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Hospitalists in Neurosurgery?

Some Hospitals Explore the Possibilities to Address Call-Coverage Issues

By Bonnie Darves

Over the past 13 years, Colorado neurosurgeon John McVicker, MD, has developed, evolved and fine-tuned a neurosurgical coverage model that's focused on filling in coverage gaps that many hospitals have and many hospital administrators worry about in a competitive and increasingly scrutinized services market. He developed an acute-care neurosurgery model in Denver in 2006 by contracting with local hospitals to provide acute-care and trauma neurosurgery coverage, taking what was essentially "standing call" in Level 1 and Level 2 facilities that had struggled to maintain adequate coverage in their EDs as community neurosurgeons reduced or opted out of call.

By assembling a two-neurosurgeon team, compensated on a stipend basis and working seven days on/seven off, Dr. McVicker and his colleague rotated through the facilities to treat the emergent or merely urgent unassigned patients, focusing on Medicare, Medicaid and TriCare patients. "The seven on/seven off schedule worked well at a modest-volume trauma center for six years. I dealt with the patients for my week on and then my associate covered the patients still in the hospital," said Dr. McVicker, founder of Acute Care Neurosurgery LLC.

"We treated a lot of trauma, but about half of the cases were other issues—seizures, undiagnosed tumors, spontaneous epidural abscesses and a lot of edema—so we'd evaluate those patients, admit them and manage their urgent problems." On typically "trauma-light" days, the neurosurgeons would schedule their discharged patients for follow-up visits.

A decade ago, Dr. McVicker replicated his model in Colorado Springs, where a Level 2 trauma center was having similar coverage issues to those the Denver hospitals experienced. He went in solo at first, later brought in a second neurosurgeon, and as volumes increased, eventually built a team of seven neurosurgeons using the same shift-based structure. The group is now hospital employed, and the model has proved so successful that the group has taken the facility to Level 1 status.

"I call this acute-care neurosurgery because everything starts with an emergent issue through the ED or from inside. But it's essentially a hospitalist staffing structure—these surgeons aren't doing elective cases," said Dr. McVicker, who is now director of neurosciences at UC Health's Memorial Hospital in Colorado Springs.

For much the same reasons that Dr. McVicker created his programs, St. Peter's Hospital in Albany, N.Y., is preparing to launch a neurosurgical hospitalist program. The concept involves bringing in two neurosurgeons who will be entirely hospital

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> – John McVicker, MD, Memorial Hospital, Colorado Springs

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Hospitalist Model

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based and who will cover three weeks a month—taking over much of the call responsibilities that the 442-bed hospital's longstanding three-neurosurgeon group covers. The existing group will continue to cover the remaining one week a month, but the new arrangement—being put in place by the hospital—will substantially lighten their call load. Having neurosurgical hospitalists in the facility will also give the neurosurgeons in St. Peter's Hospital Spine & Neurosurgery more time to attend to their growing elective practices while reducing reliance on locums.

"We don't have residents and we're not a trauma center, so this model will take away some of the burden of those middle-of-the-night calls and emergent situations that can be more efficiently handled by having a neurosurgeon onsite," said Craig Goldberg, MD, an attending with the group, which recently became hospital employed. "We'll adapt this [hospitalist] model as we move forward, but our neurosurgeons are excited about it. And we're a very collegial group who communicate with each other daily, so we expect that will continue when the hospitalists come onboard."

Shelly Timmons, MD, PhD, director of neurotrauma at PennState Health's Milton S. Hershey Medical Center and current president of the American Association of Neurological Surgeons (AANS), uses a somewhat similar model. It's not a hospitalist structure, strictly speaking, but more like an intensivist model, and it's designed to cover for a specific subset of patients. Five neurosurgeons, including Dr. Timmons, each cover one week at a time in the neuro-ICU and don't schedule clinic or procedures for that week. It's a robust team structure, operating 24/7, that also includes residents and nurse practitioners but is commandeered by an onsite attending.

"We still must be responsible to all of our neurosurgical patients' needs from the rest of our practice, including responding to office-based phone calls, problems and complications," Dr. Timmons said. "[But] this works because we have a very cohesive team, a solid office-based support system and our colleagues are always willing to help."

> **"There's a little variation, but for the neurosurgical hospitalists, it's basically taking care of the inpatient problems and leaving the outpatient elective work to the community neurosurgeons."**
>
> – James Killeffer, MD, Surgical Colleagues LLC

Drivers are largely logistical

The factors prompting hospitals and some neurosurgery groups to explore atypical arrangements to address coverage gaps and over-burdened community neurosurgeons are somewhat obvious. The perennial undersupply in the specialty means that even at the best of times and under ideal conditions, neurosurgeons in small to mid-sized groups experience challenges coordinating and managing their elective practice and potentially heavy call schedules.

Hospitals, for their part, are under increasing pressures—community and competitive—to ensure consistent neurosurgical services. And they've found that even paying hefty call stipends and/or hiring locums neurosurgeons doesn't always address the inherent problem of a patchwork approach to coverage.

Dr. McVicker points to the economics of hospitalist-type models as a potentially compelling rationale for incorporating such programs. "Data from three years ago shows that for a hospital that adds neurosurgery to its services, the first neurosurgeon brings in, in annual facility, lab and services fees, almost $4 million. There's no way a neurosurgeon can participate in that revenue stream with professional fees only," he said, "unless they contract with the hospital to provide the services that enable the hospital to offer neurosurgical care."

In Dr. McVicker's view, the hospital benefits, and the community is better served. "There were six neurosurgeons in the community when I came to Colorado Springs, and none of them wanted to do emergency care," he said. "This model has taken care of those issues."

Finally, as hospitals seek trauma designation and develop primary stroke centers, the neurosurgeon pool is being further stretched, according to Chris Eaton, co-founder of Surgical Colleagues, LLC, in New Hampshire, which develops and staffs call services in surgical specialties such as orthopedics, acute care surgery, trauma and, of late, neurosurgery. "Hospitals simply cannot afford to have inconsistent coverage for the EDs today. And even at Level 1 and Level 2 trauma centers, full neurosurgical support is sometimes absent, or it's difficult and costly to maintain," said Mr. Eaton. His company's model, of recruiting and hiring neurosurgical hospitalists and managing all administrative aspects of the resulting practice, is intended to support the hospital and offload the existing neurosurgery practices previously responsible for call coverage.

There's no template *per se* for the Surgical Colleagues model, Mr. Eaton said. Instead, it's dependent on the hospital's and existing neurosurgeons' needs and situation. "We just

sit down with the hospitals and the surgeons to determine what the needs are, and develop a program accordingly," he said. The objective is to fashion a program that will "support both constituencies and improve quality of life for all involved." This type of coverage arrangement is preferable, in Mr. Eaton's view, to hospitals hiring several locums each month for shorter durations.

Both Dr. McVicker and Mr. Eaton concur that the neurosurgical model is most suitable for mid-size to large facilities with consistently robust ED volume and good inpatient support. Mr. Eaton suggests a minimum of 200 beds as a starting point. "You really have to have volume and support to make this work," Dr. McVicker said. "Our ED sees almost 200,000 patients a year. You also need to have a team around you that includes intensivists—or the hospitalists must have neurocritical care interest and training."

The Surgical Colleagues hospitalists, in the programs the company has developed to date for non-trauma hospitals, typically work six consecutive 24-hour shifts, followed by a week off, for a total of 10 to 12 shifts a month depending on the hospital's needs. Post-discharge patients are seen in a hospital-attached clinic for follow-up, through the global period if a procedure was performed. The hospitalists' care scope is determined with input from and approved by the medical staff, and they're expected to participate on committees or in hospital initiatives.

"There's a little variation, but for the neurosurgical hospitalists, it's basically taking care of the inpatient problems and leaving the outpatient elective work to the community neurosurgeons," said James Killeffer, MD, a Knoxville, Tenn., neurosurgeon who is Surgical Colleagues' chief medical officer. "The advantage we provide is that the existing surgeons get to opt out of call without losing access to their desirable elective patients." Another potential advantage for the hospital, he added, is that it might retain patients whose neurosurgical problems could be handled in-house but might be transferred if coverage wasn't available or locums weren't able to take the case.

"I think this type of model could work for just about any situation—from the health system that's paying a lot for call that isn't very productive," Dr. Killeffer said, to the academic center that can't afford to develop more faculty just to ensure the needed coverage. "From the local neurosurgeons' standpoint, we've been welcomed because they don't have to take night call. And trust me, few community neurosurgeons really get much benefit from going to the hospital at night."

Neurosurgical Hospitalists at Harborview: Broad Role Supports Operations

Most hospitals that consider implementing a hospitalist-like model in neurosurgery would be seeking a solution to spotty, inadequate call coverage or an over-reliance on locums to meet chronic needs. But one academic center is using a modified neurosurgical hospitalist model to serve a broader purpose: smoothing out throughput and supporting over-burdened residents and attendings. At Harborview Medical Center in Seattle, a University of Washington teaching facility and Level 1 trauma center whose busy neurosurgery census might bulge to 100 inpatients in the high-trauma summer months, two senior neurosurgical hospitalists play a key role in helping the service run more smoothly—but they don't operate.

Richard Rapport, MD, and his neurosurgical colleague David Primrose, MD, work full days essentially doing whatever needs to be done. That might be supporting a harried resident, consulting on a case in the ICU, overseeing the approximately 20-member inpatient and outpatient advanced practice clinician team, handling paperwork, or meeting with patients and families. In the bigger picture, the hospitalists also help triage and manage neurosurgical admissions through the ED and step into the clinics as needed.

"Having us do these things has stabilized the service enormously and really improved its organization," said Dr. Rapport, a clinical professor of neurosurgery who enjoys the fact that he has no other official title. "All big county hospitals are similar. They're training centers for young physicians who are very smart but by definition are still learning. It's really important that a highly experienced senior neurosurgeon unencumbered by time-intensive surgical procedures be readily available to help out. We can spend time with sick people and their families, when necessary, while our faculty colleagues are busy in the OR for many hours."

"Having us do these things has stabilized the service enormously and really improved its organization."

– Richard Rapport, MD,
Harborview Medical Center, Seattle

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Hospitalist Model

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Dr. McVicker concurs. "The problem comes when you try to mix call and elective practice for the individual neurosurgeon who has to take the call but isn't reimbursed for it in any way that makes sense for the practice," he said. "And the hospitalist surgeon doesn't have to take clinic and doesn't have elective practice responsibilities to be concerned about."

What might be the advantages of the hospitalist model for surgeons? For one, Dr. Killeffer said, neurosurgeons who don't want the financial and administrative hassles of running a practice might find the practice freeing and the schedule attractive from the perspective of managing their off-work time. And those who don't want to work full time or be employed by hospitals or health systems that dictate the terms of their employment and compensation might find the model appealing. "You don't have to sit around worrying about your productivity and RVU-driven income," he said. He declined to discuss actual earnings potential but stated that Surgical Colleagues' salaries are "competitive." He added that the Surgical Colleagues model also appeals to surgeons who, for whatever reason, want to live somewhere that they couldn't feasibly practice—and can split the month between the two locations.

For Dr. McVicker, the hospitalist model provides both professional and social benefits. "It's a lot less lonely, I think," he said. "You're working day by day, side by side, with the ED folks and surgical trauma team and the intensivists and medical hospitalists, so you really begin to develop an esprit de corps in that regard. The other plus is that when you're off, you're truly off."

Some see challenges, shortcomings

Some neurosurgeons think that the neurosurgical hospitalist model poses several challenges, and others question whether the lifestyle would necessarily be an improvement over the status quo. Sources interviewed for this article wondered how many neurosurgeons who've spent seven years in training would be interested in a practice scope that's limited to emergent issues and inpatient consults—unless they're seeking to scale back. Others cited concerns about care continuity in the hospitalist model, in terms of what happens to patients who undergo procedures that might require ongoing care beyond the 90-day global period.

> **"Very few cases are 'one and done.' And about half of patients I consult on in the hospital don't need surgery at all, but they might need follow-up care."**
>
> **- James Bean, MD, Lexington, Ky**

James Bean, MD, a neurosurgeon with The Baptist Health Medical Group in Lexington, Ky., and a former AANS president, asks about how the model would address patients' longer-term needs. "If you have a neurosurgeon who's doing just the hospital-based work, those patients have to be discharged somewhere to somebody who will oversee their post-surgical care," he said. "Very few cases are 'one and done.' And about half of patients I consult on in the hospital don't need surgery at all, but they might need follow-up care. That's the hang-up I see here, unless the neurosurgeon could make arrangements with another neurosurgeon or a physical medicine physician to see patients after surgery."

Mr. Eaton noted that in the case of patients who need continuing care, Surgical Colleagues operates the follow-up clinic and also establishes hospital-sanctioned referral arrangements with community physicians, including neurosurgeons, for patients who will need ongoing care. "We also work with case managers and social workers as warranted," he said.

Robert Friedlander, MD, MA, chair of the Department of Neurological Surgery at the University of Pittsburgh, also cites concerns about care continuity post procedure. "What does the hospitalist do about the patient who needs an emergency shunt but might need things to be followed or fixed later? That's one challenge I see: what happens six months down the road with that patient?" he said. "I think that the real need in the community is for a better system for the care that hospitals are using locums for now."

Nonetheless, Dr. Friedlander admits that he finds the notion of a well-operated neurosurgical hospitalist model intriguing. "This could work well for trauma, and possibly also for hospitals that don't really need three or four neurosurgeons but the two it has don't want to be on call all the time," he said. Dr. Friedlander's 54-neurosurgeon group covers 13 hospitals in total, and he struggles to ensure consistent, adequate coverage at outlying and rural facilities within the UPMC health system. The hospitalist model might be a better scenario, he added, than constantly using different locums who are only there for a week and go home.

"The hospitalist practice might appeal to neurosurgeons who want to work part time for family reasons or are near the end of their careers. But I think you'd have to find people who are really willing to do this kind of practice, and you'd have to pay them enough to make it attractive," Dr. Friedlander said.

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Understanding Fair Market Value Compensation and Commercial Reasonableness

These Regulations, If Violated, Can Cause Serious Problems for Neurosurgeons and the Entities with Which They Contract

By Angie Caldwell, CPA, MBA and Elisa Myers, MHA

Angie Caldwell CPA, MBA

Financial relationships between hospitals and physicians must be both commercially reasonable (CR) and at fair market value (FMV) to meet certain regulatory requirements. Ensuring compliance with these requirements is critical; involved parties who fail to do so may be subject to sanctions and penalties under the Stark Law, the Federal Anti-Kickback Statute (AKS), the False Claims Act (FCA), and Internal Revenue Service (IRS) 501(c)(3) status for tax-exempt organizations.

For example, a 2014 case examined employment compensation and bonus agreements between three neurosurgeons and six medical oncologists at a Florida hospital. The government, through a whistleblower, alleged that the agreements exceeded FMV and were not CR. The hospital ultimately reached an $85 million settlement with the government to resolve the allegations. That is an exorbitant cost for any health system to bear.

Often, when such cases surface, two primary questions come to mind: What does it mean for compensation agreements to be FMV and CR? How do these concepts apply to me as a practicing neurosurgeon?

Generally speaking, transactions between potential referral sources must be consistent with both FMV and CR. An analysis of a transaction may determine that it is FMV but not CR, or vice versa, at which point the transaction would be non-compliant. All types of healthcare providers—physicians, advanced practice providers, imaging providers, pharmaceutical and device manufacturers, hospitals, home health agencies, and skilled nursing facilities, among others—are affected by FMV and CR.

Federal regulations and the IRS provide the ground rules and definitions for FMV: The transaction must be at arm's length in an open and unrestricted market, with bona fide bargaining between a willing buyer and a willing seller where neither is under compulsion to buy or sell. In healthcare, FMV cannot consider the volume or value of anticipated or actual referrals. In other words, when determining FMV, no consideration for post-transaction buyer synergies are considered, even though such synergies often exist.

Interestingly, regulatory guidance for determining FMV is not prescriptive. The guidance merely indicates that a valuator should use multiple, objective compensation surveys, such as those published by the American Medical Group Association, the Medical Group Management Association, SullivanCotter and others. Regulatory guidance further indicates that clinical compensation rates should be used for clinical services, while administrative rates should be used for administrative services.

FMV cautions for neurosurgeons

A neurosurgeon entering into an agreement with a potential referral source (for example, an arrangement between a hospital and a physician for clinical, administrative, or call coverage services) needs to understand that his or her ability to generate revenue for the other party via referrals should not be considered in determining the level of compensation paid. In general, neurosurgeon

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FEATURED OPPORTUNITY

Brooklyn Hospital Employed Neurosurgery Opportunity

A new hospital system in Brooklyn, New York, is seeking a BE/BC neurosurgeon to join the group. The incoming neurosurgeon will start working out of one hospital exclusively, a Level I trauma center in Brooklyn. The neurosurgeon will have the opportunity to build an elective sub-specialty practice, while sharing in trauma call at the hospital.

The hospital system is a newly formed group and is working with a school of medicine in the Brooklyn area to form a new neurosurgery department. The department is based in the medical school and has multiple sites, high volumes, and the ability to support a residency program.

The system includes three trauma centers (two are Level I) and will serve a very large population in central/south Brooklyn. The department will be expected to provide a wide range of specialty services and can anticipate large patient volumes. The incoming neurosurgeon will be employed through the practice. Call for the incoming neurosurgeon will be approximately 10 days per month. The position provides the opportunity to build elective practices in a variety of neurosurgery sub-specialties including spine, pediatric, neuro-oncology, endovascular and DBS.

Fair Market Value Compensation

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compensation should be valued based on the market where the services are provided, along with the neurosurgeon's level of skill, effort, time, quality, and reputation. Valuation of physician compensation is based on the individual facts and assumptions of the arrangement. It's important to note that no two arrangements are alike.

Examples of compensation that may not be FMV compliant include:

- Excess compensation in the form of benefits, where the excess benefits added to the neurosurgeon compensation exceed FMV.
- High compensation associated disproportionately with productivity, where the neurosurgeon is producing at a low level and paid at a high level when compared to peers, without qualitative factors to support the productivity-to-compensation differential.
- Unusual compensation, where the types of compensation paid to the neurosurgeon are not consistent with other employed neurosurgeons or other employed physicians.
- Risk-free sign-on bonuses, where a neurosurgeon receives a sign-on bonus exceeding market levels, with no requirement to pay back that bonus if the neurosurgeon leaves employment after a short period of time.

The Centers for Medicare and Medicaid Services (CMS) considers an arrangement commercially reasonable in the absence of referrals if the arrangement would make commercial sense if it meets these requirements: It's entered into by a reasonable entity, of similar type and size, and a reasonable physician (or family member or group practice), of similar scope and specialty, even if there were no potential referrals. In theory, most business transactions must be CR, or there would be no reason for them to occur. While CR assesses the overall arrangement, including the qualitative considerations such as strategy and operations, FMV primarily assesses the financial aspects of the arrangement, such as the range of dollars.

CR is typically analyzed in five parts. These include business purpose, provider, facility, resources, and independence and oversight. A valuator will ask the following questions, among others, when conducting the analysis:

- What is the business purpose of the transaction?
- What is the expertise of the neurosurgeon who will provide the services? Is this expertise required to provide the service, or could the service be performed by a lower-level provider?
- Does the facility require the service? Has the facility demonstrated an investment in the service?
- What resources will the parties need to effectively provide the service? How does the neurosurgeon help provide the resources?
- What processes does the facility have in place to monitor the arrangement? How does the organization measure the effectiveness of the arrangement?

Commercial reasonableness cautions

Recall that an arrangement may meet the requirements of FMV but not meet the requirements of CR. In this case, the "cents" of the transaction (the FMV) may not align with the "sense" of the transaction (the CR). Following are two hypothetical examples of potential commercially unreasonable arrangements involving neurosurgeons:

1. A hospital paying neurosurgeon specialty compensation rates for administrative work that only requires the skill set of a primary care physician. It would not make good business sense to pay a neurosurgical hourly rate for the service when that service could be obtained at a lower rate.
2. A health system maintaining, at two of its facilities, neurosurgery medical director agreements that contain duplicative protocols and policy requirements. It would not make good business sense to pay for the same service twice.

The value of neurosurgeon incentive compensation was determined by reviewing hospital contribution margins of the neurosurgeon, or hospital net margin was utilized to fund the incentive pool. In the first case, by utilizing a contribution margin analysis to directly determine compensation, the value of referrals of the neurosurgeon to the hospital is considered.

In the second case, it does not make good business sense to determine the level of compensation for one neurosurgeon based upon a hospital's net margin, which represents the culmination of many factors, events and decisions made over the course of a year.

Considering the implications

As a whole, it is important for neurosurgeons to understand their financial relationships with referral sources, including how the FMV and CR were considered. Negative health system press makes headlines almost daily, and physicians should keep in mind that patients are paying attention these days. Patients have access to more information than ever and are more actively participating in provider choice based on that information.

As a neurosurgeon, continued awareness of these regulations is paramount. Otherwise, you may unknowingly be a source of referral violations that are potentially costly in terms of time, dollars and reputation.

Ms. Caldwell is a principal for healthcare consulting and valuation services at PYA, P.C., in Tampa, Fla. Ms. Meyers is a consultant at the firm.

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Lahey Health

Modern Muckraking: Focus on Conflict of Interest Key in Neurosurgery

By Deborah L. Benzil, MD, FACS, FAANS

"It is difficult to get a man to understand something, when his salary depends upon his not understanding it!" - Upton Sinclair

President Theodore Roosevelt coined the term "muckraker" during a speech in 1906, referring to the work of Progressive Era reform journalists who sought to expose the corruption of business and government to the public. Today, "investigative journalist" is a gentler term that still carries significant emotional impact and importance when individuals and news organizations try to uncover corruption that might have gone undiscovered otherwise. Here are a few classic, recent and current examples of the results of modern muckraking:

- Bernstein and Woodward, Washington Post: Watergate investigation
- Boston Globe's Spotlight Team: Child abuse in the Catholic Church
- ProPublica and The New York Times: Memorial Sloan-Kettering conflict of interest (COI)

COI for physicians covers many aspects of the care we provide and the research we do, as well as our publications and leadership positions. Equally important are the actions that medical technology companies, as well as hospitals and healthcare systems, undertake. As a result of several high-profile disclosures, neurosurgery has been caught in the crossfire of this increasingly public discussion about what constitutes COI for the last decade. Fortunately, significant organizational efforts have evolved to help neurosurgeons do the right thing and stay out of hot water. This article will cover important aspects of this topic, including:

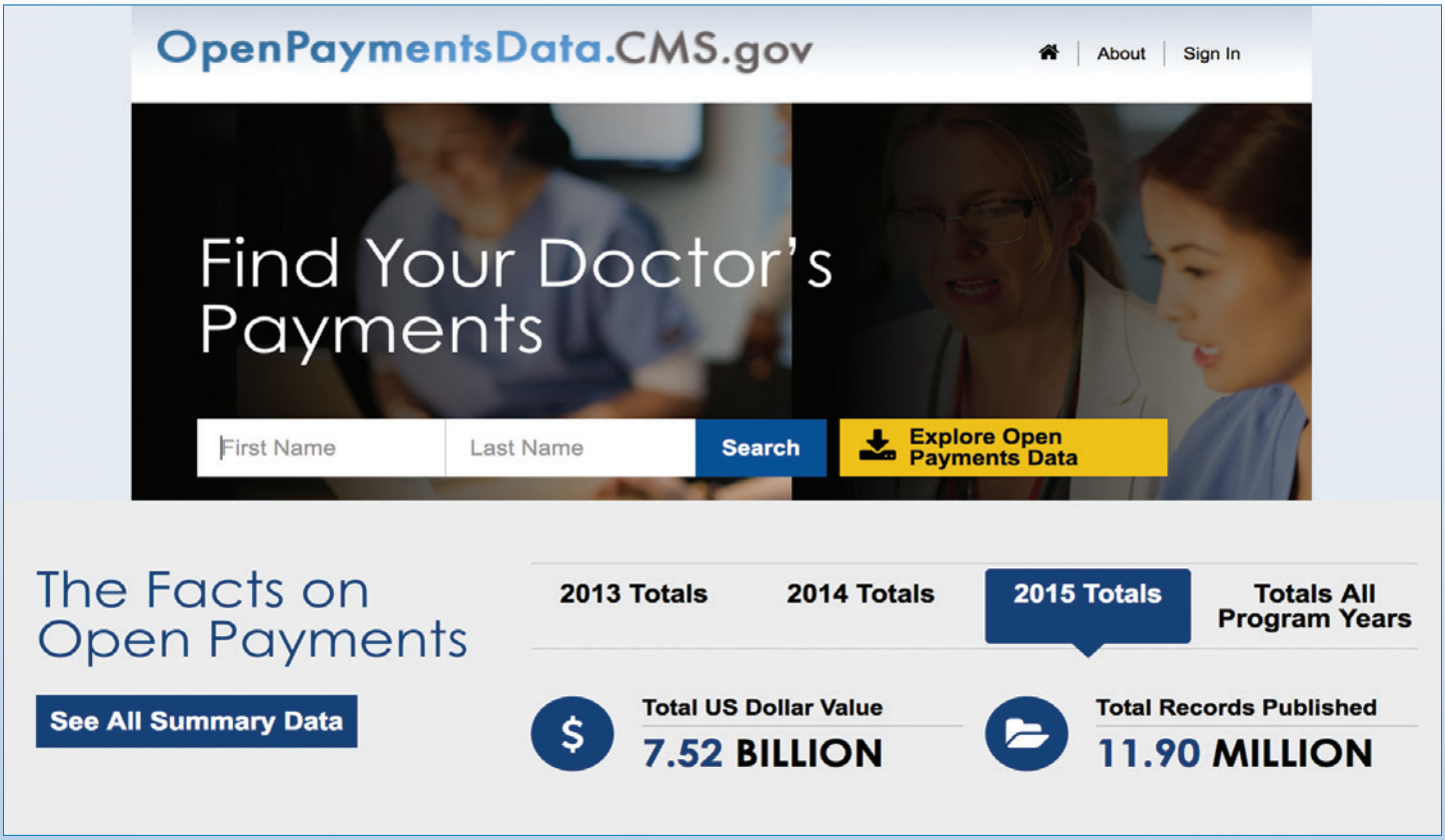
- COI in publications and presentations
- Policy statements on COI by the American Association of Neurosurgical Surgeons (AANS) and the Congress of Neurosurgical Surgeons (CNS)
- The role of AdvaMed (the Advanced Medical Technology Association)
- What neurosurgeons need to know about Open Payments (Sunshine Act) disclosure program

What is Conflict of Interest?

First, the definition of COI:

*A conflict of interest is a set of circumstances that creates a risk that **professional judgment or actions** regarding a primary interest will be **unduly influenced** by a secondary interest.*

The motivation for reform arose out of several findings. First, many physicians and researchers failed to disclose substantial payments from companies. In addition, companies moved to settle with the United



This screenshot from the CMS Open Payments database illustrates how physicians' payments from industry are readily accessible to the public.

States Department of Justice to avoid prosecution for alleged illegal payments or gifts to physicians. Too often, negative results from industry-sponsored trials were either delayed or not published at all. Manuscripts too often included names of individuals who had a very limited role in the work published. Finally, professional societies and groups developed practice guidelines without revealing critical industry involvement. Taken together, these actions clearly didn't pass the "smell test" of ensuring the integrity of professional judgment and the public trust. The questions are simple:

- Who is the source?
- What is the source's motivation?
- What is the evidence?
- Is it logical?
- What is left out?

Organized neurosurgery leads the way

Organized neurosurgery has been very active in leading efforts to limit any COI in publications, presentations and leadership. The resulting regulations and policies that arose from these efforts address all the key issues found problematic in the past, yet still recognize the value of physician-industry relations. Today, everyone involved in any activity within the AANS or CNS must complete a detailed COI disclosure related to each activity. These disclosures also must be updated on a regular basis. Violation of the policy is considered a serious breach and can result in punitive actions.

Rise of AdvaMed

From the industry side of the equation, the scathing headlines about COI drove the evolution of the trade association AdvaMed. The organization's stated goal is:

AdvaMed advocates on a global basis for the highest ethical standards, timely patient access to safe and effective products, and economic policies that reward value creation.

"When considering employment with any academic or health system entity, neurosurgeons should be sure that they understand the details of the entity's COI to facilitate compliance."

Currently, this organization represents more than 80% of medical technology in the United States and has global reach to China, India, Japan, Latin America and the European Union. AdvaMed's code of ethics is now the industry standard and includes statements about both the value of physician/industry interactions as well as acknowledgment of the primary interest of the patient. Seven components of compliance are required by every company that is part of AdvaMed:

1. Written COI policies.
2. Provision of a compliance officer/committee.
3. Documented effective training/education.
4. Effective lines of company communication.
5. A program of internal monitoring/auditing.
6. Enforcement through disciplinary guidelines.
7. Quick response to problems, with corrective action.

In addition to these, AdvaMed has issued guidelines about the various settings and conditions for physician-industry interaction. These include company training and education, support of third-party programs and promotional sales meetings, as well as consulting agreements and royalties. Most of the requirements for the various settings are similar, and call for appropriate settings and facilities, modest meals and accommodations, *bone fide* professional interest, no payment for outsiders (spouse/family) and no entertainment. Some of the specific notable requirements include:

- Payment for third-party programs must be to an institution, not individuals.
- Any consultation agreements must be written and detailed, must serve a legitimate need, and must involve demonstrated qualification and expertise, along with documentation of reasonableness. In addition, sales personnel should not unduly control the content.
- Royalties should not be directly tied to marketing, use, purchase or promotion.
- Educational products/gifts must have genuine function and be less than $100 in value, with the exception of books and models.
- Sharing of health economics information and best practices is appropriate, as is participation in joint advocacy.
- Provision of equipment must be in reasonable quantity (single use), reasonable time (multiple use) or for demonstration (nonsterile).

Understanding the Sunshine Act

Open Payments (also known as Sunshine Act), part of the Accountable Care Act legislation, was enacted to ensure public reporting of payments from industry to physicians in an easily searchable database through Centers for Medicare and Medicaid (CMS). The threshold for reporting is low: anything over **$10.21**. Since 2014, all parties must report, including applicable manufacturers of covered products, Group Purchasing Organizations (GPOs), physicians, dentists, podiatrists, optometrists and chiropractors. Manufacturers and GPOs

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LEGAL CORNER

Getting Out When an Employment Arrangement No Longer Suits

By Bonnie Darves

Andrew Knoll, MD, JD

In this regular column, Neurosurgery Market Watch speaks with health lawyers about contract issues and other trends related to neurosurgery compensation and performance. In this article, physician and attorney Andrew Knoll, MD, JD, a partner with the Syracuse, N.Y., firm Cohen Compagni Beckman Appler & Knoll, PLLC, who specializes in physician contracts, discusses issues that can cause neurosurgeons problems when an employment arrangement goes sour.

Q: As neurosurgeons move toward hospital- or health system-employed arrangements in increasing numbers, they're finding that factors outside their control might change what was a good job into a less desirable one—especially in the case of mergers or acquisitions. How can neurosurgeons protect themselves if the entity they join hooks up with or is consumed by one that they really don't want to work for-whether for personal/ethical or professional reasons?

A: They can't; they're essentially chattel. Welcome to the new business of medicine. Unfortunately, there is nothing that can be done to protect the physician. That is why I now concentrate on the exit strategy when I review a contract. If the job goes in a direction you don't like, your best option is to quit.

If you want to have more control, you could go with a private group or hang out your own shingle—but the latter is exceedingly difficult to do these days. The bottom line is that, at least from the standpoint of employment contracts, there's nothing special about a physician. When you enter the workforce, you're an employee. For the most part, you get to do what your employer tells you to do, until the day you don't like it anymore. And then you give notice and quit.

Q: So, for the neurosurgeon, are all aspects of an initial employment contract still valid when another entity purchases or merges with the practice that employed the neurosurgeon? For example, what happens if the original employer promises A and B in terms of personnel resources, technology, equipment or other support, and the new entity wants to scale back?

A: It's very common these days for physician employment agreements to include a provision that permits the employer to assign the agreement to a successor entity without need for the employee's consent. If that's the case, the contract continues as it's written. If not, then the employment relationship becomes one "at will," and the original contract terminates. In that case, A and B go away as promises, and the new employer can scale back any way it wishes.

Q: Well, it looks like this leaves us with that exit strategy you mentioned. How easy or hard is it to sever the relationship—and what can physicians do to make it less hard should they decide to leave?

A: For example, if the contract can be terminated on 90 days' notice, there's no tail and no restrictive covenant, it's easy to part ways. The neurosurgeon simply gives notices and looks for a job. On the other hand, if it can't be terminated except at the end of a three-year period, there's a 60-mile restrictive covenant (and the doctor grew up in the town and all his family is there), and the tail costs $80,000, you're stuck. You're basically an indentured servant of your own making; after all, no one forced you to take the job.

So, in today's day and age of big health systems and non-negotiable contracts, negotiate the best you can do on the exit-strategy criteria such as restrictive covenants and notice period. Then, if the place moves in a way that you don't like, you can leave.

> **"If the contract can be terminated on 90 days' notice, there's no tail and no restrictive covenant, it's easy to part ways."**

Weill Cornell Medicine
Neurological Surgery

Global Health Neurosurgery Fellow, Bugando Medical Center and MOI, Tanzania

Roger Härtl, MD, Spine Fellowship Director

This one- or two-year fellowship position, based in East Africa, entails evaluating patients, performing surgery, and training Tanzanian surgeons and medical staff, as well as ongoing research together with FIENS and Weill Cornell Medicine Neurosurgery. Ongoing communication with Weill Cornell Medicine Neurosurgery and FIENS is made possible through weekly Skype conferences and annual site visits by U.S. faculty.

The position is open to fully trained neurosurgeons and is under the direction of Dr. Roger Härtl, Professor of Neurosurgery and director of spine surgery at Weill Cornell Medicine, and founder of the Neurosurgical Mission in Tanzania. This position is endorsed by FIENS.

For more information: weillcornellneurosurgery.org/fellowships
Contact: Erma Bell, Administrative Coordinator
elb2014@med.cornell.edu (212) 746-5543

Weill Cornell Medicine
Neurological Surgery

March 22-23, 2019
4th Principles and Techniques of Complex Spinal Reconstruction

Course Directors: Dr. Ali A. Baaj and Dr. Han Jo Kim

Part didactic, part hands-on cadaveric, this two-day workshop reviews the most common techniques used in contemporary surgery for complex spine pathologies. After an afternoon of lectures from internationally renowned faculty, the course moves to the Weill Cornell Medical College Anatomy Lab for hands-on training and practice. Tips, suggestions, and surgical pearls will be discussed. Questions? neurosurgery-cme@weill.cornell.edu

Online registration now open at
weillcornellbrainandspine.org/upcoming-cme-courses
Use code NSMW19 for discounted registration

Weill Cornell Medicine
Neurological Surgery

REGISTRATION OPENING SOON!

May 9, 2019: Brain Metastases Seminar

Course Director: Dr. Rohan Ramakrishna

Metastatic disease to the central nervous system has become an increasingly vexing problem for oncologists and oncologic surgeons. This unique course will address CNS metastatic disease from a multi-specialty view and will aim to rationalize a treatment approach and address symptom management.

April 18, 2019: Spine Tumor Seminar

Course Director: Dr. Ali A. Baaj

Now in its third year, this annual meeting brings together specialists to share state-of-the-art treatment paradigms for patients with primary and metastatic spinal tumors, including surgical and non-surgical options as well as leading-edge minimally invasive approaches. Experts from neurological surgery, neuro-oncology, medical and radiation oncology, neuroradiology, and pain anesthesia will present their work.

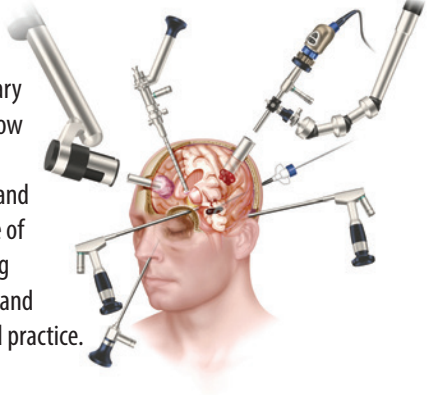
Sign up to be notified when registration opens:
weillcornellbrainandspine.org/continuing-medical-education

Weill Cornell Medicine
Neurological Surgery

NEW FOR 2019! June 7-8, 2019

Minimally Invasive Cranial Neurosurgery:
Recent Technical Advances, with Hands-On Symposium

Course Directors: Dr. Theodore Schwartz and Dr. Mark Souweidane



An expansion of our popular Endoscopic Endonasal Pituitary course, this updated event now includes robotics, keyhole craniotomies, laser therapy, and tubular retractors for a range of cranial pathologies. Featuring lectures, case presentations, and hands-on lab instruction and practice.

For more information and to register online:
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(Use code NSMW19 to receive discounted registration)
Questions? neurosurgery-cme@weill.cornell.edu

Neurosurgery
MARKET WATCH™

Understanding Neurosurgery Employment Models

By Katie Cole

There are three basic employment models being used today in most neurosurgery job options available. Whether you are a graduating resident or fellow, or an experienced neurosurgeon with five years of practice behind you, differentiating among the options can be somewhat confusing.

Most jobs would fall into one of three general categories: private practice, hospital employed and academic. These choices might have different options as far as employment compensation models, but the basics are partnership, income guarantee or a straight-salary package.

Private practices tend to use two options for new hires, either employment through the practice or an income-guarantee model. In the income-guarantee model, you would be required to meet production expectations that the practice or associated hospital has set, and compensation would be based on a model of revenue vs. expenses.

The income guarantee is either provided directly through the practice or through the hospital where you will be working primarily. Either way, there are different types of income guarantees; some are forgivable loans that are either supposed to be paid back or are forgiven over a set period of time.

Larger private practices often employ neurosurgeons directly through the practice, in more of a straight-salary model with an accompanying bonus-based incentive. Private practices rarely require buy-ins anymore, and most have a partnership track of two to three years.

Hospital employment typically is straight salary along with an RVU- or bonus-based incentive. If you are exploring either a solo opportunity through a hospital or another type of independent arrangement, the hospital might also provide an income guarantee, similar to the one that private practice models use.

An income guarantee is a type of forgivable loan, and it is set on production expectations.

> **"Private practices rarely require buy-ins anymore, and most have a partnership track of two to three years."**

A net income guarantee is a model based on revenues vs. expenses. A gross collections model concentrates on revenue before subtracting expenses. In either option, you might earn less than expected, although in some cases, if you have higher production than expected, you will be paid a percentage of any collections over the projected production. In any arrangements with such potentially fluctuating compensation structures, it's very important for neurosurgeons to understand the potential upsides and downsides, and to determine whether production targets are reasonable and achievable.

Lastly, an academic model is almost always a straight salary, although most of the time there's also a bonus-based incentive. These salaries are almost always based on American Medical Group Association survey benchmarks. Academic models tend to be more sub-specialized and multi-faceted, and most include protected or dedicated time for research, particularly if there is a neurosurgery residency program.

Choosing the right employment model often has as much to do with compensation as it does the type of practice and lifestyle you are looking for in a job opportunity. Understanding all of the options will help you as you are weighing your choices and deciding which opportunities to pursue further. It is still important to weigh the pros and cons of each opportunity beyond the model, to ensure you're considering all of the elements of the position and that you fully understand any employment contract offered to you.

Ms. Cole is a Denver resident and publisher of Neurosurgery Market Watch.

CONTRIBUTORS WANTED!

Neurosurgery Market Watch welcomes submissions of articles of potential interest to practicing neurosurgeons. We are particularly interested in opinion articles about how trends occurring in the neurosurgery marketplace or in the health policy arena might affect the practice environment.

To discuss a potential idea, please contact Bonnie Darves at **425-822-7409** or **bonnie@darves.net**

Hospitalist Model

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That's the rub, according to Robert Harbaugh, MD, who chairs neurosurgery at PennState Health and is senior vice president of the organization's academic medical group. "I think the model could work, but personally, I think it would be a dreadful practice," he said, because of its inherent limitations. "I can't see someone doing seven years of residency and a fellowship … just to stamp out fires. That sounds more like an emergency medicine practice, and I'm not sure who would find it appealing." He thinks that telemedicine, when it's more widely available nationally, will help address some of the coverage gaps that exist in nonurban markets, at least from the standpoint of evaluating and triaging patients who come into the ED with neurosurgical issues.

When the notion of medical hospitalists—as hospital-only internists and family medicine physicians who managed hospitalized patients' medical needs and didn't maintain office practices—emerged in the 1990s, it was controversial. Community-based primary care physicians, even if they didn't really want to round in the hospital and knew that doing so created inefficiencies, were reluctant to hand off their patients, and cited concerns about care quality and continuity. Turf skirmishes, and a few outright battles, arose in some markets, as community physicians worried that they'd lose their patients to this new breed of physician. More than two decades later, most hospitals have hospitalists, and most PCPs can't imagine fitting in hospital rounding.

That full-scale hospitalist model is unlikely to take hold in neurosurgery, if only because most surgical cases are elective and come into the hospital via community-practicing neurosurgeons or academic-center affiliated groups. But as neurosurgeons increasingly move toward employed practice and hospitals struggle to maintain adequate neurosurgery coverage, for a host of reasons, there's a nascent sense a quasi-hospitalist model might make inroads. Hospitalist-type coverage models have emerged in general surgery and orthopedics, for example, to reduce the call burden on surgeons with busy elective practices, improve throughput from the emergency department to the OR or onto the wards, and ensure that specialists are available when urgent or emergent inpatient consults are needed.

Once the kinks get ironed out, such models have generally been well received, according to Dr. Killeffer. "This model has worked well in orthopedics and general surgery, and I think it will work in neurosurgery too," he said.

At Mercy Medical Center in Springfield, Mass., which implemented a Surgical Colleagues hospitalist model in orthopedics nearly two years ago, the program has not only resolved the call-coverage problem but also exceeded expectations logistically and financially, according to Daniel Morrison, MD, chief of surgery at the 181-bed facility.

"We've got the third busiest ER in the state, and in the past, we spent a lot of time transferring out trauma cases," Dr. Morrison said, "because we couldn't handle them. Since we started the hospitalist program, the case volume coming out of the ED has increased 350%, and our community orthopedic surgeons have seen their elective caseloads increase by 10%. Basically, it's working out for everyone."

Ms. Darves, an independent writer based in the Seattle area, is editor of Neurosurgery Market Watch.

UPCOMING U.S. NEUROSURGERY EVENTS

2019 Winter Clinics
❑ February 24-28
Snowmass Village, CO

16th Annual World Congress of SBMT (Brain and Spine)
❑ March 15-17
Los Angeles, CA

LINNC Seminar 2019-US Edition
❑ March 22-23
Miami, FL

ISASS 19th Annual Conference
❑ April 3-5
Anaheim, CA

The Evandro de Oliveira Symposium
❑ April 11-12
San Diego, CA

AANS Annual Scientific Meeting
❑ April 13-17
San Diego, CA

UPCOMING INTERNATIONAL CMES

Global Spine Congress
❑ May 15-18
Toronto, Canada

Third Annual Course in White Matter Surgery and Brain Networks
❑ March 11-12
London, UK

International Neurovascular Course
❑ March 29-30
Athens, Greece

▶ For more info regarding any of these events, or to post your upcoming CME or neurosurgery event, please contact ***info@harlequinna.com.***

Modern Muckraking

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are responsible for reporting all payments or transfers of value made to physicians or teaching hospitals, as well as ownership/partnership by physicians or their immediate family members.

All physicians and hospitals are also required to register, and then review and, if necessary, refute the information on an annual basis. The process of registering is cumbersome and involves a several-step process, first through the Enterprise Identity Management portal, and thereafter through Open Payments as an application. As with all secure sites, registrants chose a user name, password and challenge questions. Part of the registration includes consent to monitoring and collection of personal identifying information. A credit check is also performed.

Physicians are responsible for checking their data and for refuting any unrecognized entries. This is crucial because this information is publicly available. Every year since the Sunshine Act's inception, I have found at least one errant entry that was subsequently removed. It's important to understand that participation in an event supported by industry might result in an entry. Events might include state medical society meetings and alumni gatherings during national meetings.

Currently, some institutions have zero-tolerance policies on COI, while others set either specific or general limitations. When considering employment with any academic or health system entity, neurosurgeons should be sure that they understand the details of the entity's COI to facilitate compliance.

Don't get muckraked

To avoid being unwittingly caught up in a COI situation that might make headlines, be smart! As an individual and as a representative of neurosurgery, make sure that all your physician-industry interactions pass the "smell test." Registering for the CMS' Open Payment system is required; it's also is the smart thing to do. AdvaMed has set a good standard for the medical industry, so use their ethics code and procedural recommendations as a valuable guide. Working with industry can benefit our care and our patients, but it has to be done the right way.

Dr. Benzil is Vice Chair of Neurosurgery for the Cleveland Clinic Foundation.

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IN BRIEF

New Brain 'Pacemaker' Heralds Treatment Advances

Engineers at the University of California, Berkeley, have developed a novel neurostimulator that might one day deliver new treatment options for patients with epilepsy and movement disorders. Called the WAND, or wireless artifact-free neuromodulation device, the device operates like a heart pacemaker, and both listens to and stimulates electric current in the brain.

WAND is both wireless and autonomous, with a closed-loop design. This means that after it has learned to recognize the signs of an impending seizure or tremor, it is designed to adjust stimulation parameters to prevent the event. "Finding the right therapy for a patient is extremely costly and can take years. Significant reduction in both cost and duration can potentially lead to greatly improved outcomes and accessibility," said Rikky Muller, assistant professor of electrical engineering and computer sciences at UC-Berkeley. "We want to enable the device to figure out the best way to stimulate for a given patient to give the best outcomes."

The device is described in a new study published in the Dec. 31, 2018 issue of *Nature Biomedical Engineering*.

Penn Medicine Protocol Reduces Opioid Use

Researchers at Penn Medicine in Philadelphia have developed a protocol that might reduce the amount and duration of opioid usage after spine surgeries. Called enhanced recovery after surgery (ERAS), the protocol provides a framework for reducing opioid usage by optimizing care at every juncture—pre- and post-op. It entails adjusting post-op medications to incorporate more non-opioid medications and closely adjusting recovery plans to reduce reliance on opioids.

The prospective study of 201 patients, published in the Journal of Neurosurgery: Spine, found that in those who received the ERAS protocol, use of pain-controlled anesthesia (PCA) was nearly eliminated. Further, at 30 days post-op, only 38% of ERAS patients were still taking opioids—compared to 53% of patients in the control group.