# Measuring Excellence in Neurosurgical Competence and Certification

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he public, payors, healthcare organizations, and governmental agencies all support periodic recertification of specialists. In 1998, the American Board of Medical Specialties (ABMS) created the Task Force on Competence to ensure that all certified specialists maintain satisfactory, current knowledge and skills throughout their careers. In March 2000, all ABMS member boards, including the American Board of Neurological Surgery (ABNS), committed to modify their current or planned programs for recertification into Maintenance of Certification (MOC). The ABMS on March 16, 2009, approved universal standards for MOC that applies to its member boards. The goal is to foster excellence in patient care. It is expected that training and acquisition of knowledge and skills in medical practice will begin in medical school, be enhanced in residency, and be maintained throughout a neurosurgeon's career. The elements of measuring excellence in Neurosurgical Competence and Certification are embodied in the ABNS MOC program. Through its MOC program, the ABNS supports its Diplomates in lifelong learning and self-assessment. MOC provides assurance to patients and their families, payors and funding agencies, and the general public that ABNS Diplomates maintain and continually improve their knowledge and practice of neurosurgery. The program is designed to allow Diplomates to meet ABNS requirements as they continuously work to keep current with changes in the specialty. It also provides a means for compliance with state and hospital requirements that may include participation in an MOC program or periodic reexamination by a state medical board.

The program reflects the realities of current neurosurgical practice. Emphasis is on core knowledge and practice common to all neurosurgeons. The ABNS directors realize that neurosurgeons often concentrate their practices in various subspecialties areas. Consequently, the MOC process permits Diplomates to emphasize areas of their expertise as they participate in MOC.

The MOC program has 4 basic components:

- 1. Evidence of professional standing
- 2. Evidence of lifelong learning and self-assessment
- 3. Evidence of cognitive knowledge
- 4. Evidence of performance in practice

#### **PROFESSIONALISM**

Currently, to satisfy this component, Diplomates are required to hold an unrestricted license to practice medicine and surgery in their jurisdiction. It also includes "The Chief of Staff Questionnaire," which has been streamlined to make it less onerous and more efficient.

Two other planned requirements of this component of MOC are the Consumer Assessment of Health Providers and Systems (CAHPS) and the Peer Communication Survey; both measure and report on the key Competency of Communication and Interpersonal Skills. The CAHPS tool measures patient perception of physician performance in communication and interpersonal skills. The Peer Survey performs the same function for healthcare providers. Both will soon be required. Both tools are also a feature of Performance in Practice (part 4) MOC). Both are considered developmental standards at this time; ie, member boards are allowed time and flexibility to determine what instrument and vardstick are most appropriate for their Diplomates. Most surgical boards, being similar in character, have combined to produce a Surgical CAHPS and possibly a Peer Communication Survey that will best serve the needs of surgical specialists.

# EVIDENCE OF LIFELONG LEARNING AND SELF-ASSESSMENT

This component requires the accumulation of continuing medical credits (CME) for a total of 150 CME hours, both category 1 and 2, consisting of 60 credits of category 1 (all Neurosurgery) and 90 credits of other category 1 or category 2. These CME credits are accrued and tracked on a 3-year cycle.

A second aspect of this component of MOC is the Self-Assessment in Neurological Surgery (SANS), tool which is now available in 3 modules: spine, pediatrics, and general. This feature recognizes the fact that Diplomates engage in

subspecialty practice and tailors the self-assessment requirement of part 2 MOC to the reality of practice. The SANS spine module offers nearly 70 questions focused on spinal disorders and treatments. The remaining 170-plus questions cover all areas of neurosurgical practice. The SANS pediatrics module places additional emphasis on the pediatric component, with >80 of the 250 questions focusing on pediatrics. The remainder of the examination includes material covering all areas of neurosurgical practice. The SANS general module has approximately 250 questions covering a broad range of neurosurgical topics. Each question is accompanied by a peer-reviewed expert critique and hyperlinks to peer-reviewed literature.

The third aspect of this component of MOC is the patient safety self-assessment program, which is currently a developmental standard but will soon be mandatory. Currently, there is an ABMS Patient Safety Improvement Program, but member boards may develop their specialty specific module. One likely scenario for an ABNS-specific module could be a Web-based downloadable multimedia tool-audio, PDF, Webinar, or video file. When a module is completed, Diplomates will be directed to a brief quiz, an evaluation, and an interactive form for claiming CME credit. Diplomates will receive confirmation of the credit earned via e-mail. CME credit earned by ABNS members would be electronically reported to the AANS. A CME letter of credit also may be printed. The module could be developed by the professional societies with ABNS and Committee on Oversight and Monitoring of Maintenance of Certification (COMMOC) approval.

Examples of such modules could include:

- 1. Hand hygiene/sterile technique
- 2. Patient positioning: avoiding injury—nerve, skin
- 3. Preoperative medications: screening, interactions, and high-alert medications
- 4. Wrong-Site, wrong-level surgery: how to get it right and avoid missteps
- 5. Communication of critical results: laboratory, imaging, surgical findings
- 6. Discharge communication

## **EVIDENCE OF COGNITIVE KNOWLEDGE**

The third MOC Cognitive Exam was administered in March 2009. This exam is well tolerated and easy to administer. There no plans for major changes in the near term.

### PERFORMANCE IN PRACTICE

The key tool in part 4 MOC is the key case report. Directors have chosen 15 key cases that represent common diagnoses seen and procedures performed by neurosurgeons. Reporting modules have been developed for each one. The cases and outcomes are self-reported (unaudited) on standardized questionnaires. These modules can be accessed from

"MyMOC" on the ABNS website, www.abns.org, and the questionnaires are completed online. As participants log their data, references to relevant literature pop up, providing a significant educational aspect. Once completed, key case participation is validated and feedback is given. The Diplomate is able to compare his or her outcomes with those of other Diplomates who selected the same key case. the list of key cases, which covers the major areas of practice, currently consists of the following:

- 1. Anterior cervical diskectomy and fusion
- 2. Chiari decompression
- 3. Clipping of supratentorial aneurysm
- 4. Craniotomy for newly diagnosed glioma
- 5. Craniotomy for temporal lobectomy for mesial temporal sclerosis
- 6. Endovascular embolization of anterior circulation aneurysm
- 7. Lumbar diskectomy
- 8. Management of head trauma
- 9. Management of low back pain
- 10. Radiosurgery for brain metastasis
- 11. Release of tethered spinal cord
- 12. Removal of cerebral hematoma
- 13. Surgery for pituitary tumor
- 14. Surgical treatment of trigeminal neuralgia
- 15. Ulnar nerve decompression

For each key case, the data collected are tailored for relevancy, but the concept is the same. The information is standardized into 3 areas: history, treatment, and outcome. Great care is taken to protect the anonymity of patients. Diplomates select a key case from a list of 15 and submit the details from 10 recent, consecutive cases of that type. Once a key case has been selected, it is used for all 3 minicycles in a 10-year cycle. Diplomates receive feedback on their own cases and anonymously compare that with the collective results reported by other Diplomates who selected the same key case. Thus, they can track their outcomes and compare them with others or the extant literature. In addition, they can monitor their own progress over minicycles.

In response to requests from our Diplomates, the ABNS directors and the MOC committee are developing additional key cases for the existing 15 cases. The ventricular peritoneal shunt is in advanced stage of development and will debut soon. Two other key cases, lumbar stenosis and cervical spine trauma, are at an earlier stage of development. The MOC committee also provides reviews of ad hoc key cases for Diplomates with unique or special practices not suited to the current key case sample. For example, in the past year, requests were granted and completed for surgery for intramedullary tumor, lumbar laminectomy and fusion, surgery for spine tumor, piriformis syndrome, and surgery for acoustic neuroma.

#### **MOC COMPLIANCE**

Diplomates participating in MOC are advised to track their progress closely at MyMOC and to adhere to all deadlines for completion of requirements. This is particularly important because MOC is still being modified and refined. Although Diplomates may petition the board for exemptions from particular requirements or extensions of time, such exceptions and extensions are granted only in rare cases. They will be considered only under compelling circumstances, not in the normal course of events in which an individual simply missed a deadline or is "unable" to complete requirements within the mandated time frame.

MOC is rapidly becoming a fact of life for many Diplomates. The ABNS continues to invest significant financial and human resources in the implementation and further development of this critical and key aspect of our professional lives.

#### Disclosure

The author has no personal financial or institutional interest in any of the drugs, materials, or devices described in this article.