performed over a period of not more than eighteen (18) months, although the three (3) month follow-up may be performed outside the eighteen (18) month window. Recognizing that individual patients may require more than one surgery during the collection period, such "staged procedures" will count towards the total. Note, however, that (a) complication management/revision ("take back" surgery) is considered an extension of the original operation and these procedures are not counted towards the 115 or 125 total; and (b) candidates must present clinical data from a minimum of 90 or 100 (as applicable, see Rule 6.10) unique patient encounters. As such, the total number of submitted surgical procedures may exceed 115 or 125, as applicable. Each applicant's list shall include information as determined by the Board, and such information shall be presented in a format prescribed by the Board. Data should be sent to the Board as soon as one hundred fifteen (115) or one hundred twenty-five (125) cases, as applicable (with a minimum of 90 or 100, as applicable, unique patient encounters) with three (3) month follow-up have been logged.

6.1.3 Applicants may not include cases performed during residency or any period of fellowships, even if such cases do not relate to the fellowship. Please see Rule 11.2.1 regarding the optional submission of additional practice data by those candidates who fail the oral examination on their first and, if applicable, second attempts.

6.1.4 For individuals who seek concurrently to also receive an additional initial credential in an ABNS-recognized area of focused practice (e.g., pediatric neurological surgery, neurocritical care, endovascular surgery), their submitted cases must meet the requirements set by

the ABNS (or set jointly by the ABNS and ABPNS in the case of pediatric neurological surgery), which requirements may, and likely will, mandate that a certain number or percentage of the 115 or 125 (as applicable) cases be cases in the individual's area of focused practice.

6.1.4.1 For candidates who (a) were in the certification process as of July 1, 2017; (b) wish to receive an additional initial credential in an ABNS-recognized area of focused practice; (c) had already submitted their cases prior to the ABNS' establishment of additional case log requirements for their area of focused practice; and (d) had their submitted case logs reviewed and approved by the ABNS, the ABNS in its sole discretion may allow such candidates to take the oral examination based on their submitted cases (so long as such candidates meet all other prerequisites for taking the oral examination as set forth herein). Such candidates may then submit additional cases in their area of focused practice (in accordance with the case log requirements area of focused practice established by the ABNS pursuant to Rule 6.4.1) after passing the oral examination in order to qualify for and receive the additional credential in their area of focused practice. In accordance with Rule 11.1, candidates in this category must elect their area of focused practice for the subspecialty session of the oral examination.

6.1.5 The list of patients shall be verified as to its essential accuracy by the candidate and by an individual or individuals designated by the Board at each of the hospitals in which the applicant practices. The Board at its sole discretion may perform an audit to confirm the accuracy of an applicant's practice data. Inaccuracies in practice data can result in sanctions against the candidate in the Board's sole discretion, including but not limited to permanent exclusion from the certification process.

6.1.6 In rare cases based on exceptional circumstances, the Board in its sole discretion may waive or modify certain requirements relating to the submission of case data, or extend the time period in which such cases must be collected. As examples, applicants in military service may have requirements related to three (3) month follow-up modified or waived and applicants that have taken time off for legitimate family or medical leave reasons may be granted additional time (i.e., more than 18 months) to collect their 115 or 125 (as applicable) cases. For individuals who seek concurrently to also receive an additional initial credential in pediatric neurological surgery, the decision to, waive, modify or extend requirements relating to the submission of case data shall be made by the Joint Credentials Committee of the ABNS and the ABPNS, as described in Rule 6.11.

6.2 REFERENCE LETTERS

The applicant shall supply names and addresses of three (3) or more physicians with whom the applicant has had professional contact to attest to the quality of his or her professional conduct for twelve (12) consecutive months of practice. At least two (2) of these physicians shall be neurosurgeons who practice in the applicant's community; at least one of these must be a Diplomate of the Board.

6.2.1 The Secretary will request reference letters from these physicians and others at the discretion of the Board. If, by virtue of the content of these letters or for any other reason, the ABNS has concern about the applicant's professional practice and/or conduct, the Board may seek additional information from other sources, e.g., licensing bodies, health care facilities,

medical societies, etc. Should concern still remain, the Board may, at its sole discretion, send representatives to call upon the applicant and review his or her practice.

6.3 REVIEW OF PRACTICE

An applicant's professional practice and conduct, as reflected by letters, practice data, and other information submitted to the Board, shall be reviewed by the Credentials Committee and approved by the Board of Directors prior to scheduling the applicant for oral examination.

6.4 LICENSURE

In order to take the Oral Examination and be eligible to earn a Certificate, all of the applicant's medical licenses must be full and unrestricted, and the applicant must be licensed in all states, provinces and/or countries in which he or she actively practices. In addition, the applicant must not be involved in any disciplinary proceedings before any licensing body that could result in the loss or restriction of any of the applicant's licenses. For purposes of this Rule 6.4, "restriction" shall mean that a license has been revoked, surrendered in lieu of disciplinary proceedings, suspended, placed on probation, or subject to special conditions or requirements.

6.4.1 In the course of its evaluation of professional practice, the ABNS may investigate circumstances relative to any withdrawal, suspension, restriction, revocation, or relinquishment of a candidate's license to practice medicine. The Board may withhold approval for oral examination until such time as said circumstances have been resolved to the satisfaction of the Board.

6.4.2 It is the responsibility of the applicant to notify the Board of any actual or threatened loss or restriction of his or her medical license(s). Any previous actions resulting in the loss or restriction of the applicant's license must be noted on the application materials. After the candidate's application has been submitted but prior to the date the applicant is granted certification by the Board, the applicant must notify the Board in writing within ten (10) days of the date the applicant becomes aware of any new loss or restriction imposed or proposed.

6.5 HOSPITAL PRIVILEGES

When credentials are submitted for evaluation and at all times thereafter throughout the certification process, each applicant must have unrestricted hospital staff privileges for neurosurgical practice. Such privileges need not encompass the full range of neurosurgery; however, such privileges must encompass the applicant's scope of practice, must be held in all hospitals in which he or she cares for patients, must be unrestricted in respect to each hospital's usual requirements for a neurosurgeon pending certification, and must be unencumbered by any official hospital or medical staff proceeding that threaten their continuation. For the purposes of this Rule 6.5, "encumbrance" shall include any temporary or permanent relinquishment, restriction, withholding, or withdrawal of privileges in any hospital in which the applicant cares or has cared for patients, including relinquishment, withdrawal, or non-renewal undertaken in settlement of (or to avoid) formal proceedings by a hospital or medical staff.

6.5.1 If the applicant's privileges to practice at any institution have ever been, are, or become restricted or encumbered at any time prior to certification, the Board may investigate

the circumstances surrounding such events. Based on the findings of its investigation, the Board will make a determination as to whether the applicant may proceed with the certification process, or whether any portion of the process, including the oral examination, shall be deferred or withheld.

6.5.2 It is the responsibility of the applicant to notify the ABNS of any actual or threatened restriction or encumbrance on his or her hospital privileges. All such previous actions must be noted on application materials. After the candidate's application is submitted but prior to the date the applicant is granted certification by the Board, the applicant must also notify the Board in writing within ten (10) days of the date the applicant becomes aware of any current or new encumbrance (whether actual or threatened) imposed or proposed.

6.6 PROGRAM DIRECTOR'S ENDORSEMENT

Prior to acceptance of a candidate for oral examination, the Board requires a statement from his or her program director to the effect that the:

- (a) Candidate has fulfilled the professional training requirements of the Board;
- (b) Candidate's performance in the program has been satisfactory in the program director's opinion; and
- (c) Program director recommends the candidate as professionally competent for the independent practice of neurological surgery and suitable for consideration by the ABNS for examination.

6.7 PROFESSIONALISM

During the review of a candidate's credentials, the Board will consider the candidate's professionalism. This may take the form of a review of: unusual practice patterns; coding or billing issues; interactions with colleagues or staff; investigations by local authorities or media; or other indications of potentially abusive or unprofessional behavior. The results of any such review will be evaluated by the Board as part of the entire credentialing package, and behavior deemed to be detrimental to the reputation of the Board and/or its Diplomates, or inconsistent with the practice of neurosurgery at the requisite level of professionalism, may result in an adverse determination pursuant to Rules 9.2 and 9.3. The Board also may consider any additional information it receives after a candidate's credentials have been reviewed initially, but prior to the candidate's certification, and as a result of such subsequent information the Board may modify its initial decision regarding the candidate's credentials.

6.8 REPRESENTATIONS TO THE PUBLIC

Individuals who are not yet certified may not hold themselves out to the public as certified by the ABNS nor mislead the public into believing that they are certified by the ABNS. A physician who is not yet certified by the ABNS but has been certified by another certifying body must indicate in any advertisement or marketing material the full legal name of that certifying body. The ABNS in its discretion may permanently exclude from the certification process, or take other appropriate action against, any individual who is not certified by the ABNS but holds himself or herself out to the public as simply "Board Certified," or who uses other potentially misleading phrases. "Other appropriate

action” may include without limitation informing appropriate entities of the misrepresentation (including but not limited to state licensing boards, hospitals and other providers, managed care entities and other payors, and state and federal enforcement authorities), as well as revocation of a Diplomate’s Certificate if the misleading behavior is not discovered until after the individual’s initial certification. Prior to taking action, the Board may in its discretion give the affected individual an opportunity to explain the misrepresentation

6.9 SCHEDULING FOR ORAL EXAMINATION

The Board shall not schedule a candidate for oral examination until it is satisfied that the candidate has satisfactorily completed training requirements.

6.10 REQUIREMENTS FOR STATUS AS “TRACKING TOWARD CERTIFICATION” (a/k/a “BOARD ELIGIBLE”)

Individuals who have passed the Board’s primary (written) exam for credit during residency and have successfully completed an ACGME-accredited residency program prior to June 30, 2021 are considered to be “tracking toward Certification” (also referred to as “Board Eligible”), and may hold themselves out to the public as such, until they either successfully complete the certification process (at which juncture they become “Certified”) or have exited the certification process for one of the reasons set forth in Rule 11.4. However, commencing with candidates who complete residency on or after June 30, 2021, the following additional rules shall apply:

6.10.1 In order for a candidate to be considered “tracking toward Certification” (also referred to as “Board Eligible”), and be permitted to hold themselves out to the public as such, in addition to having passed the Board’s primary (written) exam for credit during residency and having successfully completed an ACGME-accredited residency program, the candidate must:

- (a) register with the ABNS and establish a case log account in the ABNS’ Practice and Outcomes of Surgical Therapies (“POST”) data log system prior to the completion of residency;
- (b) enter at least ten (10) complete consecutive cases into ABNS POST within six (6) months of completion of residency or completion of an approved fellowship; and
- (c) register for the ABNS’ “Continuous Certification” program, as further described in Rule XII, no later than the completion of residency; commence participating in the Continuous Certification program no later than the first January 1 following the completion of residency; and remain current at all times on all annual requirements for participation in Continuous Certification (notwithstanding any grace periods or exceptions that otherwise would apply pursuant to Rule XII).

6.10.2 The ten (10) cases submitted pursuant to Rule 6.10.1(b) will be reviewed by the Board (i) to ensure that the candidate is entering his or her cases with the appropriate level of detail and imaging; and (ii) to determine whether there are any apparent

concerns regarding reporting accuracy, practice quality, safety or indications for surgery. The cases are subject to audit to ensure they are consecutive.

- (a) If the ten (10) cases are approved by the Board (i.e., do not fall into one of the categories set forth in sub-sections (b) or (c), below), the candidate will be required to submit only one hundred fifteen (115) cases as part of his or her oral examination application pursuant Rule 6.1.1 (with at least ninety (90) unique patient encounters). For avoidance of doubt, the one hundred fifteen (115) cases must be consecutive with one another but need not be consecutive to the first ten (10) cases submitted pursuant to Rule 6.10.1(b). If the ten (10) cases are not approved by the Board (i.e., if they fall into one of the categories set forth in sub-sections (b) or (c), below), the candidate will be required to submit one hundred twenty-five (125) cases, with at least one hundred (100) unique patient encounters, as part of his or her oral examination application pursuant Rule 6.1.1 (which cases again must be consecutive with one another but need not be consecutive to the first ten (10) cases submitted pursuant to Rule 6.10.1(b)).
- (b) Candidates who are not entering their case data correctly will be counseled informally on how to do so. If the review of the cases raises concerns about the candidate's practice, the Board in its discretion may require the candidate to undergo monitoring or additional training or impose other requirements in order for the candidate to retain his or her status as tracking toward Certification.
- (c) In rare circumstances where the initial case data raises serious concerns about safety, the Board may take any action it deems appropriate, including informing third parties pursuant to Rule XIV. Similarly, in those instances or other rare circumstances where a candidate's initial ten (10) cases are alarming for any reason, the Board may determine that the candidate should no longer be considered "tracking toward Certification," and/or that the candidate should be permanently precluded from the Certification process, but the candidate will be entitled to a hearing pursuant to Rule 10.1 before such decision is implemented.

6.10.3 Candidates will be considered "tracking toward Certification" (i.e., "Board Eligible") commencing at the time they complete residency, and will continue to maintain that status so long as they timely fulfill all of the requirements set forth in Rule 6.10.1 (except in rare cases as set forth in Rule 6.10.2(c)) and until they either successfully complete the certification process (at which juncture they become "Certified") or have exited the certification process for one of the reasons set forth in Rule 11.4.

- (a) If at any time, a candidate fails to timely complete any of the requirements set forth in Section 6.10.1 (i.e., fails to log ten (10)

cases into ABNS POST within six months of completing training; fails to timely register for Continuous Certification; fails in any year to complete the annual Continuous Certification requirements), he or she will be so notified by the Board, and will be given three (3) months following such notification to come into compliance with all requirements.

- (b) Any candidate who fails to come into compliance with all such requirements within the additional three (3) month notice period will then cease to be tracking toward Certification and may not hold themselves out to patients, hospitals, other health facilities, employers, medical societies, associations, payors, or the public as “tracking toward certification,” “Board Eligible,” “in the certification process” or words to that effect. In addition, at that juncture the ABNS shall notify the candidate’s hospital Chief of Staff (if known) that the candidate is no longer tracking toward certification/Board Eligible.

6.10.4 Candidates who cease to be tracking toward Certification/Board Eligible due to failure to meet the requirements set forth in Rule 6.10.1 within the time periods set forth in Rules 6.10.1 and 6.10.3. (i.e., within nine (9) months of completion of residency or completion of an approved fellowship) will be able to re-enter the process by (a) coming into compliance (e.g., logging at least 10 cases into ABNS POST and commencing participation in Continuous Certification); and (b) paying such fine as may be established by the Board from time to time. Individuals must complete the re-entry process within six (6) months of the date they initially cease to be tracking toward Certification/Board Eligible pursuant to Rule 6.10.3(b) (i.e., within one (1) year of completion of residency or completion of an approved fellowship). Failure to complete the process within one (1) year of completion of residency or completion of an approved fellowship will require the candidate to commence the entire Certification process anew, beginning with passing the primary exam. Moreover, candidates may re-enter the process only once after failing to meet the requirements set forth in Rule 6.10.1 (a second failure to comply with the requirements will require the candidate to commence the entire Certification process anew, beginning with passing the primary exam). Candidates so required to recommence the entire process pursuant to this Rule 6.10.4 shall still be required to pay the re-entry fine and also will be subject to the provisions of Rule 11.4.

6.10.5 Candidates may petition the Board for extensions of time to comply with one or more of the requirements set forth in Rule 6.10.1, or in exceptional circumstances for waiver of one or more of those requirements. The Board in its discretion may grant such requests upon a showing of good cause.

6.10.6 Individuals who timely complete the requirements of Rule 6.10.1 shall be listed on the ABNS’ website as “Tracking Toward Certification” until such time that they either successfully complete the Certification process or fall out of the process for one of the reasons set forth in Rule 11.4. Individuals who fail to timely complete the requirements of Rule 6.10.1 shall not be listed on the ABNS’ website until such time (if ever) as they timely re-enter the process pursuant to Rule 6.10.4.

6.11 CREDENTIALS REVIEW FOR CANDIDATES SEEKING ADDITIONAL CREDENTIAL IN PEDIATRIC NEUROLOGICAL SURGERY

For individuals who seek concurrently to receive an additional initial credential in pediatric neurological surgery (with such additional credential jointly issued by the ABNS and the ABPNS), the review of the candidate's case data, references, practice, licensure, hospital privileges, program director's statement and professionalism, which otherwise would be performed by the ABNS or its Credentials Committee, will be performed by a Joint Credentials Committee of the ABNS and the ABPNS, comprised of (i) all Directors of the ABPNS; and (ii) the ABNS Director who was nominated for his or her seat on the ABNS Board by the American Society of Pediatric Neurosurgeons.

RULE VII. PROFESSIONAL CONDUCT AND SATISFACTORY PRACTICE

7.1 REVIEW OF INFORMATION

If the Board (including through the Joint Credentials Committee, as applicable, for individuals who seek concurrently to receive an additional initial credential in pediatric neurological surgery) receives information that calls into question the standards of professional practice and/or conduct of any applicant, that applicant will be notified of the Board's receipt of such information and shall be given the opportunity to explain or respond to such allegations. At its sole discretion, the ABNS may defer final determination of the applicant's eligibility for oral examination. The applicant shall be notified in writing by the Secretary of this action and the reason(s) for it. In connection with such deferrals, the Board may initiate inquiries, conduct a hearing, and/or request additional data as it deems necessary to ascertain whether the applicant has met the prerequisites for oral examination and is otherwise in compliance with ABNS Rules and Regulations. Based upon these inquiries/actions, the Board shall decide whether the applicant may or may not be allowed to take the oral examination. The applicant shall be notified in writing by the Secretary of this action and the reason(s) for it.

RULE VIII. APPLICATION REQUIREMENTS FOR INITIAL CERTIFICATION

8.1 APPLICATION

Applicants for initial certification by the ABNS shall complete and file with the Secretary the official application form(s) then in use by the Board, together with the supporting data required by the application. Applicants who seek concurrently to receive an additional initial credential in an ABNS-recognized area of focused practice may be required to complete a modified or supplemental application (which application, in the case of candidates seeking an additional initial credential in pediatric neurological surgery, will be a joint ABNS/ABPNS application).

8.1.1 Candidates who complete training on or after June 30, 2011 but before June 30, 2017 must submit a completed application (including completed practice data, references and any other application materials required by the Board) no later than four (4) years following the completion of his or her residency training (or, for applicants who seek concurrently to receive an additional initial credential in an ABNS-recognized area of focused practice, within four (4) years of completion of their approved fellowship training).

8.1.2 Candidates who complete training on or after June 30, 2017 must submit a completed application (including completed practice data, references and any other application materials required by the Board) no later than three (3) years following the completion of his or her residency training (or, for applicants who seek concurrently to receive an additional initial credential in an ABNS-recognized area of focused practice, within three (3) years of completion of their approved fellowship training).

8.1.3 Extensions of the three (3) year or four (4) year submission deadline (as applicable) at the discretion of the ABNS Executive Director (and for such amount of time as determined by the ABNS Executive Director), and at no cost to the candidate, may be granted for "good cause" such as: military service, post-residency fellowship training, absence from practice for legitimate family or medical leave reasons, solo practice in underserved areas or other legitimate circumstances which make submission of practice data impractical within three (3) or four (4) years (as applicable) following training. "Good cause" extensions will rarely be granted for more than six (6) months from the original submission deadline. Any further extensions beyond the initially granted exception must be approved by the ABNS Board. Those who request extensions for "good cause" may need to provide such supporting documentation as the Executive Director may request, which may include required third party attestations. For applicants who seek concurrently to receive an additional initial Certificate in pediatric neurological surgery, the ABNS Executive Director shall consult with the Joint Credentials Committee of the ABNS and the ABPNS prior to granting "good cause" extensions.

8.1.4 Candidates who seek extensions "without good cause" will be granted extensions of up to up to six (6) months following the original submission deadline upon payment of such fees as the ABNS shall establish from time to time.

8.1.5 Extension requests (whether for good cause or without good cause) should be received by the ABNS at least sixty (60) days prior to the original submission deadline, in order for the requests to be timely considered. Any late requests will require payment of substantial reinstatement fee (as established by the ABNS from time to time), and under no circumstances will the ABNS consider or grant extension requests that are received later than three (3) months following the original submission deadline.

8.1.6 Under no circumstances will "without good cause" extensions extend longer than six (6) months following the original submission deadline. If a candidate has not submitted his or her completed application within six (6) months past the original submission deadline (or, for candidates who receive "good cause" extensions, within the granted extension period), the candidate will no longer be within the certification process. See Rule 8.5.1 for the steps that must be taken to re-commence the process in that event, and see Rule 11.4 for limitations on how such individuals may refer to themselves after exiting the certification process.

8.1.7 If a candidate has received an extension for submission of his or her completed application pursuant to this Rule 8.1, he or she will receive a corresponding extension of the four (4) or five (5) year deadline, as applicable, for taking the oral examination.

8.1.8 The Board shall not schedule a candidate for oral examination until all aspects of his or her application, including training, practice, and professional conduct, have been reviewed and approved by the Credentials Committee. It is the responsibility of the candidate to

inform the Board of new developments with reference to any matter(s) in the application between the time of its submission and the date he or she takes the oral examination.

8.1.9 Candidates may request exemptions from the eligibility requirements for oral examination by petitioning the Board. Exemptions will be granted only in rare cases under compelling circumstances.

8.2 PLEDGE

Included in the application is a pledge that must be signed and accepted by the applicant. The pledge reads as follows, except that for applicants who seek concurrently to receive an additional initial Certificate in pediatric neurological surgery (with such Certificate jointly issued by the ABNS and the ABPNS), the pledge shall additionally reference the ABPNS and the requirement to abide fully by its rules:

PLEDGE

I hereby make application to the American Board of Neurological Surgery (the "Board") for examination by the Board and issuance to me of a Certificate of qualification as a specialist in neurological surgery, all in accordance with and subject to the Bylaws and Rules and Regulations of the Board. I understand and agree that it is my responsibility to inform the Board of new developments with reference to any matter(s) in the application between the time of its submission and the oral examination; failure to provide truthful, accurate, and complete information shall be grounds for disapproval of my credentials. I agree to disqualification from examination(s) or issuance of a Certificate in the event that any of the rules governing such are violated by me or for any of the reasons set forth in the Bylaws or the Rules and Regulations of the ABNS.

Upon the submission of this application, I agree to and do become bound by the Bylaws and the Rules and Regulations of the Board. I agree that I may be sanctioned, including possible exclusion from the Certification process, in the event that any of the Rules or Regulations of said Board are violated by me prior to becoming Certified or for any of the other reasons set forth in the Bylaws or the Rules and Regulations of the ABNS, and I further agree that I may be sanctioned, including possible revocation of my Certificate, in the event that any of the Rules or Regulations of said Board are violated by me after becoming Certified or for any of the other reasons set forth in the Bylaws or the Rules and Regulations of the ABNS.

I agree to hold the Board, its Directors, Officers, and agents (including those assisting with its examinations and those providing information regarding my training, professional practice, and conduct) harmless from any damage or claim for damage or complaint by reason of any action they or any of them may take in connection with this application, such as grades given with respect to any examination(s), and/or failure of the Board to issue to me a Certificate.

I agree that the Board may release the results of my oral examination(s) to the director of my neurosurgical residency training program. I further agree that the Board may provide information to appropriate parties concerning my status as Board certified or not certified, dates, and bases for action(s) related to my certification, and/or other appropriate information. I further agree that the Board may release the results of my oral examination(s)

to the director of my neurosurgical residency training program. I further agree that the Board may provide information to appropriate third parties in accordance with ABNS Rule XIV where the Board in its discretion deems such disclosures to be necessary to protect the public, such as in cases where the Board receives or uncovers clear evidence of egregious conduct, such as pervasive billing fraud, other willful malfeasance (e.g., indications of continuous, obvious unnecessary surgery) or gross incompetence.

I understand and agree that no oral examination questions may be recorded or reproduced in any form in part or in whole by any individual or organization without the written permission of the Board. I hereby represent that I will not reproduce any examination questions and that, in preparation for the oral examination, I have not and will not use or review questions that others may have reproduced without permission.

By signing this application and filing it with the ABNS, I agree to abide by all of the terms and conditions of this Pledge. I further understand and agree that violation of this pledge may cause me to be disqualified from oral examination, to have any Certificate revoked, and/or to be ineligible ever to become certified.

8.3 ACCOMPANYING MATERIALS

The application shall be accompanied by:

- (a) An application fee payable to the Board in U.S. dollars in the amount that has been designated by the Board as being in effect at that time. Such fee will not be returned even if the application is denied.
- (b) Two (2) copies of a signed, personal photograph that shall be used for identification purposes at the time of oral examination.
- (c) A completed and signed Business Associates Agreement to ensure compliance with the Health Insurance Portability and Accountability Act of 1996 (HIPAA).
- (d) A signed release.
- (e) Practice Data as required in Rule 6.1 above to be logged in a manner prescribed by the Board; it is to be submitted separately from but concurrently with the other application materials described herein.
- (f) Any other materials that the Board may require from time to time in connection with the application.

8.4 EXAMINATION FEE

After having been advised by the ABNS of acceptance for oral examination, the applicant shall promptly submit to the Secretary an examination fee payable to the Board in U.S. dollars in the amount that has been designated by the ABNS as being in effect at that time. The fee may vary depending on whether an applicant seeks (a) Certification by the ABNS only; or (b) Certification by

the ABNS and concurrently an additional credential in an ABNS-recognized area of focused practice. The examination fee will not be returned even if the applicant does not appear for or fails the examination.

8.5 TIME LIMITS

For candidates who complete training before June 30, 2017, each candidate must receive a favorable review by the ABNS Credentials Committee or the ABNS/ABPNS Joint Credentials Committee, as applicable (see Rule IX) and be scheduled by the Board for oral examination within five (5) years of completing training; otherwise, he or she shall no longer be considered to be actively involved in the certification process. Therefore, pursuant to Rule 8.1.1, candidates must submit their completed application for certification to the Board's office within four (4) years of completing training so that his or her credentials can be reviewed by the Board in time to comply with this rule. Requests for extensions to the four (4) year application deadline and/or the five (5) year time limit for scheduling the oral examination must be made in writing (see Rule 8.1).

For candidates who complete training on or after June 30, 2017, each candidate must receive a favorable review by the ABNS Credentials Committee or the ABNS/ABPNS Joint Credentials Committee, as applicable (see Rule IX) and be scheduled by the Board for oral examination within four (4) years of completing training; otherwise, he or she shall no longer be considered to be actively involved in the certification process. Therefore, pursuant to Rule 8.1.2, candidates must submit their completed application for certification to the Board's office within three (3) years of completing training so that his or her credentials can be reviewed by the Board in time to comply with this rule. Requests for extensions to the three (3) year application deadline and/or the four (4) year time limit for scheduling the oral examination must be made in writing (see Rule 8.1).

(Note that the submission of application materials within the three (3) or four (4) year time limit, as applicable, does not necessarily ensure the candidates will meet the four (4) or five (5) year deadline, as applicable, for scheduling their oral examination if, for example, the Board has concerns regarding a candidate's practice data and requests additional data and the candidate fails to provide timely and/or adequate additional data. Candidates are therefore strongly encouraged to submit their completed application materials as soon as possible after completion of residency (or completion of fellowship in the case of candidates concurrently seeking an additional credential in an ABNS-recognized area of focused practice).

8.5.1 An applicant who fails to apply to the Board within three (3) or four (4) years, as applicable, following the completion of residency (or fellowship, as applicable), or who has not had his or her application approved by the Board in time to be scheduled for oral examination within four (4) or five (5) years, as applicable, of completing residency training (or fellowship training, as applicable), will no longer be considered to be in the certification process (unless an extension has been granted pursuant to Rule 8.1). Any such individual will not thereafter be scheduled for oral examination until he or she has again passed the Primary Examination and, if applicable, a Written Focused Practice Examination, for credit and thereby has returned to the certification process. The applicant must then submit a new application for oral examination accompanied by new practice data and all additional required application materials, including the then applicable fee. The new application must be submitted to the Board within three (3) or four (4) years, as applicable, of passing the Primary Examination (and, if applicable, a Written Focused Practice Examination), and the applicant must be scheduled for oral examination within four (4) or five (5) years, as applicable.

See Rule 11.4 for limitations on how such individuals may refer to themselves after losing their initial eligibility to take the Oral Examination.

RULE IX. APPROVAL OF CREDENTIALS

9.1 VERIFICATIONS AND INQUIRIES

Upon receipt of an application for initial certification, the Secretary of the Board or his or her designee shall take such steps as deemed appropriate to verify the statements made in the application and shall make inquiry of the references therein named concerning information relevant to the requirements for examination and certification. The Secretary or designee shall also make such additional inquiry of any other person or persons as deemed necessary to ascertain that the applicant has fulfilled the requirements of the ABNS as set forth in its Rules and Regulations. Within a reasonable time after receipt of an application, the Secretary or designee shall transmit it and all information pertaining thereto to the ABNS Credentials Committee or the ABNS/ABPNS Joint Credentials Committee, as applicable.

9.2 COMMITTEE REVIEW OF CREDENTIALS

The ABNS Credentials Committee or the ABNS/ABPNS Joint Credentials Committee, as applicable, shall make a preliminary determination as to whether an applicant meets the requirements for examination as set forth herein. The applicable Credentials Committee shall receive recommendations from the references named in the application and may request the Secretary to make such additional inquiries as it deems necessary to verify or clarify statements made in the application. Whether information was received through the application or otherwise, the applicable Credentials Committee may recommend deferral or withholding of scheduling for oral examination for any candidate about whom it has concern regarding one or more of the following:

- (a) Adverse medical liability decision(s);
- (b) Any part of training;
- (c) Faculty appointment(s);
- (d) Failure to provide fully truthful and accurate information on credentialing or application documents submitted to the Board, or failure to otherwise comply with ABNS rules or decisions;
- (e) Criminal allegation(s) and/or conviction(s);
- (f) Hospital privileges,
- (g) Medical licensure;
- (h) Membership in professional organizations;
- (i) Practice data or experience;
- (j) References;

- (k) Billing and/or coding for services; or
- (l) Professionalism.

The applicable Credentials Committee shall report any negative determinations and recommendations to the Board of Directors. If the applicable Credentials Committee determines that a candidate has met the requirements for examination as set forth herein, the applicable Credentials Committee may approve the candidate for oral examination without any further action of the ABNS Board.

9.3 BOARD REVIEW OF CREDENTIALS

At each meeting of the Board, the ABNS Credentials Committee or the ABNS/ABPNS Joint Credentials Committee, as applicable, shall report to the Directors with respect to all applications that have been referred to it and upon which it has made preliminary negative determinations. The Board of Directors shall consider all such applications reported to it by such Committees and make a final determination as to whether each applicant meets the requirements for oral examination as set forth in these Rules and Regulations. The applicant shall be promptly notified in writing of the Board's decision by the Secretary. If the determination is negative, such notice may set forth in what respects the applicant fails to meet the Board's requirements and may suggest steps the applicant can take in an attempt to remedy the deficiencies. The Board, at its option, on its own accord or as a result of a recommendation by the applicable Credentials Committee, may hold a hearing to determine whether the candidate meets the requirements for oral examination. At any such hearing the provisions of Rule 10.1 shall apply. The decision of the Board following any such hearing shall be final with respect to the ABNS and, if applicable, the ABPNS.

9.4 SCHEDULING OF ORAL EXAMINATION

An applicant may be scheduled for the oral examination only after having been approved for such examination by the Credentials Committee or by the Board, as set forth in Rules 9.2 and 9.3.

9.5 HOSPITAL NOTIFICATIONS

When an applicant's credentials have been determined to be acceptable by the Board at a regular meeting, the Secretary may, upon request, notify the hospitals in which the applicant practices. That letter will include the deadline for the applicant to be scheduled for oral examination in order for his or her application to remain valid.

RULE X. APPEAL ON CREDENTIALS

10.1 APPEAL OF ADVERSE DETERMINATIONS

10.1.1 An individual who has been notified of an adverse determination by the Board with respect to his or her credentials, and who has not already had a hearing on such matter pursuant to Rule 9.3, may within thirty (30) days after receiving such adverse determination notice, submit additional information in writing or request in writing a hearing before the Board at its next regularly scheduled meeting. At such hearing the burden shall be on the individual to establish by a reasonable preponderance of evidence that the questioned requirements for examination or

certification have been met. The individual may be represented by counsel and may personally and/or through counsel present such evidence and witness(es) as desired. For avoidance of doubt, a candidate for whom a hearing has been held pursuant to Rule 9.3 shall not be entitled to a second hearing pursuant to this Rule 10.1.

10.1.2 The individual whose credentials are the subject of any hearing held pursuant to Rule 9.3 or this Rule 10.1 is expected to be present in person at the hearing absent compelling circumstances that prevent his or her attendance or create an unreasonable hardship. If the individual wishes to request a waiver to this personal attendance requirement, he or she must submit such a request to the Board in writing not less than forty-five (45) days prior to the date of the hearing. The Board in its sole discretion may grant such a request and permit the individual to participate telephonically. If the request for a waiver is denied the individual must appear in person; the hearing will go forward without the individual's participation if he or she fails to appear and such failure to appear may be considered by the Board as one factor when rendering its decision in the matter.

10.1.3 At the Board's discretion, at any hearing held pursuant to Rule 9.3 or this Rule 10.1, the ABNS Credentials Committee (or the ABNS/ABPNS Joint Credentials Committee, as applicable) or any Director of the Board may present evidence in conflict with that of the individual whose credentials are the subject of the hearing. The individual shall have the right to question witness(es) presenting such evidence. Any Director of the Board who, in his or her opinion, has a real or potential conflict that may prevent that Director from making an unbiased and objective determination shall not vote on the issue. At any such hearing, the ABNS shall not be bound by technical rules of evidence usually employed in legal proceedings; the Board may accept any evidence it deems appropriate and pertinent.

10.2 DECISIONS ON APPEAL

After any hearing held pursuant to Rule 10.1, the Board may affirm or modify in any respect its prior determination as to whether the applicant meets the requirements for examination or certification. Such decision shall be final with respect to the ABNS and, if applicable, the ABPNS. The applicant shall be promptly notified in writing of the Board's decision by the Secretary. If the decision is negative, such notice may suggest steps the applicant can take in an attempt to remedy the deficiencies.

10.3 RECONSIDERATION OF APPLICATIONS

An application that has been denied by the Board under Rule 9.3 or Rule 10.2 above will not be reconsidered by the Board unless and until the applicant has taken steps to correct the deficiencies set forth in the notice of denial, has documented these corrections, and has requested in writing reconsideration of his or her application by the Board. The Board may or may not, in its sole discretion, approve the request and grant an extension to the four (4) or five (5) year, as applicable, deadline for scheduling the oral examination in order to give the applicant an opportunity to correct deficiencies.

RULE XI. THE ORAL EXAMINATION

11.1 PURPOSE AND PROCESS

The oral examination is the last event in the initial Certification process, which begins with neurosurgical residency in an ACGME accredited program and passage of the Primary Examination for credit. Whereas the Primary Examination explores an applicant's knowledge in various relevant disciplines (see Rule 5.2), the oral examination explores knowledge and judgment in clinical neurosurgical practice after an applicant has been an independent practitioner. The oral examination is accomplished in a series of face-to-face examinations involving the applicant, current and former Directors of the Board, and/or guest examiners. The applicant is presented a series of clinical vignettes, using clinical descriptions, radiographs, computerized images, anatomical models and/or diagrams. The examiners grade the applicant on overall diagnostic skills, surgical decision making and complication management. The oral examination covers a broad range of neurosurgery practice: (a) one session devoted to general neurosurgery; (b) a second session devoted to an area of sub-specialty of the candidate's choice (e.g., general, cranial, spine, cerebrovascular or pediatrics); and (c) a third session devoted to clinical vignettes selected by the Board from the candidate's own practice data submitted pursuant to Rule 6.1, above. Candidates must pass each session in order to achieve an overall passing grade. Candidates concurrently seeking an additional credential in an ABNS-recognized area of focused practice must elect that subspecialty area for the second session of the oral examination.

11.2 REQUIREMENTS FOR RE-EXAMINATION

An applicant who fails the oral examination for the first or second time may request re-examination. Applications for re-examination must be submitted within eighteen (18) months of the date the applicant last took the oral examination, so that the re-examination will occur no later than two (2) years from the date of the applicant's prior attempt.

11.2.1 For candidates taking the oral examination for a second time following one failure, the entire oral examination must be repeated, but the submission of a new application and additional practice data is not required. However, for the oral examination session devoted to clinical vignettes selected by the Board from the candidate's own practice data, the candidate has the option to submit an additional 75 cases for use during his or her repeat examination. Alternatively, the candidate may elect to be examined on his or her previously submitted case data (although different cases from such data will be selected for the repeat examination(s)).

11.2.2 For candidates taking the oral examination for a third time following two failures, the entire oral examination must be repeated and the submission of additional practice data is required. If the candidate submitted new data after his or her first failure, he or she will not be required to submit additional new data after his or her second failure.

11.2.3 If the candidate elects to (Rule 11.2.1) or is required to (Rule 11.2.2) submit new data, the cases must be consecutive and the other applicable provisions of Rules 6.1 shall apply, except that there is no requirement that the additional cases include a certain percentage of unique patient encounters (although the ABNS may take into account when reviewing the cases whether they include an atypical number of re-operations). Any newly submitted case data is subject to review and must be accepted by the Board, and such data is also subject to audit; if the

Board discovers that the cases are not consecutive or the case data provided is not accurate, the Board may take any steps it deems appropriate, including permanently excluding the candidate from the certification process. For candidates who elect to or are required to submit new case data, the cases can encompass any time period but starting no earlier than twelve (12) months prior to the date the candidate most recently took and failed the oral examination. But see Rule 11.2.4 for additional time limits that may apply.

11.2.4 In addition to the time limits set forth in Rule 8.5 and Rule 11.2.3, a candidate may not re-take the oral examination if more than seven (7) years have passed since the completion of his or her residency training (or fellowship training for individuals concurrently seeking an additional credential in an ABNS-recognized area of focused practice). For individuals who complete their residency (or, as applicable, fellowship) in June, this period will be extended through December of the 7th year). Consequently, depending on when a candidate submits application materials and initially sits for the oral examination, and depending on when a candidate re-takes the oral examination following an initial failure (and also depending on whether and when the candidate submits new case data for his or her repeat examination(s)), the candidate may or may not be permitted to take the oral examination a third time, or may have less than two (2) years in which to do so. By way of illustration, if a candidate completes his or her residency in June 2017, submits application materials in June 2019, initially sits for the oral examination in May 2021 but fails, submits new case data in May 2022, has that case data approved in time to re-take the oral examination in November 2022 but fails again, that candidate would be able to re-take the oral examination one additional time no later than November 2024 (i.e., the candidate would have a full two (2) years in which to take the oral examination for a third time, and may have sufficient time to again submit 75 new cases, if he or she so chooses, for the section of the oral examination based on candidate case data). By contrast, if a candidate completes his or her residency in June 2017, submits application materials in December 2020, initially sits for the oral examination in November 2021 but fails, and re-takes the oral examination in November 2023 but fails again, that candidate would be required to re-take the examination no later than November 2024 (one year from his or her prior attempt) to avoid exceeding the seven (7) year limit. That may or may not be possible depending on whether and when the candidate submits new data.

11.2.5 Before an applicant can be re-examined, a re-examination fee in the amount that has been designated by the Board as being in effect at that time must be received by the Secretary. All moneys shall be payable to the ABNS in U.S. dollars. The re-examination fee is not refundable.

11.3 EXCEEDING TIME LIMITS OR REPEAT FAILURES

If a request for re-examination is not made in time to permit a candidate to be re-examined within two (2) years of failure, or if an applicant fails the oral examination on the first three (3) attempts, or has not passed the oral examination within seven (7) years of completing his or her residency (or fellowship, if applicable), whichever is earlier, that candidate is no longer considered to be actively involved in the certification process (exceptions to the seven (7) year deadline for passing the oral examination may be granted by the Board in its sole discretion on rare occasion based on extraordinary circumstances; no exceptions will be made to the requirement that candidates must pass the oral examination within their first three (3) attempts). He or she may not apply to be re-examined until such time as the Primary Examination and, if applicable, the Written

Focused Practice Examination, has been re-taken for credit and passed. The candidate must then submit a new application for oral examination, with all required accompanying materials. Letters certifying the nature and quality of the candidate's practice must be obtained from two (2) new reference sources, both neurosurgeons, and from all hospitals where the candidate practices verifying his or her privileges. The candidate must also pay the oral re-examination fee and submit a full new set of practice data (i.e., 125 new cases). For avoidance of doubt, the first case in the new set of practice data can be performed at any time after the applicant has previously exited the certification process (i.e., the first case may be performed before or after the candidate re-takes the Primary Examination for credit). The application and all associated materials must be submitted within three (3) years following the earlier of (a) the date the applicant re-passes the Primary Examination for credit or, if applicable, following the passing of the Written Focused Practice Examination for credit; or (b) the date of the first case in the applicant's new set of practice data. See Rule 11.4 for limitations on how such individuals may refer to themselves after failing to pass the oral examination after three attempts or within the requisite time frames.

11.3.1 Once an applicant, pursuant to Rule 11.3, has (a) successfully re-passed the Primary Examination for credit, and, if applicable, the Written Focused Practice Examination; and (b) timely submitted his or her completed oral examination application and all accompanying materials (including new practice data) within three (3) of re-passing the Primary Examination and, if applicable, the Written Focused Practice Examination (four (4) years for those who re-passed the Primary Examination for credit prior to June 30, 2017), the applicant will again be given a maximum of three attempts to pass the oral examination. The applicant must be scheduled to re-take the oral examination within four (4) years of re-passing the Primary Examination and, if applicable, the Written Focused Practice Examination (five (5) years for those who re-passed the Primary Examination for credit prior to June 30, 2017), and if the applicant again fails, he or she must meet the requirements and time limitations set forth in Rule 11.2 for his or her second or third attempt. The applicant must also pass the oral examination within seven (7) years of re-passing the Primary Examination and, if applicable, the Written Focused Practice Examination.

11.4 LIMITATION ON REFERRING TO ONESELF AS "BOARD ELIGIBLE" IN CERTAIN CIRCUMSTANCES

Any individual who has exited the certification process for any reason (i.e., an individual who has had any of the following):

1. Failed to become "Board Eligible" or failed to maintain "Board Eligible" status, and then failed to timely re-enter the process, in each case pursuant to Rule 6.10;
2. Failed the oral examination three times;
3. Missed applicable deadlines for applying for or taking (or re-taking) the oral examination;
4. Failed to pass the oral examination within seven (7) years of completing residency (or, if applicable, fellowship);
5. Had his or her credentials rejected; or
6. Had his or her Certification expire because of failure to timely or successfully complete the Board's CC requirements and has not timely and successfully completed the requirements for re-instatement set forth in Rule 12.7,

must begin the process anew, commencing with re-taking (and passing) the Primary Examination for credit and, if applicable, the Written Focused Practice Examination, as a prerequisite to becoming Certified. However, such individuals may not – even after re-passing the Primary Examination and, if applicable, the Written Focused Practice Examination – hold themselves out to patients, hospitals, other health facilities, employers, medical societies, associations, payors, or the public as “Board Eligible,” “tracking toward certification,” “in the certification process” or words to that effect. Such individuals are no longer considered to be in the certification process until and unless they successfully complete all requirements for certification and are actually awarded their Certificate. The failure to abide by this Rule 11.4 may result in sanctions at the Board’s discretion, including but not limited to permanent ineligibility for certification.

11.5 REPRODUCTION OF EXAMINATION PROHIBITED

The oral examination may not be recorded or reproduced in any form, in part or in whole, by any individual or organization without the written permission of the American Board of Neurological Surgery, nor may a candidate in preparation for the oral examination use or review questions that may have been reproduced by others without permission. Individuals who violate these prohibitions may be disqualified from oral examination or, if they are already certified at the time the violation is discovered, their Certificates may be revoked in accordance with Rule 13.1.

RULE XII. CONTINUOUS CERTIFICATION

12.1 MANDATORY VERSUS VOLUNTARY PARTICIPATION

Diplomates certified by the ABNS during or after 1999 are considered to possess time-limited Certificates. In order to maintain their Diplomate status, they must participate in and successfully complete each year all elements of the Board’s annual Continuous Certification (“CC”) program. At the end of each 10-year period, the Board will issue a new 10-year time-limited Certificate to each Diplomate with a time-limited Certificate who has successfully completed the annual program requirements during each year of the expiring 10-year period. For new Diplomates, the first annual CC period begins January 1 following the Diplomate’s successful completion of the oral examination, and new annual CC periods begin each January 1 thereafter.

12.1.1 Individuals certified by the Board prior to 1999 are considered to have non-time-limited Certificates. These individuals are strongly encouraged to participate in the ABNS CC program, but their participation is voluntary and their failure to participate will not result in the expiration of their Certificates or cause them to lose their status as Diplomates. Similarly, Diplomates in this category will not lose their Certificates or their status as Diplomates if they enter the CC program but do not complete any annual cycle for any reason or fail to successfully complete any CC program requirement. For Diplomates in this category, each annual CC period begins January 1 of the year their applications for participation are received.

12.1.2 Diplomates who receive both an initial Certificate from the ABNS and an additional initial credential from the ABNS in an ABNS-recognized area of focused practice (other than pediatric neurosurgery for which Rule 12.1.3 applies), must successfully complete the ABNS CC program annually in order to maintain their ABNS Certification, and must also successfully complete any additional annual CC program requirements established by the ABNS for such

focused practice area in order to maintain their focused practice credential. Such additional CC program requirements (a) shall include having their ABNS CC Adaptive Learning Tool, if reasonably feasible, include a module geared to their area of focused practice; and (b) may include the submission of CPT Codes, E&M Codes, a case log or other information to the ABNS periodically to demonstrate that their practice remains geared to the area of focused practice for which they have received their additional ABNS credential; and (c) may include other requirements as established by the ABNS from time to time. Any Diplomate who successfully completes these additional requirements each year will also have successfully completed the ABNS CC program and will receive two renewals at the end of each 10-year Certification period: a renewal Certificate from the ABNS in general neurological surgery and a renewal credential from the ABNS in their area of focused practice. However, it is possible that a Diplomate will have successfully completed the ABNS annual CC requirements for the expiring 10-year period but not the additional annual CC requirements for their focused practice credential. In that event, the Diplomate will obtain a renewal general Certificate from the ABNS but not a renewal focused practice credential.

12.1.3 Diplomates with time limited Certificates who receive both an initial Certificate from the ABNS and an additional initial credential in pediatric neurological surgery from the ABNS/ABPNS, or Diplomates with time limited Certificates who, prior to July 1, 2017, received separate initial Certificates from each of the ABNS and the ABPNS, must successfully complete the ABNS CC program annually in order to maintain their ABNS Certification and must successfully complete the ABNS/ABPNS CC program annually in order to maintain their additional ABNS/ABPNS credential. The two CC programs shall be largely identical and overlapping (so as to avoid duplication), except that (a) those who seek to successfully complete the ABNS/ABPNS CC program will have their ABNS CC Adaptive Learning Tool include a module geared to their pediatric practice; and (b) those who seek to successfully complete the ABNS/ABPNS CC program must, in addition to completing all elements of the ABNS CC program that apply to ABNS Diplomates, submit a case log to the ABPNS periodically (which must be approved by the ABPNS) to demonstrate that their practice remains geared to pediatrics. Any such Diplomate who successfully completes the ABNS/ABPNS CC program each year will also have successfully completed the ABNS CC program and will receive at the end of each 10-year Certification period a renewal Certificate from the ABNS in general neurological surgery and a renewal credential from the ABNS and ABPNS in pediatric neurological surgery. However, it is possible that a Diplomate will have successfully completed the ABNS annual CC requirements each year during the expiring 10-year period but not the additional annual requirements of the ABNS/ABPNS CC program. In that event, the Diplomate will obtain a renewal general Certificate from the ABNS but not a renewal credential in pediatric neurological surgery from the ABNS/ABPNS, and thereafter such individual shall be deemed a Diplomate of the ABNS but not the ABPNS.

12.1.4 A Diplomate who holds a non-time limited Certificate from the ABNS and wishes to maintain his or her credential in an ABNS-recognized area of focused practice (other than pediatric neurosurgery for which Rule 12.1.5 applies) must successfully complete the ABNS CC program annually as well as the additional annual CC program requirements established by the ABNS from time to time for such focused practice area in order to maintain his or her focused practice credential. If a Diplomate with a non-time limited Certificate fails to successfully complete all such requirements annually, he or she will retain his or her non-time limited Certificate but will cease to hold a credential in his or her area of focused practice.

12.1.5 If any Diplomate holds a non-time limited Certificate from the ABNS but a time-limited Certificate from the ABPNS, and fails to successfully complete annually the requirements of the ABNS/ABPNS CC program, he or she will retain his or her non-time limited Certificate from the ABNS but will cease to hold a credential in pediatric neurological surgery and will thereafter be deemed a Diplomate of the ABNS but not the ABPNS.

12.1.6 Candidates for Certification who wish to become and be remain tracking toward for Certification/Board Eligible must participate in the ABNS CC program pursuant to Rule 6.10.

12.2 ENROLLMENT

Diplomates can enroll and maintain their participation in the annual CC program by:

- (a) Completing and submitting an on-line application in the form specified by the Board (the application must be updated annually);
- (b) Paying all fees as established by the Board; and
- (c) Fulfilling in a timely fashion all of the requirements set forth in this Rule XII or adopted by the Board from time to time.

For Diplomates participating in the ABNS/ABPNS CC program, or an ABNS modified CC program for individuals seeking to maintain their focused practice credential, the application, fees and requirements may be modified.

12.3 CONTINUOUS CERTIFICATION CYCLES

As of January 1, 2019, the CC requirements (and most additional requirements for Diplomates who obtain and wish to maintain a focused practice credential) must be completed annually. Subject to the provisions of Rule 12.6.4 regarding grace periods, Diplomates with time-limited Certificates must complete all CC requirements annually in order to maintain their Certified status (as well as complete annually all additional requirements for their area of focused practice in order to maintain their focused practice credential, where applicable), and Diplomates with non-time limited Certificates must complete all CC requirements annually in order to be considered, and listed on the ABNS website, as an active participant in the ABNS CC program (or the joint ABNS/ABPNS CC program, as applicable), as well as complete annually all additional requirements for their area of focused practice in order to maintain their focused practice credential (where applicable). Candidates for Certification who wish to remain tracking toward for Certification/Board Eligible must complete all CC requirements annually, and are not subject to any grace periods afforded to Diplomates pursuant to Rule 12.6.4.

12.4 CONTINUOUS CERTIFICATION ELEMENTS

Each year, the Diplomate (or candidate) must submit evidence of the following in the manner set forth by the Board:

- (a) Professionalism and Professional Standing;

- (b) Lifelong learning and Self-Assessment;
- (c) Assessment of Knowledge, Skills and Judgment; and
- (d) Improvement in Medical Practice.

12.4.1 EVIDENCE OF PROFESSIONAL STANDING

- (a) Chief of Staff Questionnaire – Each year, a questionnaire confirming the Diplomate's professional standing must be completed by the Chief of the Medical Staff of the Diplomate's (or candidate's) primary hospital. However, if the Chief of Staff is unavailable, this questionnaire may be filled out annually by the Department Chair, Division Head or other appropriate physician administrator.
- (b) Hospital Privileges – The Diplomate (or candidate) must continuously maintain unrestricted privileges at the primary hospital where he or she currently practices. (The Chief of Staff Questionnaire confirming such unrestricted privileges is responsive to this requirement). The Diplomate's (or candidate's) privileges need not encompass the full range of neurosurgery, but such privileges must not be (or have been): (i) restricted in any way pursuant to informal or formal hospital disciplinary proceedings; or (ii) relinquished, withdrawn, or non-renewed in settlement of, or to avoid, any such hospital disciplinary proceedings. In addition, the Diplomate (or candidate) must notify the Board if he or she has had any actions against, or restrictions imposed upon, his or her privileges at any hospital or health care facility. The Board in its discretion (and in conjunction with the ABPNS, as applicable) may determine that any such actions or restrictions may constitute non-compliance with the annual Professional Standing requirements.
- (c) Licensure – The Diplomate (or candidate) must maintain full, unrestricted medical licenses in all jurisdictions in which he or she practices. The annual Chief of Staff Questionnaire confirming such unrestricted licensure is responsive to this requirement for the jurisdiction in which the Diplomate's (or candidate's) primary hospital is located, but Diplomates (or candidates) must notify the Board about any pending or resolved actions concerning any of their licenses.

12.4.2 EVIDENCE OF LIFELONG LEARNING AND SELF-ASSESSMENT.

Lifelong Learning – Each year, the Diplomate (or candidate) must earn at least 20 Continuing Medical Education (CME) AMA PRA Category 1 Credits™ in neurological surgery annually. CME credits cannot be carried over from prior years to satisfy this annual 20 CME credit requirement.

Documentation of the earned credits is preferable but attestation is acceptable (but if by attestation, may subject the neurological surgeon to the possibility of random auditing).

12.4.3 ASSESSMENT OF KNOWLEDGE, JUDGMENT, AND SKILLS

Adaptive Learning Tool -- Diplomates (or candidates) must demonstrate evidence of cognitive knowledge annually by completing the ABNS' annual Adaptive Learning Tool, which replaces the Cognitive Examination that was previously administered once every ten years. The Adaptive Learning Tool can be engaged any time during the year and consists of multiple choice questions accessible via the internet from the Diplomate's (or candidate's) computer. The Adaptive Learning Tool is designed to be more relevant to the Diplomate's (or candidate's) practice and less burdensome in the following ways:

- (a) The Adaptive Learning Tool is tailored to update the "Core Neurological Surgery" knowledge by focusing on new evidence based concepts most critical to providing emergency, urgent or critical care to patients, thereby enhancing public safety;
- (b) If the Diplomate (or candidate) does not select the correct answer he or she will immediately learn why the answer was incorrect and be directed to read associated, peer reviewed articles (primarily Level I and II evidence) and re-try the question, ensuring real time education and mastery. The Diplomate (or candidate) will proceed to the next question when he or she masters the new neurological surgery concept, and achieves the correct answer.
- (c) This educational platform will re-enforce retention through serial testing of key concepts in future years.

12.4.4 IMPROVEMENT IN MEDICAL PRACTICE

M&M and/or QA/QI Conferences -- Each year, the Diplomate (or candidate) must participate actively in the Morbidity and Mortality Conferences (M&M) and/or Quality Assurance/Improvement Conferences (QA/QI) at least quarterly in which the neurological surgeon discusses some of his/her cases to improve his/her practice. Given the variability of neurological surgery practice today the ABNS does not believe that "one size fits all" in terms of a particular conference structure. It is up to the Diplomate (or candidate) to develop a meaningful conference structure with their colleagues, specifically one that includes an analysis of cases for future safety and quality improvement opportunities. The ABNS will provide a confidential outline/protocol for neurological surgeons who would like to use the ABNS format. Neurological surgeons who do not have access to traditional hospital M&M or QA/QI Conferences at their institutions may fulfill this requirement by attending four (4) regional or national M&M or QA/QI conferences (quarterly conferences) annually and having their respective institution leadership attest as such. The hospital's Chief of Staff, a Department Chair or

other suitable physician administrator (as part of the Chief of Staff Questionnaire) must verify annually that the Diplomate (or candidate) attended such the conferences at least quarterly and meaningfully participated by reviewing their complications.

12.4.5 ADDITIONAL REQUIREMENTS FOR FOCUSED PRACTICE CREDENTIALS

As noted in Rules 12.1.2 and 12.1.3, Diplomates who in addition to their general Certificate hold an additional credential in an ABNS-recognized area of focused practice may be required, as a condition to renewal of their focused practice credential, to comply with such modified or additional CC requirements as are established by the ABNS (and the ABPNS, as applicable) from time to time.

12.5 PLEDGE

Included in the annual CC application is a pledge that must be signed and accepted by the ABNS. The pledge reads as follows, except that for Diplomates participating in the ABNS/ABPNS CC program, the pledge shall additionally reference the ABPNS:

PLEDGE

I hereby represent that no one else will take the web based Adaptive Learning Tool in my name or on my behalf, nor will I take the Adaptive Learning Tool in the name or on behalf of any other person. It is my personal obligation and pledge to adhere to the ABNS CC principles that this adaptive tool is for my personal continuous education and I am dedicated to the ABNS mission of improving patient safety. I understand and agree that no Adaptive Learning Tool questions or answers may be reproduced in any form in part or in whole by any individual or organization without the written permission of the ABNS. I hereby represent that I will not reproduce any Adaptive Learning Tool questions or answers.

12.6 CLASSIFICATIONS

Individual neurosurgeons are classified by the Board into one of seven categories (and with respect to the first six of such categories, are listed as such on the ABNS website):

- (a) Currently Certified – Participating in Continuous Certification
- (b) Currently Certified – Participating in Continuous Certification With Recognition of Focused Practice
- (c) Currently Certified – Not Participating in Continuous Certification
- (d) Certified – Inactive (Clinically or Surgically)
- (e) Certified – Retired From Operative Practice
- (f) Tracking Toward certification
- (g) Not Certified

12.6.2 CURRENTLY CERTIFIED – PARTICIPATING IN CONTINUOUS CERTIFICATION

Diplomates who have paid their annual fees and have successfully completed or are in the process of successfully completing all CC requirements for the applicable year in a timely fashion are active participants in the CC program. These Diplomates are classified as “Certified – Participating in Continuous Certification.”

12.6.3 CURRENTLY CERTIFIED – PARTICIPATING IN CONTINUOUS CERTIFICATION WITH RECOGNITION OF FOCUSED PRACTICE

Diplomates with an additional credential in an ABNS-recognized area of focused practice who (a) have paid their annual fees and have successfully completed or are in the process of successfully completing all CC requirements for the applicable year in a timely fashion; and (b) have also successfully completed or are in the process of successfully completing the additional annual CC program requirements established by the ABNS from time to time (or the ABNS/ABPNS, as applicable) for such focused practice area are active participants in the CC program, including with respect to their area of focused practice. These Diplomates are classified as “Certified – Participating in Continuous Certification With Recognition of Focused Practice in [the applicable area of focused practice].”

12.6.4 CURRENTLY CERTIFIED – NOT PARTICIPATING IN CONTINUOUS CERTIFICATION

This classification consists of Diplomates who (a) have non-time-limited Certificates and are not participating in CC; or (b) have time-limited Certificates but are not participating in CC. Note that a participant in CC who fails to meet the annual CC requirements in any year in a timely fashion shall be subject to the following with respect to his or her participation classification and Certified status:

- (a) A Diplomat who is delinquent in some or all of the components of CC for any year will receive notice of that fact and will be given until the end of the following year (i.e., a one-year “grace period”) to complete all CC requirements for the year he or she missed. The annual CC requirements for the following year must also be completed in full and a late fee paid. The same grace period and fees also apply to those Diplomates who are delinquent in some or all of the additional CC requirements for continued recognition of focused practice. In order for a Diplomat with a time-limited Certificate to maintain his or her Certificate (and/or his or her focused practice credential), this failure to timely complete all annual requirements may occur only twice in each 10-year Certification period and not in consecutive years. A Diplomat with a time-limited Certificate will immediately lose his or her Certified status upon failing to timely complete all annual CC requirements more than two years in any 10-year Certification period, or upon failing to timely complete all annual CC requirements in any two consecutive years, or upon failing to complete all delinquent CC requirements for any year during the one-year grace period. Similarly, any

Diplomate with an additional credential in an ABNS-recognized area of focused practice will immediately lose his or her focused practice credential upon failing to timely complete all additional CC requirements for that focused practice credential more than two years in any 10-year Certification period, or upon failing to timely complete all such additional annual CC requirements in any two consecutive years, or upon failing complete all such additional CC requirements for that focused practice credential for any year during the one-year grace period. In the event that a Diplomate with a time-limited Certificate loses his or her Certified status and/or his ABNS/ABPNS credential pursuant to this Rule 12.6.4(a), he or she will be required to successfully complete the re-entry process described in Rule 12.7 in order to regain Certified status. In the event that any Diplomate loses only his or her additional credential in an ABNS-recognized area of focused practice (other than pediatrics) pursuant to this Rule 12.6.4(a), he or she will be required to fulfill whatever requirements the ABNS may impose from time to time in order to regain his or her focused practice credential.

- (b) A Diplomate who is delinquent in some or all of the components of CC for any year shall be classified as “Not Participating in Continuous Certification” during the one-year grace period described in subsection (a), above, until such time as he or she becomes current on all delinquent requirements, at which juncture he or she will again be classified as “Participating in Continuous Certification.” A Diplomate with an additional credential in an ABNS-recognized area of focused practice who is current on the requirements of the general CC program, but is delinquent for any year in some or all of the additional CC requirements to maintain his or her focused practice credential, shall be classified only as “Participating in Continuous Certification” during the one-year grace period described in subsection (a), above, until such time as he or she becomes current on all delinquent CC requirements for his or her focused practice, at which juncture he or she will again be classified as “Participating in Continuous Certification With Recognition of Focused Practice.”
- (c) A Diplomate who never submits an application and never begins the CC process will be classified as “Not Participating in Continuous Certification.” If the Diplomate holds a time-limited Certificate, he or she will be so classified until the end of his or her one-year grace period, at which time he or she will be classified as Not Certified (unless the Diplomate completes all delinquent CC requirements during the grace period, in which event he or she will then be classified as “Participating in Continuous Certification”).

12.6.5 CERTIFIED -- INACTIVE

- (a) This classification refers to Diplomates who are clinically or surgically inactive for a period of time because the Diplomate is engaged in research, academic administration, government policy work, or other activities that preclude or interfere with active clinical or surgical

practice. In order to remain certified in this category, a Diplomate must inform the Board in writing of his or her intention to become clinically or surgically inactive, and of the likely duration of clinical/surgical inactivity. Diplomates with time-limited Certificates who are listed as “Inactive” may be exempt from certain aspects of the ABNS CC program (and/or the ABNS/ABPNS CC program, as applicable) during the period in which they are Inactive, as permitted by the Board (in conjunction with the ABPNS, as applicable) from time to time. The Board (in conjunction with the ABPNS, as applicable) shall notify each Inactive Diplomate of the elements of CC from which he or she is exempt based on his or her individual circumstances (and those from which the Inactive Diplomate is not exempt) during the period of clinical/surgical inactivity. The Board (in conjunction with the ABPNS, as applicable) also shall notify each Inactive Diplomate of the steps he or she must take before again being listed as “Active.”

- (b) A Diplomate who elects “Inactive” status and who later resumes the active practice of neurosurgery shall have his or her Certificate permanently revoked, pursuant to Rule XIII, unless: (1) the Diplomate petitions the Board for re-instatement of his or her “Active” status prior to resuming clinical/surgical practice; (2) re-instatement of his or her “Active” status is approved by the Board (in conjunction with the ABPNS, as applicable); and (3) the Diplomate complies fully with any conditions imposed by the Board (in conjunction with the ABPNS, as applicable) in connection with such re-instatement.

12.6.6 CERTIFIED – RETIRED

- (a) This category refers to Diplomates who have retired from the practice of neurosurgery but were Certified and in good standing at the time of retirement. A Diplomate with a time-limited Certificate who wishes to retain his or her Certificate following retirement but no longer wishes to participate in CC must: (i) inform the Board in writing of his or her intention to retire; (ii) return his or her Certificate to the Board; and (iii) execute the Board’s standard retiree form, thereby warranting that he or she will forever cease the practice of neurosurgery. Diplomates who elect this status and comply with these requirements will receive a new Certificate from the ABNS (and, if applicable, an additional new credential jointly from the ABNS and the ABPNS) indicating they are “Retired in Good Standing.” These individuals will no longer be required to participate in CC and thereafter will be listed as “Retired” on all ABNS listings.
- (b) A Diplomate who elects “Retiree” status and who later resumes the practice of neurosurgery shall have his or her Certificate permanently revoked, pursuant to Rule XIII, unless:

(1) The Diplomate petitions the Board for re-instatement of his or her active Certificate prior to resuming practice;

(2) Reinstatement of his or her "active" status is approved by the Board; and

(3) the Diplomate complies fully with any conditions imposed by the Board (in conjunction with the ABPNS, as applicable) in connection with such re-instatement.

12.6.7 TRACKING TOWARD CERTIFICATION (i.e., BOARD ELIGIBLE)

This category includes candidates for Certification who timely meet the requirements of Rule 6.10 (including ongoing, timely completion of the annual requirements of the CC program), and who have neither yet fully and successfully completed the Certification process nor fallen out of the Certification process for one of the reasons set forth in Rule 11.4.

12.6.8 NOT CERTIFIED

This category includes:

- (a) Diplomates whose Certificate has been suspended or revoked;
- (b) Diplomates with time-limited Certificates who either (i) have been delinquent with the requirements of CC in more than two years in any ten year Certification period; or (ii) have been delinquent with the requirements of CC in any two consecutive years; or (iii) have failed, following a year of delinquency or non-participation, to fulfill the requirements they missed during the one-year grace period.
- (c) Neurosurgeons who have never been Certified. Individuals in this category include those neurosurgeons who have never sought Certification and those who never successfully completed the Certification process (i.e., have fallen out of the process for one of the reasons set forth in Rule 11.4). Such individuals will not appear on any database or listing of Diplomates maintained by the ABNS.
- (d) Neurosurgeons who have never successfully completed the Certification process (i.e., have fallen out of the process for one of the reasons set forth in Rule 11.4) but have recommenced the entire process, starting with taking and passing the ABNS primary (written) exam. Although these individuals continue to work toward Certification, they are precluded pursuant to Rule 11.4 from holding themselves out as "tracking toward Certification, "Board Eligible" or words to that effect, and will become "Certified" -- and listed on the ABNS website accordingly -- only at such time as they successfully complete the entire Certification process.

12.7 RE-ENTRY PROCESS

12.7.1 Diplomates with time-limited Certificates who fall into one of the categories set forth in Rule 12.6.8(b) are no longer deemed to be Certified. For these individuals, the mechanism to obtain a new Certificate and reinstatement of Diplomate status is as follows:

- (a) The individual must commence reinstatement activities (by notifying the ABNS that he or she wishes to do so) within two (2) years of the date he or she lost his or her Certified status, as well as pay a re-entry fee established by the Board (which is not subject to refund regardless of whether or not the individual successfully completes the reinstatement process).
- (b) The individual must submit 75 consecutive surgical cases performed during the immediately preceding three years, for review by the ABNS (and/or the Joint Credentials Committee of the ABNS and ABPNS, as applicable). There is no requirement that the 75 cases include a certain percentage of unique patient encounters, although the ABNS may take into account when reviewing the cases whether they include an atypical number of re-operations. The cases must be submitted within one year of commencing the reinstatement process and are subject to audit to confirm that they are consecutive.
- (c) Based on the case submission, the ABNS Credentials Committee will make one of three recommendations to the ABNS Board, which must then be approved by the Board: (i) If the case submission raises few if any issues and no safety concerns, the Credentials Committee may recommend that the individual's Diplomate status be re-instated based on the case submission alone; or (ii) if the case submission raises some concerns, the Credentials Committee may recommend that the individual take a re-entry oral exam, which will exactly mirror the oral exam for initial certification described in Rule 11.1 and the same passing requirements will apply; or (iii) if the case submission raises serious concerns regarding safety, competence, judgement, professionalism or ethics, the Credentials Committee may recommend a hearing to determine whether the candidate meets the requirements for oral examination (and at any such hearing the provisions of Rule 10.1 shall apply). The ABNS Board may accept the recommendations of the Credentials Committee, or may opt for another of the above options, in any particular instance.
- (d) Where the Board has opted to hold a hearing, at the conclusion of the hearing the Board will determine whether the individual may or may not sit for the re-entry oral exam. Any individual required to take the re-entry oral exam (either based on his or her case submission as set forth in sub-section (c)(ii) or based on the hearing decision as set

forth in this sub-section (d)) must pass the exam in order for the individual to regain his or her Certificate and Diplomate status.

- (e) Where an individual is required to take a re-entry oral examination pursuant to sub-sections (c)(ii) or (d), above, and fails that examination, he or she may request re-examination and will be given a total of three attempts to pass. Requests for re-examination must be submitted within eighteen (18) months of the date the individual last took the re-entry oral examination, so that the re-examination will occur no later than two (2) years from the date of the individual's prior attempt. For individuals taking the re-entry oral examination for a second time following one failure, the submission of additional practice data is not required. However, for the oral examination session devoted to clinical vignettes selected by the Board from the candidate's own practice data, the individual has the option to submit an additional 75 cases for use during his or her repeat examination. Alternatively, the individual may elect to be examined on his or her previously submitted 75 cases (although different cases from such submission will be selected for the repeat examination).
- (f) For individuals taking the re-entry oral examination for a third time following two failures, the submission of additional practice data is required (75 new cases). However, if the individual submitted new data after his or her first failure, he or she will not be required to submit additional new data after his or her second failure. If the individual elects to (Rule 12.7.1(e)) or is required to (Rule 12.7.1(f)) submit new data, the cases must be consecutive. Any newly submitted case data is subject to audit; if the Board discovers that the cases are not consecutive or the case data provided is not accurate, the Board may take any steps it deems appropriate, including permanently excluding the individual from the certification process. For individuals who elect to or are required to submit new case data following their failure of the re-entry oral examination, the cases can encompass any time period but starting no earlier than twelve (12) months prior to the date the individual most recently took and failed the re-entry oral examination.
- (g) Successful completion of the above requirements will lead to reinstatement of the individual's Certificate (including a focused practice credential, as applicable). If the individual is not approved to take the re-entry exam based on his or her case submission (and following a hearing), or if the individual is required to take the re-entry oral examination and fails three times, or if the individual fails to commence or successfully complete the entire process within the timeframes set forth above, the only mechanism to obtain a new Certificate and reinstatement of Diplomate status is to again complete all of the requirements for initial certification, including passing the

Primary Examination and, if applicable, the Written Focused Practice Examination, submitting 125 new consecutive cases for review, successful review by the ABNS (or the Joint Credentials Committee of the ABNS and ABPNS, as applicable) of the individual's cases, credentials and references, and passing the full oral examination for initial certification.

12.7.2 An individual who is no longer Certified because he or she falls into one of the categories set forth in Rule 12.6.7(b) may not hold himself/herself out to patients, hospitals, other health facilities, employers, medical societies, associations, payors, or the public as "Certified," "Board Certified," "Board Eligible," "tracking toward certification," "in the certification process" or words to that effect until such time as the individual has notified the ABNS that he or she wishes to commence the re-entry process and has paid the re-entry fee. At that time the individual should be collecting cases for submission pursuant to Rule 12.7.1(b), above, and the individual may begin holding himself/ herself out to patients, hospitals, other health facilities, employers, medical societies, associations, payors, and the public as "Board Eligible" or "tracking toward certification." Once the individual successfully completes the requirements of Rule 12.7.1, above, he/she will regain his or her Certificate and will again be a Diplomat. If the individual does not successfully complete the process within the timeframes set forth in Rule 12.7.1, he or she will again be prohibited from holding himself/herself out to patients, hospitals, other health facilities, employers, medical societies, associations, payors, or the public as "Board Eligible," "tracking toward certification," "in the certification process" or words to that effect. The failure to abide by this Rule 12.7.2 may result in sanctions at the Board's discretion, including but not limited to permanent ineligibility for certification.

12.8 UNETHICAL BEHAVIOR

Diplomates must certify that the information provided in the CC application is true and accurate and must agree not to engage in any unethical or irregular behavior intended to subvert the integrity of the program. Examples of unethical or irregular behavior include but are not limited to:

- (a) Any misrepresentation discovered in the participant's application for the CC program;
- (b) Completion of the CC Adaptive Learning Tool by someone other than the Diplomat whose name is associated with the log-in for use of the Tool; and
- (c) Engaging in any other conduct that subverts or attempts to subvert the integrity of the CC process.

If the ABNS (in conjunction with the ABPNS, as applicable) determines that unethical or irregular behavior has occurred in connection with CC, the Board may exclude the involved person(s) from the CC program, revoke the individual's Certificate, and/or take other appropriate action. If sanctions are imposed, the Board may notify legitimately interested third parties of its action. The Diplomat in question shall be given written notice of the charges and an opportunity for a hearing in accordance with the provisions of Rule 13.2.

12.9 EXEMPTIONS AND EXTENSIONS

Diplomates may petition the Board for exemptions from or for extensions of time in which to complete particular CC requirements. Such exemptions and extensions will be granted by the ABNS only in rare cases under compelling circumstances (and after consultation with the ABPNS with respect to Diplomates participating in the ABNS/ABPNS CC program).

RULE XIII. REVOCAION OF A CERTIFICATE

13.1 GROUNDS FOR REVOCATION

The Board of Directors shall have authority to revoke or suspend any Certificate or credential issued by it (or any credential issued jointly by it and the ABPNS) and thereby rescind Diplomate status, if:

- (a) Such Certificate was issued contrary to or in violation of any Rule or Regulation of the Board;
- (b) The person to whom the Certificate was issued was not eligible to receive or has since become ineligible to hold such Certificate;
- (c) The person to whom the Certificate was issued made any misstatement of fact to the Board in any application or in other material presented to the Board, violated any pledge made in conjunction with any application, or failed to comply with any ABNS rules or decisions;
- (d) The person to whom the Certificate was issued is convicted of, or pleads guilty or nolo contendere to any felony or any crime related to the provision of health care services, or is excluded from participation in any federal or State health care program;
- (e) Any license to practice medicine of the person to whom the Certificate was issued is revoked, suspended, placed on probation, or voluntarily relinquished in order to avoid potential sanctions, or restricted in any way;
- (f) The person to whom the Certificate was issued is expelled from any of the Nominating Societies, a county medical society, or a state medical association for any reason other than nonpayment of dues or lack of meeting attendance;
- (g) The person to whom the Certificate was issued has engaged in professional misconduct, a pattern of negligence or other serious misconduct adversely reflecting on professional competence or integrity (which, for avoidance of doubt, may include without limitation performing unnecessary or contraindicated procedures or engaging in intentional or grossly negligent miscoding); or

- (h) The person to whom the Certificate was issued has violated any ABNS Rule, Regulation or Code of Ethics provision, or has violated the terms of any written agreement with the Board, including but not limited to any Rule, Regulation or agreement relating to the person's status as "Retired" or "Inactive."
- (i) The person to whom the Certificate was issued has provided a negative reference or complaint to the ABNS regarding a candidate or another Diplomat that is not submitted in good faith (e.g., motivated by economic considerations such as the desire to harm a competitor) and/or is intentionally factually inaccurate or misleading.

13.2 PROCEEDINGS

When presented with information that a Diplomat may have engaged in unprofessional practice or other misconduct, the Board may investigate and gather facts concerning the possible existence of ground(s) for actions against that Diplomat's Certificate. For Diplomates with an additional credential jointly issued by the ABNS and the ABNS, the initial investigation and fact gathering will be undertaken by the ABNS/ABPNS Joint Credentials Committee. If the ABNS in its discretion (following the recommendations of the ABNS Credentials Committee or the Joint Credentials Committee, as applicable) determines that there is sufficient information to suggest that a Certificate possibly should be revoked or other sanctions imposed for any of the reasons set forth above, the ABNS Directors may institute proceedings for revocation thereof by mailing written notice to the holder of such Certificate that a hearing will be held to determine whether the Certificate shall be revoked or other sanctions imposed.

13.2.1 Such notice shall specify the ground(s) upon which a proceeding is being instituted, the date, time, and location of the hearing, and any ABNS witness(es) or other participants expected to be present (except that such notice need not specify that the ABNS Executive Director, ABNS staff and the ABNS counsel shall participate, since those individual shall participate in all hearings). The hearing notice shall be mailed to the Diplomat not less than sixty (60) days prior to the date of the hearing.

13.2.2 The Diplomat to whom such notice is addressed is expected to be present in person at the hearing absent compelling circumstances that prevent his or her attendance or create an unreasonable hardship. If the Diplomat wishes to request a waiver to this personal attendance requirement, he or she must submit such a request to the Board in writing not less than forty-five (45) days prior to the date of the hearing. The Board in its sole discretion may grant such a request and permit the Diplomat to participate telephonically. If the request for a waiver is denied the Diplomat against whom a proceeding has been instituted must appear in person; the hearing will go forward without the Diplomat's participation if he or she fails to appear and such failure to appear may be considered by the Board as one factor when rendering its decision in the matter.

13.2.3 A Diplomat against whom a proceeding has been instituted may be represented by counsel, may present witness(es), may cross-examine any witness(es) appearing against him or her, and may submit written material for the record.

13.2.4 At any hearing the Board shall not be bound by technical rules of evidence usually employed in legal proceedings but may accept any evidence it determines appropriate. After the hearing the Board shall render its decision in writing as to whether the Certificate and Diplomate status shall be revoked or other sanctions imposed (or no sanctions imposed). A copy of such decision shall be mailed to the Diplomate against whom the proceeding had been instituted. The Board's decision shall be final. With respect to Diplomates holding an additional credential in an ABNS-recognized area of focused practice (whether issued by the ABNS or jointly by the ABNS and the ABPNS), the Board's decision with respect to the individual's ABNS Certificate and Diplomate status shall apply equally to the individual's additional focused practice credential (and, if applicable, his or her ABPNS Diplomate status).

13.2.5 If, as a result of any such revocation proceeding, the Board determines that a Certificate held by any Diplomate shall be revoked, the Diplomate shall forthwith surrender his or her Certificate to the Board upon receipt of notice of such determination.

13.3 LESSER SANCTIONS

In cases where there has been an occurrence that would authorize the ABNS to revoke a Certificate, the Board may instead, at its sole discretion, propose lesser sanctions including but not limited to: probation, suspension, practice monitoring or other measures not prohibited by law. For Diplomates with non-time-limited Certificates (i.e., individuals certified prior to 1999), such lesser sanctions may also include mandatory participation in CC, which will effectively cause their Certificates to become time-limited.

13.3.1 In cases where the Board proposes such lesser sanctions, the Diplomate is entitled to all of the procedural protections set forth in this Rule XIII, including notice and a hearing.

13.3.2 The ABNS also may ultimately decide to impose such lesser sanctions in cases where it initially considered revocation but where, upon investigation or after conduct of a hearing, the Board no longer believes revocation would be appropriate. Similarly, the Board may impose greater sanctions following a hearing than were initially considered, including revocation, if the testimony or other information brought out at the hearing leads the Board to believe that more severe sanctions are appropriate.

13.3.3 If following notice and an opportunity for hearing, the Board ultimately decides to impose a lesser sanction than revocation, it may attach whatever lawful terms it deems appropriate to such sanctions. Failure of the Diplomate to comply with such terms may in the Board's sole discretion, result in revocation of the Diplomate's Certificate.

RULE XIV. NOTIFICATION TO THIRD PARTIES

In any case where a Certificate is revoked, suspended, placed on probation, or any other disciplinary action is taken pursuant to Rule XIII, or where the case log or other credentials of a candidate for initial Certification are deferred or not approved pursuant to Rules IX and/or X, the Board may at its discretion notify appropriate third parties, including but not limited to one or more of the following: (a) Nominating Societies for the Board (as listed in Article 1.2. of the ABNS Bylaws); (b) the American Board of Medical Specialties; (c) state licensing boards; (d) the Centers for Medicare and Medicaid Services; (e) the Office of Inspector General within the United States

Department of Health and Human Services; (f) state Medicaid Fraud Control Units and/or state Offices of Medicaid Inspector General; and/or (g) hospitals, other health facilities and private physician practices where the individual is believed to practice.

14.1 MATERIAL SUBJECT TO DISCLOSURE IN RARE CIRCUMSTANCES

Notifications furnished by the Board in accordance with this Rule XIV may, if determined to be appropriate for disclosing, include information that the Board has received directly from candidates or Diplomates (e.g., films or coding information submitted by candidates as part of their case submission), or objective information the Board has received from third parties (e.g., information regarding the status of a candidate's or Diplomate's licensure or hospital privileges), but in no event shall the Board disclose to any third party evaluations of candidates that it receives from residency program directors, the candidate's colleagues or physicians in the candidate's community unless required to do so by law, rule or court or administrative order.

14.2 BOARD'S DISCRETION; NO WAIVER OF PEER REVIEW PRIVILEGE

The Board is under no obligation to provide third party notifications authorized by this Rule XIV, which notifications will occur only in rare situations where the Board, through its credentialing and/or disciplinary processes, has identified evidence of egregious conduct, such as pervasive billing fraud, other willful malfeasance (e.g., indications of pervasive, obviously unnecessary surgery) or gross incompetence. Before making such a disclosure, the Board shall carefully evaluate the public interest served by disclosure as well as the need to preserve the integrity of its processes by keeping its candidate and Diplomate files confidential; no peer review or similar privileges with respect to ABNS files are waived as a result of this Rule XIV or as the result of any such rare disclosures made in furtherance of the public interest.

14.3 DISCLOSURES ARISING FROM FAILURE TO COMPLY WITH BOARD DECISIONS

In addition, in circumstances where an individual fails to comply with the final decision of the Board (e.g., where an individual whose Certificate has been revoked fails to surrender his or her Certificate in accordance with Rule 13.2.6), the Board at its sole discretion may take any additional action it deems appropriate to enforce its ruling.

RULE XV. CANDIDATE AND DIPLOMATE FILES

The contents of current and former candidate and Diplomate files are confidential and are not disclosed to anyone other than current Board of Directors, employees, and counsel, except (a) as required by law or court order; or (b) in connection with a disclosure made pursuant to Rule XIV.

RULE XVI. AMENDMENTS

These Rules and Regulations may be amended by the unanimous written consent of all of the Directors or by a majority affirmative vote of Directors at any annual, regular or special meeting provided a quorum is present.

These Rules and Regulations were updated in May 2022 to include all additions, deletions, and changes approved by the Directors of the American Board of Neurological Surgery since the Rules and Regulations had last been approved in November 2021.

AMERICAN BOARD OF NEUROLOGICAL SURGERY

Code of Ethics

Ethics are moral values. They are aspirations and inspirational, as well as model standards of exemplary professional conduct for all applicants for certification and all Diplomates certified by the American Board of Neurological Surgery. The term neurological surgeon as used here shall include all such candidates and Diplomates.

Ethics in neurosurgery always means primarily that practitioners act in the best interests of their patients. It is the duty of all neurological surgeons to place the patient's welfare and rights above all other considerations. Neurosurgical services must be provided with compassion, respect for human dignity, honesty, and integrity.

A neurosurgeon must maintain qualification by continued study, performing only those procedures in which he or she is competent by virtue of specific training or experience or with assistance as indicated of one who is so competent. This competence should be supplemented with the opinions and talents of other professionals and with consultations when indicated. Participation in the ABNS' Continuous Certification activities is one of many ways in which neurosurgeons comply with the above requirements.

Open communication with the patient or, if the patient is unable to understand a communication, the patient's relatives or other authorized representatives is essential. Patient confidences must be safeguarded within the constraints of the law. The performance of medical or surgical procedures shall be preceded by the appropriate informed consent of the patient or the patient's authorized representative. Timely communication of the patient's condition to referring and consulting physicians is also recommended.

Neurosurgery shall be recommended only after careful consideration of the patient's neurological, physical, social, emotional, and occupational needs. The preoperative assessment must document indications for surgery. Performance of unnecessary surgery, or improperly coding for procedures performed (or not performed), is an extremely serious ethical violation.

Fees for neurosurgical services must not exploit patients or others who pay for those services. In addition, a neurological surgeon must not misrepresent any service that has been performed or is to be performed, or the charges that have been made or will be made for the service.

Delegation of services is the use of nurse practitioners, physicians' assistants, trainees (such as residents and fellows) and other auxiliary health care personnel to provide patient care for which the neurosurgeon is responsible. Neurosurgeons must not delegate to an auxiliary those aspects of patient care within the unique competence of a neurosurgeon (which do not include those permitted by law to be performed by auxiliaries). When any aspects of patient care for which the neurosurgeon is responsible are delegated to an auxiliary, that auxiliary must be qualified and supervised. A neurosurgeon may make different arrangements for the delegation of patient care in special circumstances, such as emergencies, if the patient's medical needs, welfare and rights are placed above all other considerations.

Providing a patient's postoperative medical or surgical care until that patient has recovered is integral to patient management. The operating neurosurgeon and/or appropriate colleagues should provide those aspects of postoperative patient care within the unique competence of a neurosurgeon (which do not include those permitted by law to be performed by auxiliaries). Otherwise, the operating neurological surgeon must make arrangements before surgery for referral of the patient to another neurosurgeon, intensivist or qualified physician with the approval of the patient, family or legal guardian. Fees should reflect postoperative medical or surgical care arrangements with advance disclosure to the patient.

Communications to the public must be accurate. They must not convey false, deceptive, or misleading information through statements, testimonials, photographs, or other means. They must not omit material information without which the communication would be deceptive. Communications must not appeal to an individual's anxiety in any excessive or unfair way; they must not create unjustified expectations of results. Communications must not misrepresent a neurosurgeon's credentials, training, experience, or ability, nor contain material claims of superiority that cannot be substantiated. If a communication results in payment to a neurosurgeon, such must be disclosed, unless the nature, format, or medium makes that apparent.

Neurosurgeons must respect patient privacy and confidentiality, including by complying with all applicable laws, regulations, rules and accepted standards relating to the privacy and security of patient health information. Patient freedom of choice of provider also must always be respected.

Neurosurgeons who provide expert testimony in legal proceedings should limit their testimony to areas within the scope of their professional competence and experience. They should express only conclusions or opinions that are supported by and do not go beyond the medical records or the personally performed examinations that form the basis for their testimony. They should not express conclusions or opinions that are influenced or tainted in any way by the compensation they receive in connection with their expert testimony.

When engaged in research and other scholarly pursuits, neurosurgeons must comply with all applicable laws, as well as all rules of their institutions and of research sponsors, Neurosurgeons also must comply with all requirements of Institutional Review Boards, ensure that appropriate consents are obtained for all research involving human subjects and avoid any activity that could reasonably be construed as scientific misconduct (e.g., misappropriation of research funds; falsification of results or data). In all their scholarly publications, neurosurgeons ensure appropriate attribution and recognition of participating co-researchers and co-authors.

Neurosurgeons who are deficient in character or who engage in fraud or deception should be identified to appropriate local, regional, state, and/or national authorities. A physically, mentally, or emotionally impaired neurosurgeon should withdraw from those aspects of practice affected by the impairment.