Bright Ideas to Energize Your

Neurologists are ideally positioned to offer in-office procedures that improve both patient care and practice finances. Here’s how to determine if they’re right for you.

By Nathan Hall
Associate Editor

From a scientific perspective, this is a fascinating time to be involved in medicine. Breakthroughs seem to be made on almost a weekly basis as researchers decode the mystery of the human genome, dramatically improve medical imaging technology, and develop new techniques to manage devastating, previously untreatable conditions.

From a financial perspective, though, the outlook is considerably more bleak. Medicare reimbursement rates are set to drop sharply in January and for each successive year to 2013. Private insurers are putting the squeeze on physicians too, as managed care plans constantly add more drug formulary restrictions and tighter reimbursement approval procedures. In the meantime, the expenses associated with running an office are rising and malpractice rates have been skyrocketing throughout the nation.

In order to stay financially viable, some physicians have changed the way they practice medicine. While many have taken a work-harder attitude by pulling longer hours, others have decided to work smarter by changing the way their practices operate. They have capitalized on recent developments in medicine to explore new revenue streams for a wide variety of clinical applications. Few medical professions are as well suited as neurology in this regard. Augmenting your E/M exams with more procedure-driven services not only improves quality of care and convenience for patients, it allows your practice to tap into lucrative new revenue sources. Some of these expand your role as diagnostician, others provide a more active role in improving patients’ quality of life. In this article, we’ll look at several that serve patient needs while bolstering your practice.

Cash Flow Injection

Once regarded in the neurology community as the exclusive domain of movement disorder specialists, botulinum toxin A (Botox) is becoming more popular among general neurologists for a wide array of uses. According to a 2004 report from the American Academy of Neurology Member Demographics Subcommittee, 26.7 percent of respondents had administered botulinum toxin A injections in the past 12 months, up from 18.8 percent in 2000. While this is a substantial leap in popularity, it also shows that only about one in four practitioners are now offering this treatment.
Practice
Movement disorder specialists have long known about Botox’s efficacy for treating spasticity and dystonia, most applications of which have been recognized by the FDA and major third-party payers. The predetermined reimbursement rates usually govern the amount of revenues the procedures will generate. Allergan, Botox’s manufacturer, is known for offering an effective reimbursement service to help denied claims get processed, which alleviates some of the hassles associated with the reimbursement process.

Botox’s potential as a pain management option, particularly in migraine prevention, is also gaining more acceptance: Last month at the 47th Annual Meeting of the American Headache Society, David Dodick, MD, of the Mayo Clinic in Scottsdale, AZ reported the results of an exploratory study that showed Botox can help prevent chronic daily headache (for more information, see page 7). Botox can be particularly profitable when used off-label for pain prevention, as neurologists can set their own price for injections, drawing in anywhere from $500 to $900 depending on what they feel is appropriate for their services and what the community will bear. There’s also a substantially larger market for headache prevention procedures than the relatively small pool of movement disorders indications.

Using Botox for cosmetic enhancement has the potential to be extremely profitable, although some neurologists who tried it found they were not generating enough volume to justify breaking the seal on new vials. This patient population is also known for being more demanding than most neurology patients, as they expect nothing less than a visibly perfect result. However, if there is an unmet need in the community and/or you’re already using Botox for its medical indications, it could provide a substantial new stream of revenue.

**Seeing Green in Black and White**

The days of physicians strictly relying on a radiologist’s report instead of looking at MRI images themselves have been over, ever since the courts ruled this was not an adequate defense for a missed diagnosis. Neurologists now have to look at their own scans, which have come to play a more significant role in diagnostic procedures. Some have started to cut the radiologist out of the picture altogether, reading MRIs and billing for the interpretation.

Most fellowship and residency programs for neurology already put an emphasis on reading images, and the American Academy of Neurology has created guidelines to standardize this training. Licensed physicians who have developed substantial imaging experience since graduating school can also take an exam through the American Society of Neuroimaging to officially become certified in neuroimaging. Taking this extra step can increase your revenues by up to 30 percent, according to Garth James, a corporate member of ASN and CEO of MRI Central in Dallas.

Those in larger groups may want to consider working with their partners to establish an imaging center. While it requires a hefty initial investment, companies like Mr. James’s have helped to establish centers throughout the country. Those in smaller groups may want to talk to their colleagues in other specialties that rely heavily on imaging to see if they would be interested in a joint venture.

Another possibility for those considering a large-scale imaging investment is magnetic source imaging (magnetoencephalography), says John R. Gates, MD, President of the Minnesota Epilepsy Group. His practice is one of only 10 centers in the nation that offer this imaging technique, a noninvasive method used to map the brain prior to neurosurgery and characterize epileptiform activity as well as information processing. He says there is a growing need for this service as research finds more indications for its use.

**The Body Electric**

The field of electrophysiology is often overlooked, says Dr. Gates, despite the relative low costs for the equipment and its wide range of applications in neurology. “We’ve always been the electricians of the nervous system,” says Dr. Gates, “But out of the 12,000 neurologists in the nation, I’d say only about 1,000 are involved in this.”

There is a set certification process in clinical neurophysiology, offered through the American Board of Psychiatry and Neurology. Dr. Gates, who recently earned his recertification, says this program is not necessary but does give the practitioner much more credibility when interpreting the results.

Beyond the basic diagnostic roles, Dr. Gates says test monitoring can be very profitable in a hospital setting. The neurologist can watch a surgery patient’s EEG, EMG and electrocardiography results from outside the OR and bill for each procedure at the hospital fee schedule, making it a profitable use of time.

The testing equipment can also be used in the practice to offer biofeedback to migraine patients, particularly children. The physician can monitor the patient through EMG, EEG, skin temperature and heart rate as he or she attempts the relaxation techniques associated with this therapy. Although the clinical evidence supporting this procedure is still relatively scant, there is growing interest in its potential therapeutic benefits.

A similar testing method, electroneystagmography (ENG), is also becoming more popular among movement disorder specialists due to its ability to measure balance and vertigo. Stephen Gollomp, MD, a private practitioner in Wynnewood, PA, says the technique has improved his abilities to diagnose the extent of movement disorders in patients. He says it hasn’t proven particularly profitable—the revenue it brings in just cover the costs—but he attributes this to the newness of the procedure in his practice. More promotion of the service...
should bring in more patients and make the service profitable, he says.

**The Value of a Good Night’s Sleep**

Sleep medicine is a rapidly growing field, one that offers neurologists access to a huge potential “market” of patients and procedures. Increased awareness of sleep disorders has led people to find out what, exactly, is keeping them up at night. And since many of these disorders are either neurological conditions or closely related to them, neurology is uniquely qualified to fill this need.

How involved the neurologist wants to get is an individual choice. Some are content to take referrals from the local center; others set aside a portion of their practice to conduct sleep studies; still others establish entire sleep study facilities from the ground up. Which course of action is right for you would depend not only on what is the most profitable based on the local competition and community need but also your professional interests. Going into sleep studies full-time could be lucrative but it is not for everyone.

Like other subspecialties, this field has its own certification process. The American Board of Sleep Medicine requires participants to take 12 months of training in sleep medicine prior to the examination. Running a laboratory will also take a number of other specialists, such as polysomnographic technologists, and a business staff to handle the operational issues.

**A Different Way of Looking At Patients**

Taking on a medico-legal role by providing independent medical examinations may prove to be a very different experience than most clinicians are used to. Instead of providing treatment and establishing a relationship, the physician conducts an impartial exam to clear up legal issues for case management and legal proceedings.

When conducting an IME, the physician observes the patient attempt a number of tasks designed to test their abilities, analyzes their past records, determines causation and notes any necessary restrictions they have or accommodations they need. The attending physician will have to ask many specific questions about the exam, such as those related to the patient’s occupation, what caused the damage and who bears the legal responsibilities. Then the physician writes a report based on the exam’s results that specifies the impairment(s) along with issues related to the disability (such as when the patient can expect maximum medical improvement) for both the medical and non-medical personnel involved in the patient’s case. The evaluating physician must also be able to perform depositions or give testimony, if necessary.

It requires a paradigm shift from a general neurologist’s day-to-day routine, but it can be quite profitable. The court system has a very specific need for independent medical examinations from neurological experts. Central nervous system and spinal damages rank just behind orthopedics in the number of complaints stemming from workplace injuries or car accidents. Since these injuries are so complex, there is room for competing views on both side of the case. Many physicians who participate in this sort of work say it helps them sharpen their clinical skills.

Worker’s compensation evaluation may seem like a mountain of paperwork at first glance, but some practices have found that once they establish a system that tracks the process from the patient’s first call for an appointment to when they are cleared to return to work it can create a reliable revenue stream. Nerve and neural damage are commons complaint among injured workers and neurologists may be the best specialty to assess the extent of the patient’s disability.

**Pump Up Profits**

Implanting a protein pump, neurostimulator or spinal stimulator may be beyond a neurologist’s training, but both the preceding referral process and the subsequent follow-up care are within your domain. Both movement disorder and pain management specialists can offer such procedures via referral to a neurosurgeon to provide patients a new degree of control over what were previously intractable cases.

Neurologists have a wide range of treatments available for controlling spasticity. The most common front-line treatments—including baclofen administered as an oral medication, physical therapy, botulinum toxin injections, or orthopedic surgical procedures—will help most patients. However, there will still be a number of cases that need something more potent to control this symptom, which often is resistant to conventional therapy.

These patients could benefit from intrathecal baclofen (Lioresal) therapy, and while neurosurgical surgical referral is required for implantation, managing the device post-operatively can open another revenue stream for the practice. The actual task itself can be performed in an outpatient setting and constant monitoring is a must for effective treatment.

Finding the right dose can take anywhere from a few days to several months, depending on the situation, which means the patient will periodically have to revisit the practice after the implantation. Adjusting the pump and providing refills is easily incorporated into an office schedule and requires little training and no additional personnel—indeed, neurologists themselves can perform these procedures. Many patients will also need adjunctive therapies with other agents to optimize their benefit and reach their personal goals.

How profitable this venture is depends on the volume of patients the practitioner sees, which in turn depends on how...
well the procedure is promoted. There are a number of codes for ITB reimbursement (see Table 1) if the physician submits the proper paperwork with the claim. Medicare and most other payers require documented proof that oral medication was tried for at least six weeks and was either ineffective or not tolerated by the patient, and that the patient had a successful trial of intrathecal baclofen before the device was implanted. Many physicians develop forms that note the time and duration of oral medication tried and the date, location and result of the intrathecal trial. Adding the source of the spasticity (whether it is cerebral or spinal) is also helpful.

While pumps may be easy to regulate, managing deep brain stimulators and spinal stimulators is sometimes seen as complex enough to be a subspecialty itself by those who are intimidated by the technology or the new billing codes associated with them. For those who know their way around a computer, though, the process is relatively simple. The devices can be monitored and adjusted with a computer, and recharging the unit is not much harder than changing a battery. Some of the more recent devices, such as Medtronic’s SynergyPlus+ Neurostimulation System (which recently earned FDA approval for managing low to moderate levels of chronic pain), are touted as being easier to use and adjust.

The exact science behind DBS management has yet to be established. An implant that at first seems to be unsuccessful may become effective with the appropriate intervention. In the June 13, 2005 online edition of Archives of Neurology, a retrospective analysis of data collected from two movement disorders centers found that five percent of patients who complained of “failed” DBS procedures ultimately had good outcomes when adjustments were made. It’s likely that in the future we’ll have set guidelines for DBS management to optimize the benefits for patients, but until that day comes the best option is close monitoring.

### Minimizing the Risks

More and more Americans relying on outpatient clinics for their health care needs these days, and freestanding practices need to have their way around a computer, though, the process is relatively simple. The devices can be monitored and adjusted with a computer, and recharging the unit is not much harder than changing a battery. Some of the more recent devices, such as Medtronic’s SynergyPlus+ Neurostimulation System (which recently earned FDA approval for managing low to moderate levels of chronic pain), are touted as being easier to use and adjust.

The exact science behind DBS management has yet to be established. An implant that at first seems to be unsuccessful may become effective with the appropriate intervention. In the June 13, 2005 online edition of Archives of Neurology, a retrospective analysis of data collected from two movement disorders centers found that five percent of patients who complained of “failed” DBS procedures ultimately had good outcomes when adjustments were made. It’s likely that in the future we’ll have set guidelines for DBS management to optimize the benefits for patients, but until that day comes the best option is close monitoring.

### Minimizing the Risks

More and more Americans relying on outpatient clinics for their health care needs these days, and freestanding practices

---

**Table 1. Codes for ITB Therapy**

- **ITB Trial:**
  - Trial with lumbar puncture: 62311
  - Trial with indwelling catheter: 62311
  - Hospital observation: 99235
- **Pump refill by a physician:** 95991
- **Pump refill by a non-physician:** 95990
- **Pump reprogram:** 62368
- **Pump analysis:** 62367

If a patient requires a significant, separately identified E&M service on the same day the pump is refilled, you may also bill the appropriate E&M code in conjunction with the -25 modifier. Code 99235 can only be used if the patient is admitted to a 24-hour observation unit for a trial and you fulfill the documentation requirements. And since code 62367 can only be applied when the pump is interrogated but no changes are made in the programming, it cannot be billed together with 62638.

---

**PN**