Volume 65, Number 5
May 2001

CONTENTS

FEATURES

Chemical Dependence: Exposing a Silent Enemy

Time to Take Action on Chemical Dependence 5
Arnold J. Berry, M.D.

Chemical Dependency in Anesthesiologists 6
Daniel H. Angres, M.D.

Chemical Dependence in Anesthesiologists: What Is Being Done About It? 9
William P. Arnold III, M.D.

Primary Prevention for Anesthesiologists 11
Richard L. Brown, M.D.

Anesthesiologists: Addicted to the Drugs They Administer 14
Eric B. Hedberg, M.D.

Curriculum on Substance Abuse Now Available 15
Susan L. Polk, M.D.

ARTICLES

Board of Directors Interim Meeting Summary 17

National Residency Matching Program Results for 2001 19
Alan W. Grogono, M.D.

How to Prepare for a Joint Commission Survey 25
Jerry A. Cohen, M.D.
Beverly K. Philip, M.D.

DEPARTMENTS

Ventilations 1

Administrative Update 2
Bruce F. Cullen, M.D.

Washington Report 3
ASA, AANA Present Opposite Viewpoints on Rollback of Medicare Supervision Rule

What's New in … 30
…Organized Medicine: Do We Need AMA?

Practice Management 32
Evaluating a New Ambulatory Surgical Center Opportunity

State Beat 35
State Legislative Report: AL, GA, IL, LA, MD, MI, NM, NY, PA, WA

Residents' Review 36
Developing a Culture of Safety

Subspecialty News 37
Neurologic Surgery: A Logical Choice for Anesthesiologists

ASA News 39

ABA Announces … 39

Letters to the Editor 42

FAER Report 44
FAER Partners With Anesthesiology Societies

Stress, long hours and relentless work pressure lead some anesthesiologists to the very drugs they administer. Because of these inherent pressures and temptations in the specialty, anesthesiology experiences high rates of chemical dependency. This issue explores causes, cases and solutions.

EDITORIAL BOARD
Editor
Mark J. Lema, M.D., Ph.D.
Associate Editors
Douglas R. Bacon, M.D.
Lawrence S. Berman, M.D.
David E. Byer, M.D.
Daniel F. Dedrick, M.D.
Norig Ellison, M.D.
Stephen H. Jackson, M.D.
Mohammed A. Khan, M.D.
Jessie A. Leak, M.D.
Paul J. Schaner, M.D.
Jeffrey H. Silverstein, M.D.
Ronald D. Smith, M.D.
R. Lawrence Sullivan, Jr., M.D.
Editorial Staff
Denise M. Jones
David A. Love
Roy A. Winkler
Karen L. Yetsky

The ***ASA NEWSLETTER*** (USPS 033-200) is published monthly for ASA members by the American Society of Anesthesiologists, 520 N. Northwest Highway, Park Ridge, IL 60068-2573.
E-mail: mail@ASAhq.org
Editor: Newsletter_Editor@ASAhq.org
Web site: http://www.ASAhq.org
Periodical postage paid at Park Ridge, IL, and additional mailing offices.

POSTMASTER: Send address changes to the *ASA NEWSLETTER*, 520 N. Northwest Highway, Park Ridge, IL 60068-2573; (847) 825-5586.

Copyright ©2001 American Society of Anesthesiologists. All rights reserved. Contents may not be reproduced without prior written permission of the publisher.

The views expressed herein are those of the authors and do not necessarily represent or reflect the views, policies or actions of the American Society of Anesthesiologists.

SUBSTANCE ABUSE HOTLINE
Contact the ASA Executive Office at (847) 825-5586 to obtain the addresses and telephone numbers for state medical society programs and services that assist impaired physicians.

Anesthesiologists: Architects for Bridging the Quality Chasm

At 4:30 p.m. on April 2, 2001, I received a strange telephone call. If it had occurred one day earlier, I surely would have considered it an April Fool's joke. The evening news producer for a local television station asked if I was available to speak with the news anchorwoman about the "anesthesia shortage." I was stunned that our personnel shortage would reach the television's "radar screen." As I commenced discussing our undersupply, he interrupted me to ask about the anesthesia *drug* shortage presented on CNN.com. However, he became interested in both stories and sent a news team to our hospital.

After a pleasant exchange with anchorwoman Victoria Hong, I watched the late news broadcast to see how my conversation was edited. For those who have yet to give a statement to the media, I can tell you it is always a surprise to learn what comments the editors deemed important. The report was accurate, informative, nonsensational and truly credible. It notified viewers that anesthesia personnel were in short supply (largely due to the report by Abt Associates in 1994) and that a likely increase in resident physicians will continue for the next five years. With regard to the shortage of commonly used anesthetic drugs (e.g., fentanyl, succinylcholine), a balanced approach as to the possible causes and the impact on patient safety was voiced. If I were a layperson, I would have been appropriately apprised of the shortage in both personnel and supplies, told that the concerns were significant but not an immediate crisis and informed that some action on my part (e.g., calling my congressional representatives) is needed to reverse these trends.

Over the past year, I have discussed personnel shortages, dismantling of the academic structure, dissatisfaction by professionals, assault on our practice by nurses, over-regulation by administrative bodies and the mass exodus of doctors away from clinical practice. This newscast represents the early understanding by a few perspicacious television news reporters that U.S. citizens are standing on a burning health care platform — with no clear directive to act. To delay is to succumb to inferior, unsafe health care.

The Institute of Medicine (IOM) is very concerned. In their newest monograph titled "Crossing the Quality Chasm: A New Health System for the 21st Century," they call for a fundamental change in our health care delivery system.* In the executive summary, the authors state:

> "The frustration levels of both patients and clinicians have probably never been higher, yet the problems remain. Health care today harms too frequently and routinely fails to deliver its potential benefits… Between the health care we have and the care we could have, lies not just a gap but a chasm."

Continued on page 41

Mark J. Lema, M.D., Ph.D.
Editor

*Crossing the Quality Chasm: A New Health System for the 21st Century; 2001. A full report can be obtained on the Internet from National Academy Press at <www.nap.edu/books>.

Anesthetic Drug Shortages: What's Going On?

Bruce F. Cullen, M.D.
Vice-President for Scientific Affairs

Without advanced warning, it appears that anesthesiologists are now confronting shortages of several important and frequently used anesthetic drugs. Lack of ready availability of drugs has hit other sectors of the medical community in the past couple of years, with some well-publicized shortages such as tetanus vaccine or penicillin G, but anesthesiology seemed to be unaffected. Now, however, anesthesiologists and hospitals throughout the country are finding it difficult to stock such drugs as fentanyl, succinylcholine and naloxone.

Bruce F. Cullen, M.D.

The problem "hit home" at my hospital one day when our supply of succinylcholine in the operating room was reduced to one vial. We had already experienced intermittent shortages of fentanyl but were able to get by with alternate opioids. There is not, however, any good alternative to succinylcholine. Our hospital is a level I trauma center, and it is our opinion that succinylcholine substitutes are neither as safe nor as effective in that setting. Furthermore, rapacuronium, a drug touted by some as the alternative choice to succinylcholine, was also on backorder*. Through a few telephone calls to some personal friends in the pharmaceutical industry, we were able to avert a crisis, after a shipment of succinylcholine was sent by airfreight to us the next day. [It should be noted here that Raplon™ (rapacuronium) has recently been withdrawn from the market by its maker, Organon, due to a high incidence of life-threatening bronchospasm, which resulted in a few deaths.]

No one can accurately identify the extent of the shortages or provide ready explanations. In November and again in February, ASA sent out an informal survey to its officers and district directors asking them whether or not they had experienced anesthetic drug shortages, what drugs were involved, whether the situation was critical and how it was affecting patient care. Forty-eight individuals responded to the survey, and 35 of them (73 percent) had observed a "noticeable" or "critical" shortage of common anesthetic drugs, most notably fentanyl and succinylcholine. Other drugs mentioned as being in short supply included rapacuronium, sufentanil, oxycodone, oxymorphone, hyaluronidase, isoproterenol, naloxone, glycopyrrolate and even epinephrine. As might be anticipated with such a wide range of involved drugs, the shortages could not be attributed to one or two pharmaceutical manufacturers. No one surveyed mentioned knowing of any patient harm resulting from the drug shortage, although several reported that the shortages had impacted their facility's surgical schedule.

It would be nice if one central source of information existed that could monitor drug production and provide some sort of control to avert critical shortages. Unfortunately, one does not exist. The Food and Drug Administration (FDA) maintains a Web site <www.fda.gov/cder/drug/shortages/default.htm>, but it is not wholly accurate. For example, fentanyl is the only anesthetic drug mentioned to be in short supply, and the shortage is attributed to an irrational "unexpected increased demand." Furthermore, the FDA does not have legal authority to dictate drug production and inventory. The American Society of Health-System Pharmacists posts an interesting Web site of drug shortages <www.ashp.com/shortage/>, but it also has no regulatory authority. The organization representing the pharmaceutical industry, the Pharmaceutical Research and Manufacturers of America (PhRMA), does not even mention drug shortages on its Web site <www.phrma.org>.

There appears to be no clear, single answer to explain the relatively recent onset of critical anesthetic drug shortages. Some manufacturers attribute it to problems in obtaining raw materials and difficulties in the production process. Others attribute it to the FDA's closing of some manufacturers for bad practices and an inability of the remaining producers to meet the resulting shortfall. In an era of major cost cutting in medicine, it is common protocol for hospitals, drug distributors and drug manufacturers to keep their in-house inventories low. Some cynics point out that most of the shortage drugs are generic and that poor profit margins cause manufacturers to produce the generic drugs in limited quantities so they can concentrate their efforts on more lucrative proprietary drugs.

So where do we go from here? ASA has taken two actions. First, it has informed the media of the crisis in an

Continued on page 4

ASA, AANA Present Opposite Viewpoints on Rollback of Medicare Supervision Rule

Michael Scott, Director
Governmental and Legal Affairs

As noted in this column last month, Health and Human Services (HHS) Secretary Tommy Thompson on March 19 published an order suspending until May 18 the effective date of the Health Care Financing Administration (HCFA) final rule by which physician supervision of nurse anesthetists would be eliminated under the Medicare program. As stated in the order, the purpose of the 60-day suspension is to permit the Secretary to study the final rule, which was published by his predecessor at the very end of the Clinton Administration.

Secretary Thompson's action on the supervision rule is consistent with other actions he and various federal agency heads have taken with respect to a large number of final rules published in the last few days of the Clinton Administration. Some legal commentators in Washington have questioned the validity of the suspension orders, but in view of the fact that they are all of short duration, no legal challenges to the orders have been made to date.

Many legal analysts believe, however, that further suspension of the effective date of the Clinton final rule after the 60-day period would not stand up under legal challenge, unless at the same time the agency in question publishes a proposed rule for public comment, under which the final rule is to be modified or rescinded. On April 3, the General Services Administration (GSA) published a notice suspending until year end a Clinton final rule related to federal contractor qualifications, and at the same time published a proposed rule for public comment by which the final rule would be repealed.

This legal framework essentially means that Secretary Thompson, on or before May 18, must decide whether he wishes to modify or roll back the Clinton supervision rule, and if he does, HHS must publish a notice similar to that published by GSA. For practical purposes, therefore, the 60-day extension period represents a critical time for those favoring or opposing the supervision rule to advance their respective viewpoints to the Administration.

For its part, ASA has met with Secretary Thompson and members of his staff, various congressional leaders and Administration representatives in the White House and the Office of Management and Budget (OMB). ASA has also prepared and distributed an extensive "white paper" detailing the reasons why HCFA's rationale for publishing the final rule does not meet the test, established by the Supreme Court, as the proper basis for overturning a

Patient Protection Measure Readied for Introduction

In early April, the staffs of Senators Bill Frist (R-TN), Jim M. Jeffords (R-VT) and John B. Breaux (D-LA) made a final draft of their patients' bill of rights bill available for limited public review. The bill is widely viewed as a compromise measure between the two extremes favored by conservative Republicans and by Democrats and liberal Republicans in the last Congress.

Representatives of the Patient Access Coalition, of which ASA was a member last year, report that the draft bill, with limited exception, contains principles concerning access to specialist care that the Coalition has aggressively supported for several years. A controversial provision contained in the bill, however, would allow States to opt out of the bill's requirements if they could establish that premium costs had risen by a stated percentage. There is some suggestion that this provision may be dropped before the bill is introduced.

The draft bill would extend its protections to all 167 million Americans covered by private insurance and all fully insured state or local plans. This coverage provision is more liberal than that sought by conservative Republicans last year but does not go far enough to meet the demands of most Democrats in the Senate. Also unresolved is the thorny issue of liability of health plans for improper coverage decisions. President Bush has expressed support for a "reasonable" provision in this regard, but specifics are still missing. On April 11, a presidential health advisor called the draft bill "very promising."

longstanding regulatory provision such as the physician supervision requirement. In essence, ASA has argued that HCFA offers no scientific outcomes or other data demonstrating that patient safety would not be impaired by the rule change, but instead simply chooses to discount the scientific data pointing in the opposite direction.

Since the Washington legislative conferences of both ASA and the American Association of Nurse Anesthetists (AANA) are to be held simultaneously in early May, it seems certain that advocacy for and against the Clinton rule will intensify leading up to those conferences. In all likelihood, by the time this column is published, readers will have received a bulletin or other communication from ASA President Neil Swissman, M.D., detailing whatever action is taken by HHS by May 18.

HHS Seeks Comments on Patient Privacy Rule

In a press conference held on March 30, HHS Secretary Thompson expressed HHS's intention to simplify the new rules, published late last year and scheduled to take effect April 14, designed to protect the privacy of patient health information. The rules had been published pursuant to congressional mandate in the Health Insurance Portability and Accountability Act of 1996, and were summarized in this column in the March issue of the *NEWSLETTER*.

A large volume of public comments on the new rules, responding to an invitation from HHS after Secretary Thompson was confirmed, suggested the strong possibility that the effective date of the privacy standards could be delayed. On April 12, however, President Bush announced that he had directed Secretary Thompson to place the rules into effect as originally scheduled. It remains possible that HHS will propose changes as a result of the comments it has received.

Scully Nominated New HCFA Head

Thomas A. Scully, former President of the Federation of American Health Care Systems, has been nominated by President George W. Bush to serve as the new HCFA Administrator under HHS Secretary Thompson. Mr. Scully worked at OMB and in the White House during the previous George Bush Administration and is expected to serve as the current Administration's principal advocate in connection with legislation to restructure the Medicare program and develop a drug benefit for senior citizens.

HHS Proposes User Fee for Nonelectronic Claims

As part of its April 9 budget request, HHS renewed a proposal to assess Medicare providers a fee of $1.50 for claims not submitted electronically, and a like amount was charged for each duplicate or unprocessable claim. Justification for the requirement relates to HCFA's effort to modernize its claim-processing operations.

Legislation would be required to authorize the charging of processing fees. In the past, providers have successfully blocked such legislation on the basis that smaller practices and institutions do not have the financial resources to submit claims electronically. At present, according to HHS, 97 percent of Medicare Part A claims are submitted electronically, and about 82 percent of Part B claims are submitted electronically.

Anesthetic Drug Shortages: What's Going On?

Continued from page 2

attempt to educate the public. Second, ASA has taken the lead and has asked representatives from the FDA, PhRMA, the Drug Enforcement Administration (DEA) and four major anesthetic drug manufacturers to get together for a discussion of the issues. The purpose is to get those interested in the problem "at the same table," with a goal of developing both short- and long-term solutions to the problem. Unfortunately, that meeting is not scheduled to occur until after the deadline for submission of this article. Hopefully by the time you read this, we will have some answers.

Time to Take Action on Chemical Dependence

Arnold J. Berry, M.D., Chair
Committee on Occupational Health

It is not uncommon that I pick up the morning newspaper and discover, say, headlines that report the death of several teenagers in an automobile accident. Unexpectedly and without warning, young lives are lost; promising futures are instantly obliterated. Parents, siblings, friends and classmates mourn the loss. Public outcries ensue, and parent groups aggressively lobby lawmakers to raise the driving age to prevent similar tragedies from occurring in the future.

It is interesting to compare the publicity and community activism generated from teenage-driving deaths with the limited reaction from the medical community when chemical dependence or drug-related suicide takes the life of an anesthesiologist or other physician. Rarely are there headlines or public outcries. But like the losses that occur from teen accidents, anesthesiologists' deaths associated with chemical dependence are unanticipated and frequently occur in trainees or recent graduates. Their promising futures are also cut short. Parents, spouses, significant others, friends and colleagues mourn the loss. They may have sensed a change in behavior or personality in the chemically dependent anesthesiologist but often are unaware of the true cause. After the tragic event, loved ones may look back and realize that they overlooked warning signs.

Although many of us have been touched by the loss of a colleague from a drug-related death, we have not been fully aware of the true extent of the problem within the specialty of anesthesiology. Reports from drug treatment programs have revealed a greater proportion of anesthesiologist drug abusers than might be expected, but the cause of this overrepresentation has been debated. A recent mortality study funded by ASA has provided startling data on drug-related deaths among anesthesiologists.[1] Investigators used death certificates from 1979 through 1995 to confirm causes of death and calculated cause-specific mortality rates for anesthesiologists for comparison with those of a control group of internists. The adjusted risk of drug-related suicide was over two times greater in anesthesiologists than internists, and the risk for all-drug related causes was almost three times greater in anesthesiologists. The lower mean age of death among anesthesiologists, 65.5 years versus 69.0 years respectively, was partially attributable to the larger number of deaths of young anesthesiologists from drug-related causes. Premature deaths in anesthesiologists from all drug-related causes resulted in a total loss of 2,108 life-years before age 65. Although this study provides data on deaths from chemical dependence, it does not quantify the number of anesthesiologists with chemical dependence who have been identified and treated. Information on the number of these individuals is significantly more difficult to ascertain.

For the past two decades, ASA and the Committee on Occupational Health have organized multiple educational sessions and have instituted several projects to address the issue of chemical dependence. One of the most recent activities was an open meeting of the committee held during the 2000 Annual Meeting, in which members and outside consultants were invited to present their ideas and recommendations on prevention of chemical dependence in anesthesiologists. The articles that follow are based on these presentations. The committee and its Task Force on Chemical Dependence will consider this information for planning future initiatives.

It is clear that chemical dependence continues to be an occupational hazard. Anesthesiologists can be proud of the success and national recognition they have received as a leader in patient safety, but now it is time to turn our attention to another problem. With a better understanding and awareness of factors associated with chemical dependence, we should begin to take a leadership role in the prevention, recognition and treatment of substance abuse among anesthesiologists.

Reference:

1. Alexander BH, Checkoway H, Nagahama SI, Domino KB. Cause-specific mortality risks of anesthesiologists. *Anesthesiology.* 2000; 93:922-930.

Arnold J. Berry, M.D., is Professor of Anesthesiology, Emory University School of Medicine, Atlanta, Georgia.

Chemical Dependency in Anesthesiologists

Daniel H. Angres, M.D.

Chemical dependency is a disease process that can affect all professions. Although a great deal of progress has been made in terms of understanding chemical dependency as a disease, there remains considerable misinformation and bias both in the general population and among health care professionals. This article will outline factors in physician impairment, intervention, assessment and treatment modalities. Also, outcome data will be reviewed from our experience at Rush Behavioral Health Center in Downers Grove, Illinois, as well as some comments specifically regarding prevention and detection of chemically dependent anesthesiologists.

Factors in Physician Impairment

A. Physicians as a group lean toward compulsivity and perfectionism.[1] Physicians often see themselves as healers and authority figures and can have some limitation for introspection and often use their profession to defend against feeling. Anesthesiologists in particular occupy a position that places them in control of the multiple life functions of their patients. Being in this role on a day-by-day basis can make it more difficult for anesthesiologists to look at their own vulnerabilities.

B. Physicians attempt to diagnose themselves — but too often incorrectly. Traditionally, physicians have been known to attempt to save time and money by self-diagnosing and self-treating various illnesses.[2] This can be as innocent as attempting to diagnose and treat a minor illness such as an upper respiratory infection, but also can extend to even more significant illnesses. The mindset of attempting to diagnose and treat oneself or get "curbside" help from professional peers can lead to more serious issues; it can lead to self-prescribing or obtaining mood-altering, addictive substances such as narcotics to self-medicate. As stated before, this may start out innocently — to conserve time and energy, for instance. If someone is predisposed to the disease of addiction, however, such behavior often leads to an accelerated process of dependency.

C. Physicians can be extremely defensive about interventions that may pose a threat to their license or ability to practice medicine. Physicians have put in many years of hard work and have made multiple sacrifices in order to become licensed practitioners. Chemically dependent physicians are typically fearful of the repercussions on their practice and even licensure status if their chemical dependency becomes known. Peers often protect the chemically dependent physician for the same reasons. Today, we have a lesser stigma in regard to chemical dependency and greater acceptance on the part of hospital administrations, medical staff and licensing boards recognizing chemical dependency as a disease and subsequently supporting intervention, treatment and re-entry.

D. Physicians have greater access to controlled substances. Although there is an enormous availability of mood-altering substances available to the general public, physicians have additional access to samples and medications used in clinical practice. This is of particular concern for anesthesiologists who have a unique accessibility to extremely powerful and reinforcing narcotics such as fentanyl and sufentanil. Such access to these narcotics poses great risks to anesthesiologists.

E. Accountability is a major factor in physician chemical dependence and impairment. The previously mentioned risk factors are of critical importance, but accountability in regard to patient care makes this a particularly sensitive issue. For the safety of the chemically dependent physician, his or her family and most certainly his or her patients, there needs to exist an aggressive posture for prevention, detection, intervention, treatment and re-entry.

Daniel H. Angres, M.D., is Director, Rush Behavioral Health Center, Downers Grove, Illinois. He is also Chair, Section on Addiction Medicine and Assistant Professor of Psychiatry, Rush-Presbyterian-St. Luke's Medical Center, Chicago, Illinois.

Increased Need for Intensive, Specialized Treatment

Most physicians will benefit from specialized treatment involving a program for chemical dependency that has expertise in treating health care professionals.[3] Most specialized programs recognize the need to remove the dependent physician from work, particularly when the disease has shown itself in the workplace. If there are comorbidity issues such as depression or severe character disorder in addition to the chemical dependency, there is an added risk and need for expertise in the treatment program. If there exist high-risk situations such as in anesthesiology or emergency medicine, the course and re-entry process is further complicated. Length of stay and type of treatment also will be determined by the dependent physician's support systems. The presence of significant family dysfunction might also determine type of treatment and length of stay. Re-entry issues are paramount in providing appropriate treatment to this population. Prognostic indicators are important in determining the treatment of the health care professional. Regarding re-entry, it is important to evaluate the duration of the disease, type of drug used and the nature of the practice setting.

Specialized Treatment

A. *Phase I*:

Specialized programs for physicians generally include a primary treatment experience that lasts four to eight weeks. It includes breaking through the denial process, expressing feelings and bonding with peers in the therapeutic setting. Working toward recognition of one's consequences of chemical use and establishing a 12-step (e.g., Alcoholics Anonymous) support foundation are also critical during this phase. Exploration of one's spirituality and intensive family work need to occur during this primary phase.

B. *Phase II*:

This phase, also known as "placement," can last anywhere from two to six weeks. It is a phase where a patient who successfully has completed Phase I is considered in a more senior role in the treatment process. While continuing to work on his or her own issues, he or she also provides a role model for new patients in treatment. During this phase, the physician-patient can also undergo a "mirroring" process that includes a recognition of personal dynamics through interaction with new patients. During this phase, the physician-patient also works with the staff in examining work-related stresses and triggers and develops a relapse prevention plan. Re-entry plans begin to formulate during this time, and the physician-patient receives a clear-cut written aftercare plan (the Caduceus Contract, for instance).

C. *Phase III*:

This phase consists of the aftercare monitoring, which in most specialized programs is a minimum of 20 months following treatment. This phase includes weekly Caduceus support groups and individual follow-up visits with one's primary physician. It also includes urine monitoring and 12-step participation. At this stage, there is an emphasis on coordination with state physician assistance programs as well as hospital wellness committees. Pharmaceutical adjuncts in aftercare, such as the use of naltrexone, are often part of the plan, particularly when dealing with anesthesiologists. Although the average contract for specialized programs involves a 20-month minimum in aftercare, state physician assistance programs average a five-year duration. This time period includes the continuation of behavioral and urine monitoring.

A physician's involvement with the peer group and other physicians is critical at this time. Having enough time in treatment to go through the necessary phases, including acceptance of the disease, are all critical in this specialized process. Emphasis on a 12-step recovery has been noted as a critical aspect of recovery from chemical dependency, for health care professionals and all members of society.

Outcome Measures

Several outcome studies have been noted regarding chemically dependent physicians.[4-6] The following trends have been noted in Rush Behavioral Health studies, including a seven-year outcomes study completed between 1985-92.[7]

A. Eighty percent of the 100 physicians in the study who completed treatment and committed to aftercare stayed abstinent for a period of two or more years.

B. Risk of relapse was greatest in the first year and decreased as time in recovery increased.

C. Fifty percent of the relapse group had limited slips and went on to have two or more years of total abstinence.

Relapse Risk Factors

The Rush Behavioral Health study also noted some specific relapse risk factors among health care professionals in general.

A. Anesthesiologists addicted to fentanyl were at higher risk if they stayed in anesthesiology.

B. A dual-diagnosis patient is at the greatest overall risk. Comorbidity of either an Axis I or Axis II type (such as a major depressive disorder and/or significant character pathology) were over-represented in the relapse group.

C. Narcissistic personality disorder was a major risk factor as were personality disorders overall.

Detection

Anesthesiologists have some additional risk factors compared with physicians in general. There needs to be particular emphasis on detection of the use of substances among anesthesiologists.

A. Urine and body fluid screening: It has been an area of debate as to whether all health care professionals should undergo random urine and/or body fluid screening for mood-altering, addictive substances. Considering the risks inherent in anesthesiology, a case could be made for random urine and/or body fluid screening for all anesthesiologists in training and post-training. Although controversial, this would certainly lead to an earlier detection of chemical use problems and make for a safer work environment.

B. Surveillance: Most operating rooms already have some surveillance capacity. It would be conceivable to implement even greater surveillance of anesthesiologists during procedures. Again, also controversial, appropriate surveillance could minimize the ability of diverting narcotics and provide a visual tracking method. This could be protective for anesthesiologists who are not diverting substances and provide detection for those who are.

C. Analyzing wastage: This is a standard procedure in most operating rooms. One of the most frequent means of diverting narcotics in the operating room by anesthesiologists and other health care staff is taking wasted narcotics for one's own use. The appropriate measuring and analyzing of all wastage certainly reduces diversion of substances and can increase detection capacity. Ideally, the wasting of narcotics should be a formally observed process.

Risk Reduction

Currently, there are a number of strategies used to reduce the risk of diverting substances by anesthesiologists.

A. Chain of custody: Having a solid chain of custody is critical in risk reduction. Many operating rooms have an internal pharmacy that checks out narcotics. It is difficult, however, for many reasons to have a foolproof chain of custody in regard to an analysis of wastage and narcotic use. Typically, a certain amount of narcotic is dispensed to anesthesiologists in the beginning of the day, with some room for variation for the various cases with which they will be involved. To have a strict and exact determination of what is needed, what is used and what is returned will only reduce the risk of diversion of controlled substances. This involves extra work and cooperation between pharmacists, anesthesiologists and operating room personnel.

B. Electronic dispensing: As technology improves, the possibility of electronic narcotic dispensing may become more feasible. Such a device might prevent intraoperative diversion of narcotics by using a portable system that could include the ability to record timing and dose of narcotic delivery and perhaps double as an infusion pump. This device might also function as a locked electronic syringe.

C. Locked narcotics: One of the greatest risks to anesthesiologists in the operating room involves unsupervised narcotics in the workspace. It is not uncommon for

Continued on page 31

Chemical Dependence in Anesthesiologists: What Is Being Done About It?

William P. Arnold III, M.D., Chair
Task Force on Chemical Dependence of the Committee on Occupational Health

On a rather fateful day in 1983, an extremely bright resident came to me saying, "Bill, I'm in trouble — I'm addicted to fentanyl." In an attempt to hide my astonishment, I responded, "So what are you going to do about it?" He had already arranged for admission to a fine treatment program, where he remained for four months before beginning his life of aftercare, in addition to continuing his career as an anesthesiologist. Although he has abstained from drug use for nearly two decades, relapse remains a constant threat for him as it does for all individuals in recovery.

That single experience served as a stimulus for me to gain insight into his misfortune. Over time, I have learned that while an understanding of the disease of addiction makes it possible for one to deal positively with an ill colleague, it is extremely difficult to prevent the disease from becoming manifest should an individual possess the roots that foster its development. Today, as it has for centuries, addiction parallels diseases such as malignancies, diabetes and a host of other sicknesses that are treatable but incurable.

In spite of fairly aggressive attempts by ASA and many other organizations to deal with the disease, it continues to plague anesthesiologists, primarily those in the early portions of their careers. Death as a result of drug overdose remains a tragic outcome in a disproportionate number of cases involving anesthesiologists.[1] It is my purpose in this article to summarize a variety of approaches being used to combat the disease.

Society of Academic Anesthesiology Chairs (SAAC) and Association of Anesthesiology Program Directors (AAPD):

In 1988, SAAC/AAPD devoted a major portion of a meeting to a series of presentations concerning chemical dependence in anesthesiologists. Since then, the disease has been a topic for discussion at nearly all its meetings. A major contribution was the funding of a videotape titled *Wearing Masks,* a moving presentation by the widow and friends of a resident in anesthesiology who died of an overdose of sufentanil. This tape, produced in 1992, is shown regularly to residents in anesthesiology as well as to their significant others. It can be obtained by contacting the ASA Executive Office.

Accreditation Council for Graduate Medical Education (ACGME)

Since 1992, ACGME has mandated that all residency programs in anesthesiology have a written policy for the management of chemical dependence in trainees. In addition, each program's educational efforts must include presentations that address the disease as it relates to practitioners of the specialty.

American Board of Anesthesiology (ABA)

ABA will permit persons with a history of chemical dependence, who are satisfactorily recovering, to take both the written and oral examinations. After a candidate with this history has satisfied the requirements for certification, "…ABA will determine whether it should defer awarding its certification for a period of time in order to avoid certification of a candidate who poses a direct threat to the health and safety of others." If it deems such deferral appropriate, "…ABA will determine the length of time the candidate's certification is deferred following an individual assessment of the specific circumstances of the candidate's history of alcohol abuse or illegal use of drugs." This is in keeping with the intent of the Americans with Disabilities Act.

Chief Residents' Meetings

For several years (but ending in the mid-1990s), a pharmaceutical manufacturer hosted an annual meeting for chief residents in anesthesiology. Each meeting included presentations that focused on both the subjective and objective aspects of chemical dependence. This educational effort resulted in an awareness of the disease that has persisted in many of the attendees. It fostered an understanding in these persons that has facilitated assistance for

William P. Arnold III, M.D., is Associate Professor of Anesthesiology, University of Virginia Health System, Charlottesville, Virginia.

addicted anesthesiologists in the United States and several other countries. It also served as groundwork for the formation of policies in many groups and departments.

American Society of Anesthesiologists (ASA)

1. Since 1983, the Annual Meetings of ASA have included panels and discussions on chemical dependence. Speakers have included not only members of the Society who have an interest in the disease but also experts in its treatment, persons in recovery, educators, an advisor to the President of the United States and the father of a resident who died of an overdose of fentanyl.

2. In a totally confidential manner, ASA has amassed 10 years of data on incidence and outcomes of chemical dependence in residency programs in the United States. Reviews of preliminary data have appeared in the *ASA NEWSLETTER*. Until recently, the strict confidentiality in which the data were collected and the departure of a key individual in that confidentiality process had made detailed analysis of the aggregate data difficult. Fortunately, that hurdle has been overcome, and anonymity for departments and individuals has been preserved. Publication of recent data will be forthcoming.

3. Since 1986, the ASA Committee on Occupational Health has published three brochures on chemical dependence. The most recent edition, published in 1998 and titled "Chemical Dependence in Anesthesiologists: What you need to know when you need to know it," has appeared both in printed form and on the ASA Web Site at <www.ASAhq.org/ProfInfo/chemical.html>. With appearance of the latter, the material covered in the brochure has become available to a far greater audience than just the membership of the Society. As a result, calls for information and assistance are coming directly to the authors of the document from family members and friends of anesthesiologists. This is particularly heartening because were it not for the Web, most likely these persons would have remained unaware of the Society's interest in assisting its membership.

4. Since 1990, ASA has maintained a confidential hotline for persons who have questions or concerns regarding chemical dependence in themselves or others. Nearly 100 calls come annually either through the hotline or directly to members of the Committee on Occupational Health and its Task Force on Chemical Dependence. Questions have addressed such aspects of the disease as assistance with identification, intervention, referral for treatment, return to the workplace, disability and many others. With the appearance of the 1998 brochure on the Web, calls via the hotline have decreased somewhat.

5. The Task Force on Chemical Dependence and the Committee on Occupational Health are developing a curriculum on chemical dependence. This effort, which so far has taken several years, is nearly finished. When completed, the curriculum will be made available to SAAC/AAPD. We anticipate that it will serve as a model for residency programs to use in their training mandated by the Accreditation Council for Graduate Medical Education.

In spite of these various efforts, the incidence of the disease in anesthesiologists does not appear to have diminished significantly. At first glance, that would seem to imply that the efforts are ineffectual and perhaps should be abandoned. From a purely objective viewpoint, this may be true. But from the perspective of the individual or family member who has benefited from these services, those previous efforts may have been life-saving. For that reason alone, any diminution of these efforts would be a mistake.

Although education will not prevent the development of chemical dependence, it will certainly increase awareness and thus promote early identification and treatment. That conviction serves as the basis for recommending that this work be continued.

Reference:

1. Alexander BH, Checkoway H, Nagahama SI, Domino KB. Cause-specific mortality risks of anesthesiologists. *Anesthesiology.* 2000; 93:922-930.

Primary Prevention for Anesthesiologists

Richard L. Brown, M.D.

Organized medicine has long appreciated the importance and impact of physician impairment, including substance abuse and addiction. The American Medical Association (AMA) advanced a definition of physician impairment in 1972.[1] State licensure boards discipline and withdraw licenses from impaired physicians who threaten patient safety. Many state medical societies have established physician health programs. These programs promote early identification of impaired physicians, engage such physicians in effective treatment and monitoring programs, protect patients and help to preserve the careers of physicians who are engaged in recovery.

Because of its traditional emphasis on diagnosis and treatment, it is not surprising that organized medicine has not focused more heavily on preventing physician substance abuse. Substance abuse prevention is particularly relevant for anesthesiologists since they suffer disproportionately from drug-related deaths and are over-represented in substance abuse treatment programs for physicians.[2]

Although detection, intervention and treatment programs are important, programs that help anesthesiologists avert substance use disorders would be a valuable contribution. Designing such programs will be challenging, in part because there is little experience or research on such programs for physicians. Rather than designing such programs from scratch, it might be useful to consider the growing research literature on the prevention of substance use and related disorders for youth. Although some of the challenges of substance abuse prevention would differ between these two populations, lessons learned from youth prevention efforts may be useful to consider in designing prevention efforts for anesthesiologists. This article discusses classifications of prevention efforts, possible systems levels to target, a framework for designing substance abuse prevention programs and other suggestions.

A useful historical classification of prevention consists of primary, secondary and tertiary preventions. *Tertiary prevention* aims to ameliorate the effects of established disorders. *Secondary prevention* involves early detection and treatment of disorders. *Primary prevention* consists of efforts to prevent the onset of disorders and substance use itself. Primary prevention is the chief focus of this article.

Another way of classifying prevention efforts is by universal, selective and indicated preventions.[3] *Indicated prevention* is aimed at individuals who have already manifested signs and symptoms of an early disorder (e.g., the aforementioned physician health programs). *Universal preventions* are designed to reach the entire population; they may be useful when entire populations are at risk, as anesthesiologists seem to be. *Selective prevention* efforts are aimed at subpopulations at special risk. Research is needed to identify whether certain groups of anesthesiologists are at higher risk than others such as: academic versus community-based, urban versus rural, male versus female, and among various cultural groups.

Another useful distinction in substance abuse prevention has been supply reduction versus demand reduction. *Supply reduction* has included efforts to keep illicit drugs from being produced, imported and distributed through such acts as interdiction and strong criminal penalties. For health care professionals, especially anesthesiologists who have access to addictive medications, analogous efforts would include systems for preventing diversion and actions on licensure. In general, supply reduction efforts have perhaps increased the price of drugs but have not been sufficient to prevent substance use and abuse in the face of continuing demand. We can expect, similarly, that supply reduction efforts alone would not curtail diversion and substance use by all anesthesiologists. However, systems that make diversion more detectable and difficult might help discourage potential first-time diverters.

Even if diversion could be curtailed, anesthesiologists would continue to be at risk for use of, abuse of and addiction to alcohol and street drugs. *Demand reduction* must therefore be an important component of any substance abuse prevention plan for anesthesiologists. Demand reduction efforts are the focus of the remainder of this article.

One scheme for considering methods of primary, universal or selective prevention is the risk-resiliency model.[4,5] In this model, risk factors are identified, and interventions are aimed at ameliorating such risk factors. A *risk factor* is a characteristic that occurs more frequently among individuals who will develop a disorder. In the risk-resiliency model, protective factors are also identified and bolstered. A *protective factor* is a characteristic that occurs more fre-

Richard L. Brown, M.D., is Associate Professor, Department of Family Medicine, University of Wisconsin-Madison Medical School, Madison, Wisconsin.

quently among individuals with risk factors who do not develop the disorder. Thus, a protective factor is not simply a negative risk factor; it is an attribute that mitigates risk. Protective factors promote resilience, i.e., a resistance to using substances and developing related disorders despite the presence of risk factors.

Six systems levels have been identified as potential targets for preventive interventions: 1) individuals, 2) families, 3) peer groups, 4) work/school environments, 5) community environments and 6) society at large. Risk and protective factors are present at each of these systems levels. Research has begun to identify some risk and protective factors for youth. Many of these research results are controversial, as few long-term prospective studies have been done, and randomized controlled trials on risk and protective factors are nearly impossible to perform. Nevertheless, it is worthwhile to consider some of the tentative conclusions about risk and protective factors for youth, as there may be some analogous factors for anesthesiologists. Such factors are shown in Table 1.

Prevention programs are designed to ameliorate risk factors and bolster protective factors for the targeted individu-

Table 1: Risk and Protective Factors for Substance Use Disorders

Level	Risk Factors	Protective Factors
Individuals	Genetic predisposition (positive family history), psychiatric disorders, low perception of risk of substance use, impulsiveness, hostility, rebelliousness, deficits in social skills, aggression, alienation	Strong social skills, caring and cooperative nature, positive sense of self, problem-solving skills, sense of humor, autonomy, sense of purpose, religiosity or spirituality, skills to resist negative influences by peers
Family	Families with abuse or excessive conflict, families with interpersonal distance or low support, poor cooperative problem-solving, positive attitudes toward substance use	Positive bonding, lack of severe criticism, trust, mutual and reasonably high expectations, clear rules, mutual involvement in activities, involvement in religious or spiritual groups
Peer Group	Involvement with other individuals who use alcohol and drugs or engage in other risky behaviors	Involvement in activities not involving substance use, good communication and support among peers
Work/School	A negative climate, low or overly high expectations of employees/students	A caring and supportive climate, appropriately high and attainable expectations, clear standards and rules, participation in important tasks and decisions
Communities	Norms, customs and policies that permit or promote substance use, extreme economic deprivation, disorganization, alienation of individuals from their cultures, pro-use messages in the media and advertising	Caring and supportive climate, high expectations for citizenship, opportunities for participation
Society	Availability of substances, poor economic conditions, unemployment, discrimination and marginalization	Counter-advertising messages, enforcement of relevant laws, restricted availability of and access to substances

als, groups and institutions. In designing such programs, it is important to consider *cultural factors* of the target group. Culture is defined as the framework or filters through which groups of individuals interpret all experience. Anesthesiologists are most familiar with the culture of their profession and should therefore be integrally involved in the design and implementation of prevention programs.

Strategies for prevention include information dissemination, development of coping skills, provision of alternatives to substance use, community development, advocacy for a healthy environment and implementation of programs for early detection and intervention. Experience with youth prevention has shown that information on the risks and consequences of such use is insufficient as a single prevention strategy. The most effective programs have employed a combination of strategies and have targeted several levels. A lack of resources for an ideal program, however, should not deter initial efforts that can be built upon over time.

Steps for effective primary prevention programs include identifying a target population (universal or selective), establishing a team for design and implementation, identifying desired outcomes, designing strategies and then implementing and evaluating the program. Evaluation is essential to determine whether the program is achieving its desired effect and how to improve programs over time. Thus, evaluation planning should occur hand-in-hand with program design.

Possible targeted outcomes could relate directly to substance use, abuse and addiction. Alternatively, programs could target risk-factor reduction or protective-factor enhancement that, presumably, will have desirable effects on substance use, abuse and addiction. Outcomes can be related to any of the prevention levels. Although it is difficult to prove that a program has had impact on changes in policy or laws, such changes are among the most effective measures in preventing substance use and abuse.

In summary, anesthesiologists are at a special risk for substance use disorders. Anesthesiologists are challenged to protect themselves and their patients with not only early detection and intervention programs but with primary prevention efforts. Anesthesiologists themselves are the key to designing effective prevention because they are intimately knowledgeable about the culture of their profession. Although research on youth prevention has many gaps, the framework and results of such research can help to guide initial efforts to prevent substance abuse and addiction among anesthesiologists. Such efforts would not only help fellow anesthesiologists but would also serve as a model for other physician and health professional groups, all of whom are affected by substance abuse and addiction.

References:

1. The sick physician: Impairment by psychiatric disorders, including alcoholism and drug dependence. *JAMA.* 1973; 223(6):684-687.
2. Alexander BH, Checkoway H, Nagahama SI, Domino KB. Cause-specific mortality risks of anesthesiologists. *Anesthesiology.* 2000; 93(4):922-930.
3. Mrazek PJ, Haggerty RJ, eds. *Reducing Risks for Mental Disorders: Frontiers for Preventive Intervention Research.* Committee on Prevention of Mental Disorders, Division of Biobehavioral Sciences and Mental Disorders, Institute of Medicine. Washington, DC: National Academy Press; 1994.
4. Hawkins JD, Catalano RF, Miller JY. Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychol Bull.* 1992; 112(1):64-105.
5. Marcus M. HRSA-AMERSA-SAMHSA/CSAT Interdisciplinary Program to Improve Health Professional Education, Syllabus, Module 5. Providence, RI: Association for Medical Education and Research in Substance Abuse; 2001.

Anesthesiologists: Addicted to the Drugs They Administer

Eric B. Hedberg, M.D.

Many anesthesiology departments have experienced the trauma of a member of its staff becoming addicted to an anesthetic drug. Anesthesiology reportedly has a higher incidence of addiction than any other medical specialty (*Healing the Healer: The Addicted Physician* Angres DH, Talbott DG, Bettinardi-Angres K; 1998). This most likely is due to the fact that anesthesiologists administer highly addictive drugs, have greater access to controlled substances and seem to have a greater curiosity about drug effects than other physicians. Due to the increasing awareness of addiction symptoms, anesthesiology departments are becoming leaders in identifying impaired professionals and referring them to treatment. It would be rare for a department to have a member of the anesthesia staff who at some point will not need treatment for chemical dependency.

Anesthesiologists addicted to anesthetic drugs face different challenges than other medical specialists. There are few medical specialties that require physicians to personally administer intravenous controlled substances. Additionally, few physicians handle drugs with the addiction potential of fentanyl or sufentanil. Also, opiate-addicted anesthesiologists face greater temptations than most other specialists when they return to clinical anesthesiology. For most physicians it is not difficult to create an aftercare plan that eliminates the necessity of administering controlled substances. In anesthesiology, however, it is impractical to attempt to limit the use of regularly administered, controlled anesthetic substances. Even if an anesthesiologist removes fentanyl from his or her anesthesia technique, that person will continue to be exposed to fentanyl while supervising or administering anesthesia. Opiate-addicted anesthesiologists need more from their recovery program than other recovering addicts.

Eric B. Hedberg, M.D., is Associate Medical Director, Talbott Recovery Campus, Atlanta, Georgia.

In order to consider whether opiate-addicted anesthesiologists should return to anesthesiology practice, it is imperative that those anesthesiologists obtain adequate treatment. For opiate-addicted anesthesiologists, I strongly recommend treatment at a facility that specializes in health care professional addiction. During treatment, the addicted anesthesiologist should be evaluated carefully for the appropriateness of his or her return to clinical anesthesia.

At the Talbott Recovery Campus, Atlanta, Georgia, all anesthesia personnel are admitted to my service due to my training in anesthesiology, psychiatry and addiction medicine. From the beginning, I address with the anesthesiologist the issue of returning to practice. Patients are given a series of questions designed to allow them to carefully examine their choice of medicine as a career and anesthesia as a specialty. The assignment questions are as follows:

1. If you were a freshman in college and could choose any profession, with the wisdom you now have, what profession(s) would you consider pursuing?
2. If you could not re-enter the field of anesthesia, what are the possibilities you would consider in clinical or non-clinical medicine?
3. What are the positives and negatives for you in the practice of anesthesia?
4. What is stressful to you in the practice of anesthesia?
5. The risk of relapse for opiate-addicted anesthesiologists returning to the operating room is potentially high. There is a high incidence of death among anesthesiologists who relapse. Why would you want to put yourself and your patients at such a risk?
6. By returning to anesthesia, you are going to put your family and yourself through a lot of pain if you relapse. How does your significant other feel about your return to anesthesia and the risk you are taking?
7. What safeguards would you put in place to help prevent relapse?

While the patient is working on this assignment, the treatment team is also carefully evaluating the anesthesiologist's progress, response to treatment, social support at home, professional support at work and relative safety for returning to clinical anesthesia. In the book *Healing the Healer: The Addicted Physician*, the authors outlined guidelines to help evaluate anesthesiologists who may desire to continue their career in anesthesia. In my work with anesthesia personnel, I have modified their criteria

slightly to include some additional considerations. The categories based on *Healing the Healer* are as follows:

I. Return after appropriate treatment (for health care professionals)

1. Accepts and understands disease of addiction
2. Bonding with AA/NA with active sponsorship
3. Good relapse prevention skills
4. Other psychiatric disorders in remission
5. Healthy family relationships
6. Balanced lifestyle
7. Anesthesia department supportive
8. Committed to five-year monitoring program
9. Confident to be in operating room, administer anesthetic drugs and not relapse
10. All of the above required for immediate return to anesthesia

II. Possible return, with reassessment after one or two years

1. Incomplete bonding to AA/NA but improving
2. Some denial / minimizing
3. Lacks complete confidence to be in operating room and not relapse to chemical use
4. Recovery skills improving
5. Brief relapse may have occurred
6. Other psychiatric disorders improving
7. Dysfunctional family members improving (may require therapy)
8. Healthy attraction to anesthesia

III. Never return to clinical anesthesiology (any of these conditions)

1. Prolonged addiction history
2. Significant relapse despite adequate treatment
3. Lacks confidence to return to operating room and not self-administer anesthetic drugs
4. Significant Axis I or II psychopathology
5. Inability to follow treatment and monitoring contract
6. Poor bonding to AA/NA and recovery skills
7. Significant family pathology

One of the most important factors to consider when assessing the appropriateness for return to anesthesia is the physician's confidence to remain in recovery while working in the operating room. There are many triggers and stres-

Curriculum on Substance Abuse Now Available

Susan L. Polk, M.D.
Task Force on Chemical Dependence
of the Committee on Occupational Health

The Task Force on Chemical Dependence of the Committee on Occupational Health has completed a model curriculum on substance abuse meant for education of residents in anesthesiology. The "Model Curriculum on Drug Abuse and Addiction for Residents in Anesthesiology" is posted on the ASA Web site at <www.ASAhq.org/ProfInfo/curriculum.htm> and will be made available to all residency program directors through the Association of Anesthesiology Program Directors/Society of Academic Anesthesiology Chairs. The curriculum consists of objectives, an outline for subject matter to be covered, an extensive reference list, suggestions for three videotapes to supplement the program and several questions to stimulate discussion among the learners.

The Committee on Occupational Health developed this model curriculum in an effort to aid residency programs in meeting the Residency Review Committee requirement for education in substance abuse. Both the ASA-funded study in the early 1990s by William P. Arnold III, M.D., and the ASA-funded mortality study by Karen B. Domino, M.D., published last year in *Anesthesiology*, pointed out that the disease usually occurs very early in the anesthesiologist's career. Educating residents may be an effective method for prevention of the disease and, through heightened awareness, will hasten identification and treatment of the victims of the disease.

Therefore, all ASA members are urged to review the document. The curriculum covers etiology, identification, treatment, return to work and briefly discusses stress management. As new information and statistics become available, the curriculum will be updated.

sors present in the operating room that make it impossible for some anesthesiologists with a history of addiction to function in that setting. For some anesthesia personnel, the external drug addiction cues present in the operating room are overwhelming. Many anesthesiologists have severe autonomic responses to the sights, smells and environment of the operating room. Fentanyl ampules and the sight of other drugs can cause debilitating cravings and obsessions that distract some anesthesiologists from being able to concentrate on their jobs. Toward the end of treatment at the Talbott Recovery Campus, we arrange for anesthesiologists to visit an operating room to get a sense of how they may react if they were to return to clinical anesthesia.

Some anesthesiologists have an intuitive sense that they cannot be constantly exposed to their drug of choice and not eventually relapse. Like other psychiatric or physical illnesses, there is great variation among patients' responses to their illness. Other anesthesia personnel seem to have the ability to return to the operating room and not experience disabling cravings and distractions. These individuals are not only able to remain safe in their own recovery but also provide anesthetics to their patients in a safe and competent manner. In the experience of this author, about half of the opiate-addicted anesthesiologists who have successfully completed an extended treatment designed for health care professionals meet the criteria for return to anesthesia.

Those who do meet these criteria and have returned to clinical anesthesia have done well. Most of the anesthesiologists who were not able to return to clinical anesthesia have returned to other clinical or nonclinical medical careers. Many retrain in other specialties that allow them to work with patients recovering from addiction. A few anesthesiologists realize that they were not well-suited for medicine at all and have pursued nonmedical careers that they have found to be rewarding.

It is important to note that some anesthesiologists become addicted to nonopiate anesthetic drugs such as propofol, midazolam, ketamine, barbiturates and inhalation agents. Propofol is of particular concern because it is not a scheduled drug. Although fentanyl and sufentanil seem to have greater addictive properties, these other addictions should follow the same type of evaluation process to ensure the safety of the recovering addict and his or her patients. It is my experience that a substantially high percentage of anesthesiologists addicted to nonopiates are able to return to clinical anesthesia.

Addiction among anesthesiologists is a serious and, unfortunately, common problem. ASA has become a leader in the education of its members about the problem of addiction. Most anesthesia training programs have a high level of commitment to educating residents about addiction and consequently are better prepared to identify impaired physicians than are many other fields of medicine. Most state medical societies have excellent physician health programs that refer addicted physicians to approved treatment facilities. Physician health programs can be a wonderful help in obtaining appropriate treatment and even more helpful with monitoring recovering physicians after treatment. With appropriate treatment, careful assessments and adequate post-treatment monitoring, many addicted anesthesiologists can return to clinical anesthesia and practice in a safe and competent manner.

Board of Directors Interim Meeting Summary

The ASA Board of Directors held its interim meeting in Chicago, Illinois, on Saturday and Sunday, March 3-4, 2001. The Board Committees on Administrative Affairs, Finance, Legislative Review and Scientific Affairs met as Review Committees on Saturday to review reports for consideration by the Board of Directors on Sunday. Among the actions taken by the Board of Directors were the following:

HCFA Proposal

In order for ASA to continue its effort to reverse a decision by the Health Care Financing Administration (HCFA) that would remove the Medicare program's requirement for physician supervision of nurse anesthetists, additional funding was approved for lobbyists, consultants and media placements.

Drug Shortages

Received information that ASA members and staff have been working with the U.S. Food and Drug Administration, the Drug Enforcement Administration and pharmaceutical manufacturers to uncover reasons behind the shortage and to propose solutions.

Reimbursement

Received information that ASA has persuaded HCFA to increase the Medicare conversion factor for 2001 to $17.83 from the originally proposed $17.26. This amounts to a projected $1,846.80 increase of Medicare reimbursement for the average practicing anesthesiologist. This increase was the result of ASA's challenge of the calculations used by HCFA in establishing the original $17.26 figure.

Educational Mission Statement

Revised, subject to ratification by the House of Delegates, ASA's Educational Mission Statement that was previously approved in 1999. This statement is in accordance with Essential Area 1 of the Accreditation Council for Continuing Medical Education that states: "the provider must have a written statement of its continuing medical education (CME) mission that includes the purpose, content areas, target audience, type of activities provided and expected results of the program."

National Center for Clinical Outcomes Research

Approved a resolution that ASA accept an invitation from the National Center for Clinical Outcomes Research (NCCOR) to send an observer to participate in future deliberations of the NCCOR Governing Board. It was emphasized that the acceptance of this invitation would not be construed as an endorsement of NCCOR or any commercial organizations that provide NCCOR with financial support, and that this acceptance of observer status will be on a trial basis and subject to regular periodic reconsiderations by ASA.

2001 Budget

Amended the 2001 budget to provide income of $19,489,000 and expenses of $20,214,000.

Fiscal Management Policy

Approved a new Fiscal Management Policy as a compilation of ASA's policies and procedures that govern how the Society's finances are managed. It is anticipated that this document, prepared by the Section on Fiscal Affairs, will regularly be updated as the bylaws, administrative procedures or business practices change.

Separate Component for Federal Employees

Referred to an ad hoc committee of the President's choice, with representation from at least the Committees on Bylaws, Membership and Uniformed Services and Veterans' Affairs, a resolution for ASA to create a separate component for members under the employ of the federal government, with a report to the Board of Directors at its meeting in August 2001.

Task Force on Graduate Medical Education

Received information that ASA President Neil Swissman, M.D., has appointed a Task Force on Graduate Medical Education to study ways that ASA can support academic anesthesiology in accomplishing its mission of educating the next generation of anesthesiologists.

Speakers Bureau

Approved a recommendation from the Committee on Communications that ASA establish a Speakers Bureau, which will be a compilation of skilled and informed speakers who would be available to speak on a wide variety of both scientific and nonscientific topics. Audiences could include other specialty societies or other appropriate organizations for medical and lay audiences. The committee

intends to liaison with the ASA Scientific Council to develop this list of speakers.

Specialty Society Exhibits

Approved a recommendation from the Committee on Communications that ASA sponsor an exhibit booth at the American College of Surgeons' meeting in October 2001, in New Orleans, Louisiana, and at the American Society of Plastic Surgery November 2001 meeting in Orlando, Florida.

Ralph M. Waters, M.D., Jubilee

Approved a resolution, subject to House of Delegates ratification, that ASA proclaim and celebrate the year 2002 as the 75th anniversary of the founding of academic anesthesiology by Ralph M. Waters, M.D.

Practice Parameters

Received information that updates of the Guidelines for Management of the Difficult Airway, Guidelines for Pulmonary Artery Catheterization and Guidelines for Sedation and Analgesia by Non-Anesthesiologists are scheduled to be presented at the October 2001 ASA House of Delegates for approval.

Statement on Transesophageal Echocardiography

Approved, subject to House of Delegates ratification, a new Statement on Transesophageal Echocardiography that is intended to address bundling issues.

Statement of Support for Respiratory Therapists

Approved, subject to ratification by the House of Delegates, a "Statement of Support for Respiratory Therapists" that expresses ASA's support of National Board for Respiratory Care-credentialed therapists using physician-approved, patient-driven respiratory protocols to provide the highest quality, safest and most efficacious respiratory care under the direction of a knowledgeable physician.

Task Forces

Received information on the appointment of a Task Force on Rural Access to Anesthesia Care, chaired by Robert S. Crumrine, M.D., the reappointment of a Task Force on Office-Based Anesthesia, chaired by Rebecca S. Twersky, M.D., and a Task Force on Structure and Governance, chaired by Burton S. Epstein, M.D.

Certificate in Business Administration Program (CBA)

Received information that 84 ASA members have enrolled in the Certificate in Business Administration Program sponsored by the ASA Committee on Practice Management.

Liaison with Capnography Society

Approved a recommendation from the ASA's Committee on Standards of Care that ASA establish liaison with the Capnography Society. Randolph H. Steadman, M.D., a member of the Committee on Standards of Care, was appointed to a two-year term as ASA liaison representative.

Foundation for Anesthesia Education and Research (FAER)

Received information that year-2000 contributions totaled $1.8 million. ASA contributed $1,050,000 to FAER in 2000. In addition to ASA's contribution, it was reported that more than 350 individual anesthesiologists and private practice groups contributed, as well as five new corporations. Ten returning corporations increased their donations.

Anesthesia Consultation Program

Due to increased costs related to various administrative services associated with conducting anesthesia consultations, a recommendation from the Committee on Quality Management and Departmental Administration was approved to increase fees for a two-day and three-day anesthesia consultation to $17,000 and $21,000, respectively. It was emphasized that these fees continue to be well below the cost of similar services in the marketplace, but still allow the program to maintain its self-funded status.

Annual Meeting Site — 2013

Selected San Francisco, California as the location of the ASA Annual Meeting in October 2013.

National Residency Matching Program Results for 2001: Another Increase This Year

Alan W. Grogono, M.D.

This is the ninth in a series of annual Spring updates about the results of the National Residency Matching Program (NRMP) for anesthesiology. In 1993, the first article was provoked by an initial slight decline in recruitment. Surprisingly, in view of what followed, I expressed concern about the decline and concluded that it would be desirable to "…generate strategies to enhance our ability to continue attracting both excellent medical students and excellent graduates into our specialty."

Twelve months later we were worrying about oversupply — so were the medical students who, about four years later, demonstrated the awesome power of the marketplace. As a result, there is now a shortage of anesthesiologists, and for at least two years now, we have resumed worrying about recruitment.

NRMP Results [Table 1]

Overall this year there has been a 21-percent increase in recruitment, a similar increase to last year. Once again, it is almost entirely attributable to a rise in the number of graduating seniors entering anesthesiology from U.S. allopathic medical schools (from 549 to 713). This is the fifth year in a row that recruitment of U.S. medical students increased [Figure 1]. From the low of 169 in 1996, there have been annual increases of 50 percent, 53 percent, 10 percent, 29 percent and now 30 percent. The increase in recruitment this year is slightly greater for the PG-1 group (39 percent) than for the CA-1 group (26 percent).

Positions Unfilled

The number of positions offered through the NRMP increased from 1,005 last year to 1,104 this year (10-percent increase), still well below the all-time high of 1,386 in 1993. Because there was a greater increase in the number recruited, the number of positions remaining unfilled fell from 204 to 131, about 21 percent of the maximum number of positions unfilled, which reached an all-time high of 622 in 1996.

Distribution of Recruits [Table 2]

The most striking trend of the last six years has been the ongoing increase in the number of U.S. graduates recruited (from 169 to 713). This was initially accompanied by a rise in the number of other medical graduates [Figure 2]. Since 1997, however, the number of other medical graduates has stabilized at about 250. That number now represents about 27 percent of the total because of the rise in the number of U.S. allopathic student recruits.

Among the nonallopathic medical graduates, only four categories contribute significant numbers. This year, osteopathic physicians were the largest category; their number has roughly doubled each year since 1997 (from 7 to 107). By contrast, the number of non-U.S. citizen international medical graduates (IMGs) fell from a high of 213 in 1997 to 79 this year. The number of U.S. citizen IMGs has changed little, providing 50 recruits this year. The sponsored physician group grew this year to 15 recruits. The remaining three groups, (fifth pathway, Canadian, U.S. physician) provided nine recruits between them.

Of the available pool of applicants in each category, anesthesiology once again attracts the highest percentage of applicants from graduates of U.S. osteopathic medical schools (8.62 percent) and U.S. medical allopathic schools (4.93 percent). In these two categories, recruitment is above our average of 4.12 percent of the total available via the NRMP.

Regional Distribution [Table 3]

The NRMP data for the last five years has also been compiled by state and ranked by the numbers recruited into each state's residencies via the NRMP. For the second year in a row, the two largest totals were California (106) and New York (93); those two states recruited 20 percent. The next three states recruited: Texas 70, Massachusetts 68 and Pennsylvania 65. Between them, the top five states recruited 402 (41 percent), and the top 10 recruited 582 (60 percent). During each of the last five years, California has recruited the largest number. For four years in a row New York, Texas and Massachusetts have occupied the next

Alan W. Grogono, M.D., is Professor, Department of Anesthesiology, Tulane University School of Medicine, New Orleans, Louisiana.

Table 1: Match Results for Anesthesiology 1990 – 2001.

	PG-1 Positions			CA-1 Positions			Sum of PG-1 + CA-1			
Year	Students	All	Available	Students	All	Available	Students	All	Available	Unfilled
1990	251	264	321	642	693	822	893	957	1143	186
1991	247	266	329	698	751	963	945	1017	1292	275
1992	244	273	352	682	752	1020	926	1025	1372	347
1993	199	235	325	632	708	1094	831	943	1419	456
1994	163	191	297	542	634	1022	705	825	1319	470
1995	93	136	241	330	400	902	423	536	1143	607
1996	43	113	234	126	211	712	169	324	946	622
1997	80	197	317	173	300	677	253	497	994	497
1998	118	246	347	270	399	661	388	645	1008	363
1999	137	255	376	288	401	671	425	656	1047	391
2000	171	291	349	378	510	656	549	801	1005	204
2001	237	332	371	476	641	733	713	973	1104	131

"Students" are graduating seniors from U.S. allopathic medical schools. **"All"** includes every category listed in Table 2. **"Available"** represents the number of positions offered via the Match. **"Unfilled"** represents the difference between "Available" and "All."

three positions, but not in the same sequence. Most states recruited more this year than last. Nearly half of states matched all of the positions that had been made available via the NRMP. The following states recruited fewer this year than last year: Arizona, Colorado, Louisiana, Michigan, Nebraska, Oklahoma, Washington and West Virginia.

Distribution Among Schools and Programs [Table 4]

The uneven distribution observed between states is just as evident between individual schools and programs. This year, 713 graduating U.S. allopathic seniors matched into anesthesiology. The closest match to this number occurred in 1994 when 705 U.S. seniors matched [Table 4]. 1994 was also the last year of significant recruitment of U.S. seniors before the major decline. This year has been selected for comparison between the top 20 schools and the top 20 programs based on numbers recruited.

The percentage attracted into the specialty was similar to last year (about 4.95 percent), but the proportion of those recruits entering anesthesiology from the top 20 schools rose slightly from 36.6 percent to 39.4 percent this year. The number absorbed into the top 20 residencies showed a slight trend in the opposite direction: from 38.6 percent of all recruits in 1994 to 34.3 percent in 2001.

Membership in these top 20 lists, as well as the rank order, changed considerably in the seven years, with residency programs demonstrating more consistency. Only six of the medical schools still appear seven years later whereas 11 of the residency programs appear seven years later.

More striking, perhaps, is the difference in membership between the two lists in the same year. In 1994, only five institutions appear in both top 20 lists, while six appear in 2001. Only a single institution, the Medical College of Wisconsin, Milwaukee, appears in all four lists. This exception only serves to emphasize that, in general, the presence of a strong residency program is not necessarily associated with successful recruitment of medical students from that institution.

Comments

One year ago, there was an increased number of seniors graduating from U.S. allopathic and osteopathic medical schools, as well as increased numbers of U.S. citizen

IMGs. The increase in the number of recruits from U.S. allopathic and osteopathic medical schools has continued. This year, the number of U.S. citizen IMGs has decreased, and the number of sponsored graduates has increased. The total recruited this year via the NRMP is 95 percent of the peak number (1,025) recruited in 1992. The major difference appears to be that there were 347 unfilled positions in 1992 and only 131 unfilled this year.

Adequate employment opportunities continue to be abundantly available, as was mentioned in the February 2001 "Ventilations" in the *ASA NEWSLETTER*. The shortage of anesthesiologists ensures employment for several years. For individual members of the profession, this must be good news. For a profession committed to the widespread distribution of expert anesthesiology care, however, it is a handicap. When and if the threat of oversupply reappears, we should treat it with a moderation born of this recent cycle. A mere mention around our operating rooms of an adequate supply of anesthesiologists will probably suffice to modulate the supply of recruits. Our "Abt reports"* and discussions of "limits on residency numbers" appear to be overkill and almost certainly contributed to our current shortage.

Sheer size of a residency program is not the only yardstick for success. However, the association between size and eminence is far from random. By contrast, there appears to be no association between eminence and recruitment from one's own medical student population. Indeed, some of the most successful anesthesiology residency programs recruit astonishingly few of their own students into the specialty. This year, the top three residency programs absorbed 64 recruits but were associated with schools that provided only 12 students between them.

Table 2: Distribution via the Match 1996 to 2001.

	1996	1997	1998	1999	2000	2001
Allopathic	169	253	388	425	549	713
Osteopathic	14	7	17	35	55	107
IMG/NonUS	130	213	201	152	133	79
IMG/US	10	22	34	41	59	50
Sponsored Grad	1	2	2	2	3	15
Fifth Pathway	0	0	0	1	2	4
Canadian	1	0	2	0	0	3
US Physician	0	0	1	0	0	2
Total	**325**	**497**	**645**	**656**	**801**	**973**

Distribution into anesthesiology from various sources over the last six years. During this period, the number of osteopathic physicians entering anesthesiology has risen significantly.

This disparity invites speculation. In the spirit of provoking discussion, and perhaps research, some of these speculations follow in a style encouraged by the relief we all feel in once again being popular:

The top 10 reasons given by major anesthesiology chairs when asked to explain why they recruit so few of their own students:

10. I travel to too many meetings to meet students.
9. When they graduate, they should get away from here and travel.
8. They all decided to do surgery before even applying to medical school.
7. I'm never in the operating room.
6. What students?! You're telling me medical students come here, too?
5. How can I meet students, I'm always in the laboratory?
4. Students are smarter than me, and they scare me.
3. Students are smarter than me, and that really scares them.
2. Our anesthesiology residency actually makes a

Continued on page 24

* In 1994, ASA commissioned a report by Abt Associates, Inc., titled "Estimation of Physician Work Force Requirements in Anesthesiology." The report forecasted a surplus of anesthesiologists but, in actual fact, the reverse occurred in the following years.

Table 3: Positions Available & Matched by State for 1997 to 2001.

1997			1998			1999			2000			2001		
State	TA	TM	State	TA	TM	State	TA	TM	State	TA	TM	State	TA	TM
CA	96	60	CA	100	91	CA	103	87	CA	100	95	CA	109	106
NY	81	39	TX	75	54	NY	103	61	NY	94	69	NY	126	93
FL	47	35	MA	66	51	MA	83	54	TX	78	65	TX	80	70
TX	70	34	NY	96	43	TX	75	40	MA	76	64	MA	74	68
MA	58	33	FL	44	34	PA	71	35	PA	58	41	PA	74	65
IL	66	21	IL	69	32	IL	65	30	IL	65	39	IL	63	48
NC	28	20	PA	65	26	NC	34	27	NC	33	33	FL	38	36
LA	32	19	MI	34	24	MI	31	26	FL	31	31	NC	35	35
WI	26	19	NC	28	23	FL	39	25	MI	30	30	MD	32	32
MD	27	18	MD	29	22	MO	28	20	MO	33	26	MI	29	29
VA	20	18	WI	25	21	WI	21	20	MD	29	25	WI	29	29
OH	38	16	MN	23	20	VA	20	18	WI	19	19	OH	40	28
MI	29	15	VA	20	19	IN	20	16	LA	18	18	MO	33	26
PA	63	15	MO	31	15	MD	23	16	WA	19	18	GA	22	20
WA	18	13	WA	18	15	OH	44	16	OH	39	17	MN	20	20
KY	15	12	IN	18	14	WA	22	16	IN	20	16	TN	22	20
AL	12	11	AL	12	12	MN	16	15	KY	16	15	VA	19	19
MN	14	11	KY	14	12	AL	14	14	MN	18	15	IN	20	18
MS	12	10	GA	16	11	GA	16	13	AL	14	14	CT	24	17
AZ	19	8	LA	13	11	LA	23	13	VA	20	14	LA	18	17
GA	16	7	OH	32	11	CO	12	12	TN	22	13	WA	19	17
IN	15	7	TN	24	11	KY	11	9	CO	12	12	KY	17	15
MO	23	7	CO	10	10	MS	7	7	IA	12	12	AL	14	14
TN	25	7	DC	12	8	SC	9	7	GA	17	11	DC	13	12
DC	17	5	MS	7	7	TN	22	7	NE	10	9	IA	12	12
IA	15	5	IA	12	5	AR	6	6	AZ	8	8	KS	12	11
AR	4	4	OR	5	5	AZ	6	6	SC	9	7	CO	10	10
KS	10	4	AZ	10	4	KS	15	6	AR	6	6	UT	10	10
NJ	16	4	KS	8	4	OK	6	6	CT	13	6	AR	8	8
OK	6	4	NH	8	4	DC	19	4	KS	9	6	NE	8	8
CO	10	3	NJ	20	4	NJ	16	4	NM	6	6	SC	9	8
NM	6	3	OK	6	4	NM	6	4	UT	6	6	AZ	7	7
CT	7	2	SC	7	4	IA	10	3	MS	7	5	MS	7	6
NH	6	2	ME	3	3	NH	6	3	NH	5	5	NM	6	6
UT	10	2	NE	7	3	CT	19	2	OK	6	5	OR	6	6
ME	3	1	WV	8	3	ME	4	2	DC	13	4	NH	5	5
NE	4	1	NM	6	2	NE	8	2	PR	4	4	NJ	13	5
OR	5	1	AR	1	1	OR	5	2	ME	4	3	ME	4	4
SC	16	1	CT	22	1	UT	1	1	OR	6	3	OK	4	4
VT	4	0	VT	4	1	WV	4	1	WV	5	3	PR	4	4
WV	5	0	PR	-	-	VT	4	0	VT	4	2	VT	4	3
PR	—	—	UT	-	-	PR	-	-	NJ	11	1	WV	5	2
N=41	**994**	**497**	**N=40**	**1008**	**645**	**N=41**	**1047**	**656**	**N=42**	**1005**	**801**	**N = 42**	**1104**	**973**

For each year, the data is ranked by number matched. This year, of the total matching into anesthesiology, 20% went to the top two states, 41% to the top five, and 60% to the top 10. Key: **TA** = Total positions available, **TM** = Total positions matched.

Table 4: NRMP Match Results for the Top 20 Schools and Programs

1994 Medical Schools	Anes	Grads
Med Coll Wisc, Milwaukee	19	185
Univ Illinois, Chicago	18	168
SUNY HSC, Brooklyn	17	191
New York Med Coll, New York	15	165
U Tex Med Branch, Galveston	15	174
U Tex HSC, San Antonio	15	180
Indiana U Sch Med, Indianapolis	15	245
Hahnemann Univ, Philadelphia	14	149
U Texas, Houston	14	172
Wayne State U, Detroit	13	233
Univ of Pittsburgh, Pittsburgh	12	117
U Tex SW Med School, Dallas	12	174
SUNY HSC, Syracuse	11	157
Univ Arkansas, Little Rock	10	121
U California, San Francisco	10	146
SUNY, Buffalo	10	150
Med Coll Georgia, Augusta	10	154
U Mich Med Sch, Ann Arbor	10	197
Wright State Univ, Dayton	9	84
Univ Nebraska, Omaha	9	103
Total for top 20 medical schools	**258**	**3265**
Total for all 133 medical schools	**705**	**14209**

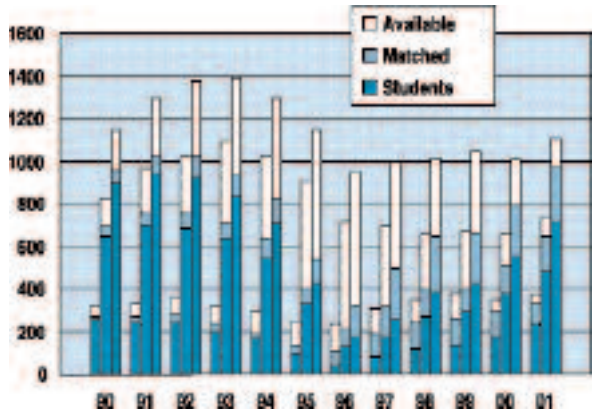
1994 Residencies	TM	TA
U California, San Francisco	24	24
Emory U School of Med, Altanta	20	20
Brigham & Women's Hosp, Boston	20	20
Jackson Memorial Hosp, Miami	18	21
Johns Hopkins Hosp, Baltimore	18	18
Univ Mich Hosps, Ann Arbor	17	22
Mayo School Med, Rochester	17	17
Med Coll Wisc, Milwaukee	17	18
The New York Hospital, New York	16	16
U Tex Med Branch, Galveston	16	16
Stanford U Hospital, Stanford	15	15
Hosp U Pennsylvania, Philadelphia	15	15
Thomas Jefferson U, Philadelphia	14	18
U Tex SW Med School, Dallas	14	20
UCLA Med Center, Los Angeles	13	15
Yale-New Haven Hosp, New Haven	13	16
Univ Chicago Hospitals, Chicago	13	13
Massachusetts Gen Hosp, Boston	13	18
Mount Sinai Hospital, New York	13	15
U South Florida, Tampa	12	13
Total for top 20 residencies	**318**	**350**
Total for all 144 residencies	**825**	**1295**

2001 Medical Schools	Anes	Grads
Indiana U Sch Med, Indianapolis	29	252
U Texas, Houston	22	168
U Tex HSC, San Antonio	21	177
Med Coll Wisc, Milwaukee	20	178
University of Colorado, Denver	16	118
Loma Linda Univ, Loma Linda	15	158
Creighton University, Omaha	14	103
Tufts University, Boston	13	158
Ohio State Univ, Columbus	13	178
Univ of Washington, Seattle	12	164
Univ of Wisconsin, Madison	12	132
U Southern Calif, Los Angeles	11	151
University of Iowa, Iowa City	11	168
Univ Minnesota, Minneapolis	11	208
Oklahoma Univ, Oklahoma City	11	103
Univ of Pittsburgh, Pittsburgh	11	134
U Tex SW Med School, Dallas	11	183
Univ of Utah, Salt Lake City	10	79
U California, Irvine	9	83
U California, San Diego	9	110
Total for top 20 medical schools	**281**	**3005**
Total for all 131 medical schools	**713**	**14464**

2001 Residencies	TM	TA
U California, San Francisco	22	22
Johns Hopkins Hosp, Baltimore	22	22
Brigham & Women's Hosp, Boston	20	20
Med Col Wisc Aff Hosp, Milwaukee	20	20
U Tex Med School, Houston	19	19
UCLA Med Center, Los Angeles	18	18
Indiana U Sch Med, Indianapolis	18	20
Univ Mich Hosps, Ann Arbor	18	18
McGaw Med Ctr NW Univ, Chicago	17	17
Massachusetts Gen Hosp, Boston	17	22
U Florida Shands Hosp, Gainesville	16	16
Emory U School of Med, Altanta	16	16
Mayo School Med, Rochester	16	16
NYP Hosp-NY Cornell, New York	16	16
U Alabama Hosp, Birmingham	14	14
Wake Forest Univ, Winston-Salem	14	14
U Southern California, Los Angeles	13	13
Thomas Jefferson U, Philadelphia	13	16
Univ Hlth Ctr, Pittsburgh	13	13
U Tex SW Med School, Dallas	13	15
Total for top 20 residencies	**335**	**347**
Total for all 125 residencies	**973**	**1104**

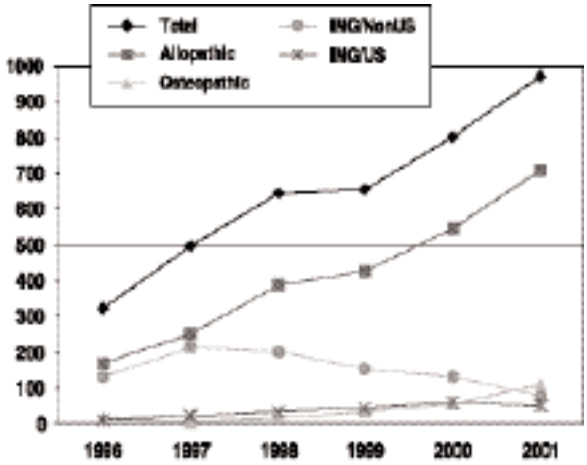
Recruitment from the top 20 schools and into the top 20 residencies in 1994 and 2001. Key: **Anes** = Students at that medical school matching into anesthesiology. **Grads** = Total students at that medical school entering the match. **TM** = Total positions Matched, **TA** = Total positions Available.

Figure 1: Graph of the NRMP Match Results for Anesthesiology 1990-2000



For each year, the right-hand column represents the sum of the left (PG-1) and center (CA-1). The lower (dark) bar of each column represents the number of graduating seniors from U.S. allopathic medical schools. The size of the middle (gray) bar represents the number of other recruits; the upper border of the gray bar indicates the total number recruited. The size of the top bar (white) indicates the number of unfilled places; the upper border of the white bar indicates the number of places offered via the NRMP.

Figure 2: Graph of the Distribution of People Recruited via the Match 1996-2001



This graph is based on the larger categories in Table 2. It shows that the major increase in recruitment is attributable to increased recruitment from U.S. allopathic medical schools.

surgery residency look attractive.

And the number-one reason given by major anesthesiology chairs when asked to explain why they recruit so few of their own students:

1. Other medical schools have far better students!

Conclusion

Recruit! Recruit the best! Welcome any eventual oversupply and merely greet it with a carefully orchestrated whisper to selected students: "We may have enough for the present."

Web site

Detailed information about the numbers of students recruited into anesthesiology from each school and the numbers recruited into and graduating from each residency program is available at <www.grogono.com/nrmp>.

Acknowledgments

It is a pleasure to thank Liz Lostumbo of the NRMP for sending the data to me by e-mail. Her prompt response permits the rapid production of this article. This article was prepared primarily for publication in the *ASA NEWSLETTER*. I thank the Editor, Mark J. Lema, M.D., for his agreeing that it should be simultaneously made available on the Web site.

Dr. Grogono's past NRMP articles have appeared in August 1993, May 1994, June 1995, May 1996, May 1997, May 1998, May 1999 and May 2000.

How to Prepare for a Joint Commission Survey

Jerry A. Cohen, M.D.
Beverly K. Philip, M.D.
Committee on Quality Management and Departmental Administration

Passing a survey of the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) requires a good understanding of JCAHO's standards that apply to the institution and/or department under review. Below is a review of relevant standards, annotated by us in italics. The standard numbers given are from the Comprehensive Accreditation Manual for Hospitals (JCAHO, January 1, 2001 update).

Assessment of Patients (PE)

PE.1.8.1 Any patient for whom moderate or deep sedation or anesthesia is contemplated receives a presedation or preanesthesia assessment (see also, **Care of Patients** section). *This must be done or approved by a licensed independent practitioner (LIP). This practitioner need not have privileges to administer anesthesia or sedation.*

PE.1.8.2 Before anesthesia, the patient is determined to be an appropriate candidate for anesthesia. *The language in this section addresses not only the need to evaluate the patient before sedation or anesthesia, but also to make sure that the techniques contemplated are appropriate for the patient's medical status and that the patient's preoperative state has been optimized, taking into account the degree of urgency of the procedure.*

PE.1.7.3 The patient is re-evaluated immediately before anesthesia induction. *This assessment is done immediately before induction of anesthesia. It documents the patient's baseline status, creating a benchmark against which changes may be measured. The intent is to make sure that when patients are seen in advance, and perhaps given sedatives, antibiotics, beta blockers, treatment for hypertension, diabetes, etc., that they are re-evaluated immediately before induction. Although anesthesiologists routinely re-evaluate patients before induction by reviewing the preoperative evaluation, evaluating the electrocardiogram, blood pressure and pulse, this must be explicitly documented. Attempts to simply refer the surveyor to the vital signs recorded in the brief period before induction have not been successful. Compliance can be simple and unobtrusive. In one of our institutions, a statement that appears in very small print under the anesthesiologist's signature says ,"I have reviewed preoperative evaluation and VS immediately before induction and concur with plan." More robust wording might include, "I have re-evaluated the patient immediately before induction and find that the patient is still fit for the planned anesthetic and procedure."*

PE.1.8.4 The patient's postoperative status is assessed on admission to and discharge from the postanesthesia recovery area.

Care of Patients (TX)

Standards for Moderate and Deep Sedation and Anesthesia

This section now includes standards for sedation. In previous editions of the Comprehensive Accreditation Manual for Hospitals (CAMH), sedation was brought under the standards for anesthesia principally in a footnote. Now, it is explicitly placed in the body of the text. Sedation and anesthesia now occupy a common continuum of drug-induced neurological depression ("minimal anxiolysis, moderate sedation/analgesia, deep sedation/analgesia, anesthesia"). The older oxymoronic term "conscious sedation" has been replaced by the term "moderate sedation/analgesia." The wording used by JCAHO in addressing the sedation-anesthesia continuum, monitoring, requirements for rescue from a deeper level of sedation than intended and the capabilities of the individuals involved in providing sedation is derived from the work of ASA members, including the Committee on Quality Management and Departmental Administration.

TX.2. Moderate or deep sedation and anesthesia are provided by qualified individuals. *In order to qualify, individuals must have specific training in standards for giving sedative and anesthetic drugs, monitoring their effect and rescuing from deeper levels of sedation than those intended. Appropriate equipment and trained individuals are available to deliver and monitor sedation and anesthesia as well as recovery of the patient. The level of care is specifically no less for sedation than for anesthesia, although the qualifications are different. A quality improvement mechanism must exist for tracking, analyzing and improving the outcome of patients receiving moderate and deep sedation.*

TX.2.1 A presedation or preanesthesia assessment is performed for each patient before beginning moderate or

deep sedation and before anesthesia induction. "Hospitals providing obstetrical or emergency operative services can provide anesthesia services within approximately 30 minutes after anesthesia is deemed necessary." *The preanesthesia or presedation evaluation of the patient must include historical data and sufficient information to plan, administer and monitor sedation and anesthesia.*

TX.2.1.1 Each patient's moderate or deep sedation and anesthesia care is planned. *Because sedation and anesthesia carry potential risks, an anesthesia plan is developed based on the patients' assessed needs and is communicated "among care providers." Policies, guidelines and medical records are examples of compliance.*

TX.2.2 Sedation and anesthesia options and risks are discussed with the patient and family prior to administration. *Examples include discussion of anesthesia, blood transfusion options, risks and the documentation of informed consent.*

TX.2.3 Each patient's physiological status is monitored during sedation or anesthesia administration. *The level of monitoring depends on the acuity of illness and presumes that the patient may lose consciousness when only sedation is attempted. Rescue depends on prompt recognition by means of systematic monitoring of cardiac and respiratory depression. Continuous monitoring of heart rate and oxygenation and continual monitoring of ventilation and blood pressure are documented during the entire period of care.*

TX.2.4 The patient's postprocedure status is assessed on admission to and before discharge from the postsedation or postanesthesia recovery area.

TX.2.4.1 Patients are discharged from the postsedation or postanesthesia recovery area and the organization by a qualified LIP or according to criteria approved by the medical staff.

TX.3.5 Preparation and dispensing of medication(s) is appropriately controlled. *It primarily pertains to dispensing and labeling of medications by a pharmacy. Specific reference to the appropriate labeling (see TX.4.1, 1994 AMH) has been omitted. An LIP with appropriate clinical privileges may prepare and administer medications. All medications must be labeled in a consistent, standard manner. JCAHO does not define what is standard, but at minimum it should include the name of the medication and its concentration. It is likely that JCAHO and its surveyors will continue to examine for proper labeling and restriction to access of drugs, regardless of who controls them, especially because the Health Care Financing Administration's conditions of participation (CFR 482.25) require that "drugs and biologicals must be kept in a locked storage area." Although JCAHO no longer states that medication carts must be locked, they expect that drugs should be secured from tampering, should be safe from patient-to-patient cross-contamination and should be properly labeled. If the operating room cannot be accessed by unauthorized individuals, as in the case of automatic locks or portals under* ***continuous*** *observation, locking of carts is not essential. In a 1996 Medication and Security alert, JCAHO said:*

The area of greatest concern appears to be for medications that have been prepared for use by an anesthesiologist or certified registered nurse anesthetist (CRNA). These drugs are placed on the anesthesia cart in the operating room while the anesthesiologist or CRNA goes to the holding area to get the patient and bring him or her back to the operating room. Some believe that these drugs are "unsecured" because they are not locked or constantly attended.

Those drugs are "secure" in that they are not readily available to anyone other than operating room personnel. In the absence of evidence to the contrary—that is, there have been no instances of drug abuse, misuse, or diversion—this practice is considered to be safe and the drugs are considered secure.

TX.3.5.5 Emergency medications are consistently available, controlled and secure in the pharmacy and patient care areas. *Applies to emergency drug carts.*

Improving Organizational Performance

PI.4 Data are systematically aggregated and analyzed on an ongoing basis. *The performance improvement section has been extensively reorganized. It no longer explicitly requires that "Adverse events or patterns of adverse events during anesthesia are intensively assessed (PI.4.5.2, CAMH, 1998)." The standards emphasize the competent*

use of mechanisms to systematically gather data on a continuous basis, aggregate it so that the frequency and distribution of problems is clear, use statistically valid means to evaluate and present conclusions, place findings in context over time by trending and comparison with external benchmarks and ultimately making improvements to enhance performance. Great emphasis is placed on the detection and elimination of the root causes of undesirable performance, outcomes and sentinel events. Of note, JCAHO's use of the term "sentinel event" is quite different than that used by engineers, i.e., a previously unknown defect or set of circumstances under which a system will fail. JCAHO identifies as a sentinel event any unanticipated death or permanent loss of function that is not consistent with the patient's disease process.

Over time, JCAHO has been adopting performance improvement standards that have strategic value to health care organizations. Although JCAHO has not directly addressed the strategic benefits of performance improvement, application of these concepts should lead to the exposure and correction of problems that hurt patients and frustrate medical staff. Ultimately, improved outcome and logistics should lead to better, more economical care that links quality management and resource management.

PI.4.1 Appropriate statistical techniques are used to analyze and display data.

PI.4.2 The organization compares its performance over time and with other sources of information. *Various CQI tools apply, including means to display comparative data such as run charts, control charts and other graphic tools. The assessment of data involves determining current levels of performance, how stable it is over time, how it compares to external benchmarks, identifying areas that can be improved, prioritizing improvement opportunities and developing strategies to make improvement where indicated. Emphasis is placed on identifying best practices and developing practices that can be proven to produce the best possible results.*

PI.4.3 Undesirable patterns or trends in performance and sentinel events are intensively analyzed. *JCAHO considers major adverse events associated with anesthesia to be sentinel events. Presumably these events result in permanent damage or death. They may also include a variety of adverse outcomes, and failures in using processes, such as transfusion reactions, medication errors, performance levels that vary from the expected, lack of adherence to appropriate practices and logistical problems.*

PI.4.4. The organization identifies changes that will lead to improved performance and reduce sentinel events. *Trending and analysis of data lead to improvements that are monitored and sustainable. The risk of sentinel events is reduced. Emphasis is placed on the reduction of sentinel events. Here again, it is necessary to accept JCAHO's concept of "sentinel event" to understand its intent. While an engineer might argue that a sentinel event is a hidden system failure that cannot be known before it occurs, and thereafter appears obvious, JCAHO uses the term to denote a catastrophic outcome.*

The Survey Process — Key Points

The survey proceeds from a review of documented performance and improvement to a review with the executive leadership, then to a series of hospital site visits and concludes with a review of problems with specialty groups and a final wrap-up. We have abstracted the core of this process from the Comprehensive Accreditation Manual for Hospitals, pages AC 16-19.

Survey Team — Consists of at least one physician, one nurse and one hospital administrator (for hospitals with more than 75 beds).

Opening Conference — Surveyors and hospital staff discuss the hospital's approach to quality improvement and may use this as an opportunity to discuss specific performance improvement projects.

Documentation Review — Bylaws, rules and regulations, performance improvement data and reports are all reviewed. The departmental QA/QI activities will be reviewed here instead of with the chair, as was done in the past. It is important to provide a clear picture of how the department assesses and controls quality, including examples of problems, sentinel events, improvement strategies and policies that have been adopted for the surveyors to evaluate in order to avoid a more intense review later in the survey process.

Leadership Interviews — Addresses the collaboration of leaders in the performance improvement process. This session is designed to make sure that problems are routinely brought to the attention of leadership and resolved as part of the overall strategic planning of the hospital.

Visits to Patient Care Settings — These include the operating room, anesthetizing locations and recovery areas. All personnel are expected to be familiar with the performance improvement activities relating to their area, the regulations that apply (JCAHO and hospital) and how they meet those requirements. Surveyors are especially sensitive to patient privacy, control of medications, the preoperative process, re-evaluation of the patient's status before induction, infection control and compliance with the other regulations set forth above.

Function Interviews — With multidisciplinary groups responsible for a particular function, e.g., medical records, conscious sedation or CQI. Unresolved issues are likely to surface here.

Leadership Exit Conference — Surveyors meet with leadership to review and discuss findings, including any potential accreditation issues and presentation of a preliminary report.

ORYX — Adding Performance Measures

ORYX is the name of JCAHO's initiative to integrate performance measures into the accreditation process. Its long-range goal is to establish a data-driven, continuous survey and accreditation process to complement the standards-based assessment. A standardized set of performance measures will be identified for use in each JCAHO accreditation program. The use of these core measures will allow for benchmarking based on processes and actual outcomes of patient care. Over time, meaningful performance measurement data will likely be made available to the public. Currently, there are performance measurement requirements for the hospital, long-term care, network, laboratory, home care and behavioral health care accreditation programs. The timetables for ORYX implementation in ambulatory care organizations and long-term care pharmacies have not yet been established.

Performance measurement systems were solicited by JCAHO and then reviewed, and those meeting the criteria have been listed as acceptable for accreditation. Each health care organization in participating programs must select and enroll in an accepted measurement system; a list of acceptable systems can be obtained from JCAHO at <www.jcaho.org>. There is a chapter in each accreditation manual on the evaluation and selection of performance measurement systems. The chapter assists organizations in selecting the measurement system that best meets local measurement. It provides advice and guidance and profiles the first group of measurement systems meeting initial screening criteria. The cost of ORYX will be assessed to the performance measurement systems, and it is expected that "some of these costs" will be passed back to enrolling health care organizations.

ORYX data can trigger a response outside a regular triennial survey if an organization fails to provide ORYX data for two consecutive quarters. Organizations that fail to provide data for two consecutive quarters may be issued a Type I recommendation for missing data. This recommendation will be cleared when JCAHO has received a single quarterly transmission of all required data. Continued failure to send data would result in a second generation Type I recommendation that could be cleared by the same mechanism. Failure to clear the second generation Type I recommendation would result in conditional accreditation.

More information about ORYX can be found at JCAHO's Web site <www.jcaho.org> by selecting "For Health Care Organizations and Professionals" and then "ORYX/Performance Measurement" on the green navigation bar. The ORYX Information Line can be reached at (630) 792-5085, and questions can be submitted via e-mail to <oryx@jcaho.org>. JCAHO also suggests that you call your usual contact for survey- and accreditation-related questions in the Division of Accreditation Operations.

Current 'Hot' Issues for Anesthesiologists

Based on feedback from recently surveyed departments, three controversial issues surface repeatedly. The first of these concerns is the **standard requiring that the patient be re-evaluated *immediately* before anesthesia induction** [PE.1.7.3]. It is important to document that this assessment has been performed. This documentation can consist of a note or a check-box with a preprinted attestation conforming to the above, located on the preanesthesia assessment form or on the anesthesia record. Recording of vital signs at a time before induction is not sufficient.

The second issue concerns the **determination of secure storage in the operating room**. There is a common misconception that this requires a *locked cart*. The "Joint Commission continues to maintain its long-standing position that drugs need not be locked to be secured." (For more information on secure storage, see <www.jcaho.org/standard/pharmfaq_mpfrm.html>.) The standards do require that preparation and dispensing of medications are "appropriately controlled" [TX.3.5]. This point was addressed in an article by William L. Collins, M.D., and Eugene P. Sinclair, M.D., in the August 1996 *ASA NEWSLETTER*, available at <www.asahq.org/NEWSLETTERS/1996/08_96/Articles.html#anchor130830273>. The issue is also covered in the November 1999 issue of *The Inside Perspective*, a JCAHO publication.

The third issue **concerns applicability of the anesthesia standards to the provision of sedation care** [reference: Introduction to Anesthesia Care, TX.2]. This issue is not a factor specifically in the review of anesthesiology departments but rather in the review of the institution as a whole when sedation is provided in other departments for conformity in the quality of care. The anesthesiology department often needs to be involved in the development of institution-wide, safe sedation policies and in teaching the knowledge and skills required by such policies.

The **reporting of "sentinel events"** is another hot issue that applies to institutions in general. The reporting of these events by hospitals is now mandatory. One of the variations of performance referred to in PI.4, above, is the "sentinel event." JCAHO defines a sentinel event as "... an unexpected occurrence or variation involving death or serious physical and psychological injury, or risk thereof. The event is called 'sentinel' because it sends a signal or sounds a warning that requires immediate attention." JCAHO's definition, therefore, includes adverse events that lead to an "unanticipated death or permanent loss of function, ... is associated with significant deviation from the usual process(es)...or has undermined, or has the potential for undermining the public's confidence in the hospital."

In addition, the issue of **restraint and seclusion** has become an area of great concern to JCAHO. Although they are principally concerned with the rights and safety of psychiatric patients, the standards apply to all patients who must be restrained. It is expected that the environment of care will be modified to reduce the need for restraint and that when needed its usage and limitations are specified in the policies of the health care organization. Standard 7.5 and its subcategories refer to restraint in the patient for medical reasons, including those required in the perioperative period. Restraint may be used based on need, and only while needed. Its use and the reasons for use should be documented and should conform to written policy. Restraint may be invoked by protocol or, in the absence of protocol, by written order of an LIP. It may be initiated by a registered nurse who has properly assessed the need for restraint, but it must be confirmed by the written or verbal order of an LIP within 12 hours. Orders for continued restraint must be made by an LIP at least daily. He or she must address the mechanism for monitoring the patient if there is any variance from the written protocol. It is contemplated that patients in the operating room and recovery room require restraint when to do otherwise would cause injury, extubation, removal of parenteral lines or injury because such patients are unconscious or at a level of consciousness that precludes sufficient judgment to prevent injury. It is expected that when restraint is no longer clinically justified, it will be discontinued and that orders or protocols are written to affect this outcome.

What to Do if You Disagree With the Surveyor

The best time to address points that may be unclear is after your mock survey. You can either fax the Standards Interpretation Group of the Joint Commission at (630) 792-5942 or e-mail its director, Carol Patterson <cpatterson@jcaho.org> to request written clarification before your actual survey occurs. When shown to your surveyor, this may avert controversy. If your institution disagrees with the interpretation made by the surveyor at the time of the actual survey, we recommend that you do not argue with the surveyor on site. Instead, address your concerns as an appeal if you are cited for a deficiency in the controversial area. Issues are then frequently resolved.

Hotline Information

ASA members who have specific questions that they would like to address to ASA's JCAHO representatives may do so by e-mailing Karin Bierstein <k.bierstein@asawash.org> or Ron Bruns <r.bruns@asahq.org>.

...Organized Medicine: Do We Need AMA?

Richard R. Johnston, M.D., Chair
Committee on Representation to the American Medical Association

As Chair of the Committee on Representation to the American Medical Association (AMA), I am writing to inform ASA membership of evolving changes in AMA. This article attempts to explain changes that may occur with organized medicine and how these changes could affect ASA and you as an individual physician.

Twenty-five years ago, AMA represented a substantial percentage of American physicians. Today, only 25 percent of active, practicing physicians belong to AMA. Previously, when AMA lobbyists and leadership advocated for physicians, they could claim they represented all American physicians. Today this is not the case.

During the past 25 years, the changes that affect each of your practices have affected AMA as well. With more federal and state governmental hassles, increased paperwork, increased work for less pay and the continued demeaning of American physicians, today's physicians have come to believe that some of their problems have been created by a "weak" AMA that is not looking out for their interests. As a result, more and more physicians sought solutions to their problems through their specialty societies and/or their local, state and county medical associations.

AMA was slow to respond to many of these changes because they had been firmly committed to maintaining geographic state medical associations, without acknowledging the significant potential input of specialty societies, other practice arrangements and changing physician demographics. Physicians saw few benefits in belonging to AMA, and membership began falling. In an attempt to maintain revenues and membership, AMA leadership became involved in several ill-advised programs, including AMAP (an expensive quasi-credentialing process) and the Sunbeam fiasco, which damaged AMA's reputation and further contributed to loss of membership.

Richard R. Johnston, M.D., is Staff Anesthesiologist, Sacred Heart Medical Center, Eugene, Oregon.

The continued drain on membership has awakened the AMA to the realization that if it is to remain viable, significant changes are necessary. AMA is finally attempting a major restructuring that will reorganize the changing involvements of physicians, as mentioned above. Significant for us is the increased recognition of specialties such as ASA.

One could question, "do we really need AMA?" If it has membership problems, what if we just ignore AMA and let it dissolve? The answer to that question is: Fine, if you do not want anyone representing you as a physician at the national level and in Washington, D.C. It should be clear, then, that we *definitely* need AMA. It has had tremendous involvement with medical education, medical standards, ethics and publications, in addition to participation as an advocate with our national legislators. Furthermore, AMA has assisted individual states with legislative efforts and on numerous occasions has filed lawsuits on behalf of physicians. Recently, AMA has won several major lawsuits that supported physicians against the government and egregious insurance companies. Closer to home, AMA has been very supportive of our efforts concerning nurse anesthetists and the supervision issue.

Although ASA is vital to anesthesiologists in particular, there are many issues we have in common with all of medicine. It is shortsighted to think that we, the ASA, can individually promote the medical interests of anesthesiologists and the patients we care for without the help of AMA. It is estimated that AMA yearly provides ASA with more than $1 million in direct and indirect lobbying efforts. The reports made through the AMA House of Delegates are invaluable in providing the research and information necessary for our staff and leadership to work on our behalf.

We need AMA. However, AMA needs ASA as well. Amid the current restructuring at AMA, one important question is, "what type of organization should AMA be?" Should we have a voluntary or mandatory organization? Should ASA participate in an organization-of-organizations, or should we maintain the "status-quo," leading to the inevitable decline in AMA's power and resources? ASA could function as one organization along with other specialties, states, counties, large group practices, etc., that participates as a member of a larger organization whose

name might be different than "AMA." The parent organization would then be funded by the participating organizations on the basis of each organization's membership numbers.

In my opinion, what is necessary for building a stronger voice for medicine is better trust between the AMA Board of Trustees and AMA House of Delegates. There also needs to be better trust among the various components of the Federation (i.e., specialty societies, AMA and the state medical associations). The "new" AMA should be slimmer. Perhaps AMA needs to eliminate many of their traditional tasks and allow those responsibilities to be carried out by specialty societies and/or state associations — education is an area where this could occur. A "slimmer" AMA is necessary for the creation of an efficient umbrella organization that is cheaper and more efficient than what they offer now. Additionally, there needs to be a better and more representative governance of the parent organization.

Currently, the Advisory Committee for Commission on Unity is working to make some of the changes. It contains two anesthesiologists out of 25 members (one is a representative of a state organization). John B. Neeld, Jr., M.D., represents ASA.

Would you be willing to pay $50 to $100 extra above your ASA dues to participate in an organization that would be an advocate on your behalf ? Currently, AMA dues are $420, and ASA dues are $450. Mandating that *all* physicians participate through their organization, if their organization participates, is a question each of you needs to consider. It may be less expensive for some, but current nonparticipants who benefit from AMA activities would now contribute something.

For the strong voice of medicine to be heard, and for continued representation of our profession in the future, AMA's issues must be addressed by ASA and its members. We need a strong and more focused AMA in which all physicians participate. How the change occurs and how ASA participates will be a major issue for your current delegation to AMA and ultimately the ASA House of Delegates.

We welcome your input and hope that we can represent you well in this transition.

Chemical Dependency in Anesthesiologists

continued from page 8

these narcotics to be laying around an anesthesiologist's workspace between cases. This makes for easy access to narcotics for anesthesiologists and anyone else working in an operating room setting. There has been and needs to be continued emphasis on making sure narcotics are appropriately stored and locked, and used only by appropriate personnel.

Despite increased risks, there are still outstanding outcomes when the chemically dependent physician is appropriately intervened upon, treated and re-entered into his or her profession. Efforts to enhance detection and reduce risk need to continue on a consistent basis.

References:

1. Gabbard GO. The role of compulsiveness in the normal physician. *JAMA.* 1985; 254(20):2926-2929.
2. Robinowitz CB. The physician as a patient. In: Scheiber SC, Doyle BB, eds. *The Impaired Physician*. New York: Plenum Medical Book Co.; 1983.
3. Talbott G. Elements of the impaired physician program. *J Med Assoc Ga.* 1984; 73(11):749-751.
4. Smith PC, Smith JD. Treatment outcomes of impaired physicians in Oklahoma. *J Okla State Med Assoc.* 1991; 84(12):599-603.
5. Porter T, Talbott GD, Irons R. Addiction treatment outcomes: A seven-year follow-up study; 1994 (Unpublished manuscript).
6. Reading EG. Nine years' experience with chemically dependent physicians: The New Jersey experience. *Md Med J.* 1992; 41(4):325-329.
7. Angres DH, Talbott GD, Bettinardi-Angres K. *Healing the Healer: The Addicted Physician*. Madison, CT: Psychosocial Press. 1998:34-42.

Evaluating a New Ambulatory Surgical Center Opportunity

Karin Bierstein,
Assistant Director of Governmental Affairs (Regulatory)

Investing in ambulatory surgical centers (ASCs) raises legal issues that this column last addressed in February 2000. Whether providing anesthesia services for an ASC makes sense as a matter of business is an equally important question that recently was the subject of an electronic discussion by six professional anesthesia group administrators: Al Tank, Will Schlotter, Shena Scott, Mark Meisel, David Cloninger and Lynda Venters. Ms. Venters provides a thorough summary of the discussion below.

Introduction

In today's health care environment, new ASCs are springing up in nearly every marketplace. They are being developed by health care systems, for-profit companies, physician groups and partnerships consisting of a variety of investors. These ASCs can be either multispecialty centers or single-specialty niche facilities.

Anesthesiologists face decisions on whether to provide services for or, in some instances, invest in these ASCs. In evaluating these opportunities, there are many questions to be answered and analyses that can be helpful. Additionally, groups considering investing in an ASC must address legal issues including exposure under the antikickback laws. (Judith Jurin Semo, Esq., presented a great summary of these laws at the recent February 2001 ASA Practice Management Conference. Her abstract, which is available as part of the conference compendium, can be obtained by e-mailing ASA at <publications@asahq.org>.)

In evaluating any new opportunity, one must first ask whether the surgeons and administrators of the ASC will work with the specialty of anesthesiology to develop and enforce safe and appropriate standards of care. If so, the group must then determine the potential revenue, of which the major factors are case mix, payer mix and volume. It is even more critical to answer the question, "How much will it cost us to provide the anesthesia coverage for another location?" The cost entails not just hard dollars, but the opportunity/political costs as well.

Hard Dollars

The real cost to a group practice in providing anesthesia coverage for a new location is its workforce costs: "Do we have enough capacity in our existing staff to provide the services, or will we need to hire additional staff? Will covering this location provide for more efficient or less efficient utilization of our staff?" In analyzing this cost, there are many questions to consider:

1. What is the anticipated volume at the new ASC? How many anesthesia providers can this volume support?
2. Is this new case volume or just a shift of existing cases from another location currently being covered by the group?
3. Will the new ASC pull any existing inpatient volumes from our current hospitals because of its proximity to another hospital? In other words, will surgeons take their inpatient cases to a hospital that is closer to the ASC for their convenience, thereby affecting the group's inpatient case volumes as well?
4. Is the ASC requiring any particular mix of anesthesia providers? Will it consist exclusively of physicians or an anesthesia care team?
5. How many rooms does the ASC intend to open? Does it have sufficient volume for the intended number of rooms, or will there be an "inefficiency" cost for covering this number of rooms, which should be factored in by the group? Does it have growth capacity? What are the plans?
6. Will the group have an exclusive contract, or will other anesthesia providers be allowed to work at the new ASC? (Allowing other providers will exacerbate any staffing inefficiencies anticipated and could impact the analysis of the payer mix of projected cases.)
7. Will the group be required to provide other uncompensated services such as night call or recovery room patient management?
8. Will the group be given the opportunity to invest in the ASC?

Once these questions are answered, the hard dollar costs

can and should be analyzed. The group will need existing utilization data for the surgeons intending to move their business to the new ASC as well as accurate labor costs for their anesthesia providers. Staff scheduling capacities, payer mix information and any projected return on an investment in the ASC are additional key pieces of data.

Be cautious! It is easy to underestimate the startup costs of a new venture. How quickly will the ASC realize its volume projections? Will it take six months or two years? If those involved are planning on four rooms, will they be opening two in the beginning and adding a room as more volume is attained, allowing the anesthesia group to "ramp up" its workforce needs? Such a progressive staffing system may be established in the contract. Alternatively, will the ASC be opening four "inefficient" rooms from the beginning? If so, is a stipend available? As a third possibility, will there be utilization targets that must be attained and maintained before another room will be opened, or is it at the discretion of the ASC management?

Clearly, workforce cost is the most significant investment on the part of the anesthesia group. Any resulting inefficiencies will increase the group's costs if there is not sufficient new case revenue to offset the inefficiencies. However, if a group is in a situation where there is excess capacity, staffing a new location can help to absorb this excess, thereby creating more efficiency and decreased costs to the group.

Political Costs

Evaluating the political costs of providing anesthesia services at a new ASC can be particularly challenging. The variety of available arrangements presents different issues to be analyzed. Many groups have exclusive contracts with their hospital systems that prohibit them from providing services for anyone outside their system. With such "non-compete" clauses, they can be confronted with the predicament of a new ASC outside their hospital system skimming a portion of their "good book of business," thereby affecting their overall payer mix and revenue potential. In this case, a group must calculate multiple costs: the cost of potential new business, the cost of lost volume and the "cost" of the remaining business represented by the exclusive contract. The best advice is that once all homework has been done, if appropriate, a group should build its case and negotiate with the hospital system for a waiver of this provision of their exclusive contract. In a small community, the new ASC could be in a position to skim a large enough portion of your practice to render your exclusive contract with a hospital a liability.

Another popular scenario in a competitive anesthesia market involves the ASC inviting multiple anesthesia groups to bid for the opportunity to work at the ASC. The same analyses need to be conducted to determine the "costs" of bidding or not bidding for the book of business the ASC represents. This scenario immediately increases competition among groups who may have historically been competitors or just co-existed in a marketplace with their own defined niches.

If the group has no local competition and is asked to take on the new ASC, the major issue will be how the new location affects its staffing efficiency. If the group is required to hire additional staff to cover the location, there could be significant impact on the bottom line of the group if no new case volume is anticipated. With this scenario, groups often request a stipend or subsidy to offset the increased workforce inefficiency.

These are only a few of a multitude of variations in the dynamics between groups, competitors, hospital systems and ASCs. Each situation needs to be carefully evaluated and analyzed. It is difficult to anticipate each and every issue, but careful, up-front analyses will help groups avoid costly mistakes or at least allow informed decisions about incurring additional costs for the opportunity to provide services at the new ASC.

Other Costs

Other cost factors that must be considered in making a final decision regarding a new ASC opportunity include:

1. Who will provide the anesthesia equipment, supplies and drugs?
2. Is adequate support staff provided by the ASC?
3. Will the anesthesia group retain its own contracting, billing and collections? Will the ASC require the anesthesia group to participate in "package pricing" or offer unreasonably low rates?
4. Will the anesthesia group be expected to provide medical director services? Will such services be compensated? (This is an important question because of potential antikickback issues as well.)
5. Are any other services or administrative duties required of the anesthesiologist that will add cost?

Other Issues

An important area to assess is the quality of the ASC's administrative team. Does it have experience in the start-up and management of an ASC? Who is the team's employer — the ASC, the physicians, etc? Experienced management is critical in maintaining the focus, strategic planning, negotiating optimal contracts, facilitating relationships between the physician groups and in the day-to-day management of the facility.

An anesthesia group should also take the time to assess the surgeon community that will be practicing in the ASC. Have you worked with them before? Will the surgeons be willing to work with you on developing utilization targets to maximize staffing, not only for anesthesia but for the ASC support staff? Will they be willing to work with anesthesia and the support staff as a "team" to attain the best patient outcomes?

And lastly, an anesthesia group should "look within" to determine if the group's leadership is committed to taking on a new venture. Is there sufficient knowledge and adequate resources to provide the level of customer service demanded within an ASC environment? Are the providers willing to try new techniques? Are they willing to work with the surgeons and support staff in maximizing the efficiency of the ASC? Are they willing to "do what it takes" to turn over rooms, make patients comfortable and facilitate a positive outcome for the patient? Are they willing to face an initial period of negative net revenues?

All of these assessments will help a group to determine if adequate and competent resources exist to make the new facility a success. Each component group is critical, but administrators, surgeons and anesthesiologists must be able to work together in an ambulatory setting to obtain maximum output and positive results for all involved.

Patient Safety/Standards of Care

The final and most important issue is one of patient safety and appropriateness of cases performed in an ambulatory setting. Will surgeons and the administration work with the anesthesiology department to develop appropriate and safe standards of care for their patients? More importantly, will the surgeons enforce implementation of these standards?

It is critical that only appropriate cases be performed in an ambulatory setting to avoid potential exposure for all providers, the facility and staff. Patient safety should be the driver of the schedule — not economic gain and physician convenience.

Summary

It should be obvious that each opportunity is unique. The standards of care, type of facility, ownership of the facility, the marketplace, payer mix, current contract status and anesthesia workforce are the primary factors in an adequate analysis of the opportunity. The above information is provided in an effort to stimulate a group's thinking when conducting an evaluation of any opportunity presented.

For information, contact: Lynda F. Venters, Venters & Associates, LLC, P.O. Box 14423, Albuquerque, NM 87191-4423; (505) 323-7200.

Lunch Break Redux

The March "Compliance Corner" answer to the question "Can an anesthesiologist who is medically directing two or more cases give a lunch break to one of the nurse anesthetists?" dismayed quite a few ASA members, judging by telephone calls and e-mails received. Although it may be perfectly safe for an anesthesiologist to relieve the nurse in case #1 while the physician continues to medically direct cases #2 and #3, the Medicare billing rules do not allow reimbursement for medical direction of #2 and #3 once the anesthesiologist begins "personally performing" case #1 by excusing the nurse anesthetist, even if the latter can return immediately.

The Medicare Carrier Manual does not list relieving nurse anesthetists among the services that an anesthesiologist may perform without breaking medical direction. A 1998 letter from the relevant Health Care Financing Administration (HCFA) division director confirms this principle and also indicates that the practice can continue medical direction by assigning another anesthesiologist to take over cases #2 and #3.

ASA leadership wishes to clarify that the intent in responding to compliance questions is to provide conservative guidance on current Medicare policy. ASA does not always agree with Medicare policy, and that is why we are discussing possible changes with HCFA.

State Legislative Report: AL, GA, IL, LA, MD, MI, NM, NY, PA, WA

S. Diane Turpin
Assistant Director of Governmental Affairs (State)

Although 19 states have adjourned their regular legislative sessions for this year (Arizona, Arkansas, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Maryland, Mississippi, Montana, New Mexico, North Dakota, South Dakota, Virginia, Washington, West Virginia, Wisconsin and Wyoming), the remainder of the states are in session. The following bills are of significant interest to anesthesiologists.[1]

Alabama The governor has signed legislation into law that requires nurse anesthetists to function under the direction of a physician licensed to practice medicine (or a dentist) who is immediately available. The Alabama Society of Anesthesiologists worked tirelessly to ensure passage of this legislation.

Georgia H.B. 632 and H.B. 784 would have required the Board of Medical Examiners to "implement measures to ensure that physicians who provide surgical services in office-based surgical settings and physicians who provide, or supervise the provision of, anesthesia services in office-based surgical settings are appropriately credentialed to provide such services…" Under the legislation, a physician could apply to any credentialing entity approved by the Board or, alternatively, a physician could be deemed sufficiently credentialed if the physician had "specific unlimited privileges as a member of the active medical staff in a hospital located within 50 miles of the physician's primary office." The bills also required the reporting of "an unexpected occurrence involving death or serious injury, or the risk thereof" within 30 days after the occurrence to an independent peer-review organization. The legislative session ended before the bills were passed.

Illinois Regulations were adopted to require that nurse anesthetists may provide anesthesia services in the office setting only if the physician has training and experience in the delivery of anesthesia services to patients. The physician's training and experience must be documented in a written practice agreement. The physician must either have clinical privileges to administer anesthesia services in a hospital or ambulatory surgical treatment center or have completed specified continuing medical education (CME) in the subject area. For conscious sedation only, the physician shall complete a minimum of eight hours of CME within each three-year license renewal period in delivery of anesthesia, including the administration of conscious sedation. For deep sedation, regional anesthesia and/or general anesthesia, a physician shall complete a minimum of 34 hours of CME in the delivery of anesthesia services within each three-year license renewal period.

Louisiana H.B. 1765 would eliminate the current requirement for nurse anesthetists to practice only under the direction and supervision of a physician or dentist. S.B. 726 would allow advanced practice registered nurses (APRNs), including nurse anesthetists, to write prescriptions. Under current law APRNs may apply for limited prescriptive authority in accordance with written clinical practice guidelines and a collaborative practice agreement between the APRN and a supervising physician.

Maryland The legislative session ended without passage of H.B. 1356, legislation advanced by the nurse anesthetists. The bill was amended in committee and, if passed, would have given the Board of Nursing sole authority to govern anesthesia as a nursing function in all practice settings where nurse anesthetists are authorized to practice.

Michigan H.B. 4591 would ensure that physicians who supervise the administration of general anesthesia or major conductive regional anesthesia do so while they are physically available in the health facility at the time of surgery. The legislation is intended to close a loophole in the current law that may permit "supervision" by a physician who is not in the health care facility.

New Mexico H.B. 337, granting prescriptive authority to nurse anesthetists, was signed into law. S.B. 370, providing for the licensure of anesthesiologists' assistants, was signed into law.

New York A.B. 5548 and S.B. 3457 would require the Commissioner of Health to promulgate regulations for office-based surgery. A.B. 5549 and S.B. 3458 would require all health care practitioners performing office-based surgery to report to the Commissioner of Health all reportable incidents.

Pennsylvania H.B. 823 would amend the Medical Practice Act as follows:

Continued on page 40

Developing a Culture of Safety

Jason T. Vigue, M.D.
Alternate Delegate to AMA Resident and Fellow Section

Many issues were covered at the American Medical Association (AMA) Resident/Fellow Section (RFS) Interim Meeting in Orlando, Florida, last December. One topic included a discussion on safety in medicine, moderated by keynote speaker, John Nance. Mr. Nance — an airline pilot, attorney and national safety expert — has been called upon to help medicine apply the safety processes that have transformed aviation. He is also a board member of the National Patient Safety Foundation.

Mr. Nance believes physicians and other health care providers can learn from aviation because both industries have similar characteristics. A comparison of the practice of anesthesiology and aviation proves how similar they are.

Both anesthesiologists and pilots are carefully selected, highly trained professionals who are to maintain high standards, both internally and externally imposed, while performing difficult tasks in life-threatening environments. Both groups use highly technical equipment and function as key members of a team of specialists forced to operate under conditions that at times are far from ideal.[1] In addition, both fields involve extremely complex systems of which the human element is a major component. The perceived crisis concerning safety and errors, which is gaining increasing attention in health care, is not dissimilar to that experienced by the aviation industry in the 1970s. Recognition of these commonalities can help health care providers understand the connection between principles of safety within the two industries and to adapt aviation safety lessons for medicine.[2]

The majority of accidents in anesthesia probably arise from human error. Several studies have shown that 75 percent of intraoperative cardiac arrests appear to have been caused by preventable anesthetic errors, while inadequate vigilance contributed to one-third of deaths in another study.[3] These statistics are similar to those in aviation, where three-quarters of all air carrier accidents are attributed to operator mistakes. Nance stated that physicians and pilots can develop a type of "command stress" that comes from feeling they have to maintain complete control of a situation, manage everything that happens and never make a mistake. He said the airline industry found that this isolated pilots and that they tended to ignore important roles support staff could play. Most anesthesiologists also work in a team setting, either with a nurse anesthetist, hospital staff or other physicians, but that does not mean they feel any less isolated than pilots.

Mr. Nance shared some of the key ideas and learned lessons that transformed the aviation industry from one in crisis to one that today maintains an excellent safety record. He offered much advice:

- Safety begins with two-way communication. Create an atmosphere of communication and teamwork by training professionals of all levels to interact, be assertive, be a part of the team and take individual responsibility for safety.
- Complex systems fail in complex ways. There is not a probable cause to an incident: There are multiple causes. Incident investigations that focus only on who erred often fail. Root-cause analyses that investigate why the problem occurred and what factors caused the failure will help improve the system.
- Blame and punishment are conducive to silence and are useless for the prevention of future errors.
- Persistence is key. The above items involve a paradigm shift that takes time. Change in safety culture requires leadership, teamwork and dedication to a common goal: safer systems.[4]

Although the current practice of anesthesia is thought to be safe, the profession rightly seeks continued improvement in quality and safety. Human error will continue to be the primary cause of accidents. There remains a need to continue research into the causes of human error and decision-making. Resident physicians and nurse anesthetists need to be trained in human factors and team management in a manner similar to the aviation industry. There also exists a need to track and study near-misses in anesthesia, while working independently of any medicolegal process.

Continued on page 38

Jason T. Vigue, M.D., is a CA-1 resident in anesthesiology, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina. He is also an instrument-rated private pilot.

Neurologic Surgery: A Logical Choice for Anesthesiologists

Michael E. Mahla, M.D.
Society of Neurosurgical Anesthesia and Critical Care

Much like other subspecialty societies, the Society of Neurosurgical Anesthesia and Critical Care (SNACC) is beginning to tackle the questions surrounding the definition of a "consultant" in neurosurgical anesthesiology. This process initially involved defining the curricular content of the required primary rotation in neuroanesthesia in the core residency program. It is now focusing on fellowship training curriculum and content. What unique and special competencies and services can a neuroanesthesiologist provide to patients having surgery that risks the structure and function of the central and peripheral nervous systems?

Neuroanesthesiologists are becoming recognized as the logical choice to head medical direction for neurologic monitoring services to patients undergoing surgery that places the nervous system at risk, such as scoliosis repair or thoracic aneurysm repair. This concept regarding the role of anesthesiologists in "nonanesthesia monitoring" is similarly embraced by the Society of Cardiovascular Anesthesiologists with respect to transesophageal echocardiography. Currently, there are several SNACC members in the United States and internationally who are entirely responsible for the provision of neurologic monitoring at their respective institutions. Indeed, these same SNACC members are performing much of the current and important research in neurologic monitoring.

This initiative will require significant changes in neuroanesthesia training programs. Fellows training in neuroanesthesia will need significant exposure (at least six months) to neurologic monitoring modalities including auditory and somatosensory-evoked responses, motor-evoked responses, evoked and spontaneous electromyography, electroencephalography, transcranial Doppler ultrasound and other methods for cerebral blood flow measurement. They will also need training in basic neuroanatomy and neurophysiology to provide a solid basic science foundation necessary for understanding and interpreting these responses. Also, current practitioners, if interested in gaining skills in this area, will need equivalent exposure and training.

As the specialty of neurologic surgery continues to advance, requirements for intensive neurologic monitoring both in the operating room and the intensive care unit will likely expand. Complex spinal surgery and intracranial neurovascular surgery already utilize extensive monitoring at many centers.[1,2] Recently, a patient at the University of Florida was spared a major neurologic deficit following clipping of a basilar apex aneurysm. During surgery, one of several clips placed to control this complex, multilobed aneurysm put pressure on a small atheroma in one of the exiting posterior cerebral arteries. The problem was not visible under the operating microscope, but a persistent unilateral loss of the cortical somatosensory evoked a response following temporary occlusion of the basilar artery, which alerted the surgeon and anesthesiologist to the problem and prompted re-exploration and induced hypertension that would not have otherwise occurred. Even less complex cases performed in community hospitals are increasingly using neurologic monitoring. Within the next decade, clinical intraoperative monitoring of motor pathways, with its incumbent anesthetic requirements, is likely to become much more common, especially at larger private and university hospitals.

Currently, neurologic monitoring is provided for the most part by nonanesthesiologists.[3] While these models work well, I believe that anesthesiologists could do a better job. Many of these physician providers rely on technicians to perform the monitoring and are not physically present in the operating room. In this case, when a change in a monitored response occurs, the technologist must contact the medical director who must then verify the change. The medical director must then determine what has happened surgically to make certain that the change makes sense. He or she can then interact with the surgeon and anesthesiologist to determine what is best to do at that point in time. Having the anesthesiologist actually responsible for the monitoring reduces the clinical response time to a change in the monitored response to near zero. He or she can then in "real time" discuss work with the surgeon to immediately implement appropriate surgical and medical therapy.

The prospect for anesthesiologists becoming more

Michael E. Mahla, M.D., is Associate Professor of Anesthesiology and Neurosurgery, and Residency Program Director, University of Florida College of Medicine, Gainesville, Florida.

involved with neurologic monitoring is obviously very exciting, but there is a potential problem that could defeat this initiative before it even gets started. Anesthesiology reimbursement, particularly from Medicare, has been undergoing many changes in recent years. One of the most important issues to emerge from these changes involves concurrent care. Can the anesthesiologist provide nonanesthesia services at the same time he or she is supervising anesthesia care by other providers (residents or nurse anesthetists)? Obviously, if the anesthesiologist is providing direct care to a patient, it would not be appropriate to supervise a neurologic monitoring technologist in another location. That would be no better than most current models. However, based on my nearly 20 years of experience, I strongly feel that neuroanesthesiologists in the operating room supervising two anesthetizing locations can readily supervise neurologic monitoring without compromising care to either his or her anesthetized patients or to the patient being monitored. As more anesthesiologists become trained in neurologic monitoring, it would be readily possible for the anesthesiologist to only supervise monitoring in rooms where he /she is providing supervision of the anesthetic.

SNACC is working hard with ASA to address issues relating to neuroanesthesia. However, the importance of these issue extend far beyond neurosurgical anesthesiology. Indeed, it extends to the very definition of an anesthesiologist as a "perioperative medicine specialist." As anesthesiology moves into the 21st century, neurologic monitoring, transesophageal echocardiography or those skills involved with management of acute or chronic pain will define the anesthesiologist's role. It will make him or her different from other providers of anesthesia care, both in fact and in the eyes of the public. The support of ASA in this issue is greatly appreciated by all in SNACC.

References:

1. Nuwer MR, Dawson EG, Carlson LG, et al. Somatosensory evoked potential spinal cord monitoring reduces neurologic deficits after scoliosis surgery: Results of a large multicenter survery. *Electroencephalogr Clin Neurophysiol.* 1995; 96(1):6-11.
2. Burke D, Nuwer MR, Daube J, et al. Intraoperative monitoring. The International Federation of Clinical Neurophysiology. *Electroencephalogr Clin Neurophysiol Suppl.* 1999; 52:133-148.
3. Nuwer JM, Nuwer MR. Neurophysiologic surgical monitoring staffing patterns in the USA. *Electroencephalogr Clin Neurophysiol.* 1997; 103(6):616-620.

Developing a Culture of Safety

Continued from page 36

I will end with this bit of enlightenment:

"The greatest mistake you can make in life is to be continually fearing you will make one."

— Elbert Hubbard. *The Note Book,* 1927.

References

1. Allnut MF. Human factors in accidents. *Brit J Anaesth.* 1987; 59(7):856-864.
2. Noble J. Overcoming barriers to examining errors. Risk Management Foundation of the Harvard Medical Institutions-Resource Web site. <www.rmf.harvard.edu>; 1999.
3. Green R. The psychology of human error. *Eur J Anaesthesiol.* 1999; 16(3):148-155.
4. Executive summary-national patient safety foundation. American Medical Association Web site <www.ama-assn.org/med-sci/npsf/wisc.htm>; 1999.

ABA Announces …

ABA Recertification Examination Dates

All certificates awarded by the American Board of Anesthesiology (ABA) on or after January 1, 2000, expire at the end of the 10th year following the year in which the candidate passes the certifying examination. The ABA recertification program is voluntary for ABA diplomates whose certification is not time-limited. ABA diplomates may take the examination by computer at more than 350 test centers during a two-week period, May 4-18, 2002. ABA will inform applicants of the test sites when the list is available. Diplomates may obtain an application after July 1, 2001, either on the ABA Web site <www.ABANES.org> or by writing the ABA at 4101 Lake Boone Trail, Suite 510, Raleigh, NC 27607-6507. Applicants may submit their application to ABA directly from the Web site or via mail at <boconnell@abanes.org>. The ABA must receive completed recertification applications by **November 15, 2001**.

Workshop on Regional Anesthesia and Pain Medicine Techniques

This continuing medical education (CME) program is the first ASA workshop to be offered in an electronic format. It is the product of a collaborative effort between ASA and the American Society of Regional Anesthesia and Pain Medicine (ASRA-PM).

This program is designed for any anesthesiologist who performs neural blockade for the management of pain in his/her practice. The material is designed for all practitioners regardless of their level of prior expertise with the techniques described. This workshop utilizes video clips, patients and cadavers to present evidence-based pain management techniques such as proper positioning and needle placement techniques. The three topics discussed are:

- Thoracic Epidural Analgesia
- Neurolytic Blocks for Cancer Pain
- Sympathetic Blocks

For each technique, patient selection, current information regarding outcomes and the relevant anatomy are described. Selected techniques are demonstrated, including the use of fluoroscopic guidance.

The speakers for this program are:

- James P. Rathmell, M.D., Program Chair, Associate Professor of Anesthesiology, University of Vermont College of Medicine, Director, Pain Management Center, Fletcher Allen Health Care, Burlington, Vermont
- Joseph M. Neal, M.D., Staff Anesthesiologist, Virginia Mason Medical Center, Seattle, Washington
- Sunil J. Panchal, M.D., Director, Division of Pain Medicine, Assistant Professor of Anesthesiology, Weill Medical College, Cornell University, New York, New York

Those who wish to participate may access the program through the ASA Web site at <www.ASAhq.org> under the "Continuing Education" link on the homepage. On the workshop page, there is a description of the workshop, faculty listing and a section on frequently asked questions as well as learning objectives for each of the three one-hour sessions. After filling out a basic registration form and submitting credit card information, the session begins. After viewing the session, there is a brief five-question quiz and an evaluation form that must be completed to receive CME credit. A CME certificate will be mailed to each participant after the quiz and evaluation form are completed. One hour of category 1 credit is available for each of the three sessions.

ASA is approved by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor CME programs for physicians.

ASA designates this educational activity for a maximum of three hours in category 1 credit toward the American Medical Association's Physician Recognition Award. Each physician should claim only those hours of credit he or she actually spent in the activity.

This program will be available on the ASA Web site for one year. Registration fees are $35 per one-hour session for ASA and ASRA-PM members and $75 per one-hour session for nonmembers.

This is an affordable and convenient opportunity to advance your knowledge and expertise in the area of regional anesthesia and pain management.

'Calendars for Meetings' on the Web

Locating anesthesia-related education courses and meetings has never been easier. New features on the ASA Web site allow members to search for relevant events and meetings by date, location, keyword, 25 different subject categories or by simply choosing to show all events on the site.

Submission of courses, events and meetings in anesthesiology has also become simplified. One must simply click the "Submit An Event" button on the Meeting Calendar Web page, fill out the necessary information electronically and click "Add New Event" to add it to the hundreds of other anesthesiology events already listed.

Due to the efficiency and easy access of the Web version of "Calendars for Meetings," the printed version will be phased out after the July 2002 edition. For those who wish to submit information for the July 2001 booklet version, information must be received ***no later than June 1, 2001***; submissions for the January 2002 booklet edition must be received ***no later than December 1, 2001.*** As usual, no telephone submissions will be accepted, and entries are limited to anesthesia-related, physicians' continuing education and meetings.

Submissions to the Web version can be sent any time and will be posted to the Web within three days after submission.

For further information or to obtain submission forms, contact the ASA Communications Department, 520 N. Northwest Highway, Park Ridge, IL 60068-2573; telephone (847) 825-5586; e-mail <K.Yetsky@ASAhq.org>. Web submissions can be sent by accessing <http://events.ASAhq.org>.

State Legislative Report: AL, GA, IL, LA, MD, MI, NM, NY, PA, WA

Continued from page 35

"Supervision of authorized services — When a certified registered nurse anesthetist administers anesthetics and provides related services in a health care facility, the certified registered nurse anesthetist shall be under the supervision of a physician who is present in the health care facility when the anesthesia is administered. The services provided by a certified registered nurse anesthetist do not include the prescription of medication or the performance of medical diagnosis or therapeutics."

The bill defines "supervision" as "medical direction provided by a qualified physician who is responsible for the anesthesia care provided by the certified registered nurse anesthetist. The Board shall promulgate regulations which define the medical direction required by the standards of acceptable medical practice embraced by the medical doctor community in this Commonwealth."

Washington S.B. 5796 and H.B. 1621 would have expanded the prescriptive authority of APRNs by allowing them to prescribe controlled substances in Schedules II-IV. Under current law, APRNs are permitted to prescribe legend drugs and Schedule V controlled substances. Furthermore, nurse anesthetists are permitted to select, order and administer controlled substances as defined in Schedules II-IV of the Uniform Controlled Substances act, provided such authority is consistent with their commission-recognized scope of practice, facility-specific protocols and a physician's request for a nurse anesthetist's services. The authority to select, order or administer Schedule II-IV controlled substances is limited to those drugs that are to be directly administered to patients who require anesthesia for diagnostic, operative, obstetrical or therapeutic procedures in a hospital, clinic, ambulatory surgical facility or the offices of other designated licensed practitioners. These bills did not pass.

[1] Copies of the bills are available upon request from the ASA Washington Office at (202) 289-2222 or <mail@ASAwash.org>.

Anesthesiologists: Architects for Bridging the Quality Chasm

Continued from page 1

Medical discoveries and technology continue to expand rapidly while, ironically, the health care infrastructure is crumbling. The awesome medical advances that people see on television are not what they receive after they become ill. With shortages in both nursing personnel and physicians — added to 40 million uninsured Americans plus continued reductions in reimbursement — the current path leads directly into catastrophe. Imagine for a moment that health care was similar to the restaurant industry. If there were no servers, bartenders or chefs, if customers demanded the best service, but could not pay, if credit card companies only partially paid for services or food delivered, the business would file for bankruptcy and close. How do we shut down health care in America?

In the executive summary of the IOM report, the authors succinctly describe the last quarter-century of health systems development as the "Era of Brownian motion in health care." What most physicians find insufferable is the abject shortsightedness displayed by those "orchestrating" mergers, acquisitions and affiliations, seemingly in a vacuum. Millions of dollars previously used to deliver and pay for direct patient care are squandered on uniformly unsuccessful partnerships. Most physicians believe that excellence is driven by being as good as the outcome of one's last procedure. How do we judge CEOs in the health care industry who apparently judge their success by the magnitude of their severance package? With no obvious solution to correcting the current American health care system, IOM believes that a totally new system must emerge — one that will be able to seamlessly incorporate future medical technology into a cost-effective practice paradigm.

IOM has developed an agenda for crossing the quality health care delivery system chasm. Among its early recommendations, they propose six aims for improvement. Health care should be:

- Safe — avoidance of injury in the attempt to cure
- Effective — provision of services based on scientific knowledge
- Patient-centered — provision of respectful, responsive and individualized care
- Timely — reduction in waiting time and harmful delays in care
- Efficient — avoidance of waste in equipment, supplies, ideas and energy
- Equitable — provision of equal quality care to everyone

Anesthesiology, despite our anticipated shortage in personnel concomitant with an increased demand for services, can once again lead the way for medicine. We **are** safe, effective, patient-centered, timely, efficient and equitable. Our challenge then is to not only market our accomplishments to the public, but to maintain and further improve on these six aims. Each physician must develop a code of practice and conduct that espouses these concepts whenever interacting with patients. Patients should not bear the brunt of our frustrations by receiving anything less than our best efforts.

I reflected on these six aims and derived an action plan in the form of six questions for interacting with patients. I would like to share them with you in the hope that collectively we can begin to develop a standardized nationwide code of professional decision-making and conduct for patient care. Once again, we can show medicine how it should be practiced.

Suggested Code of Conduct

1. Safety — Would I want someone to do this (procedure, block, technique) on me or my family?
2. Effective — For what reason am I doing this (procedure, block, technique)?
3. Patient-centered — Am I acting in a manner that I would want someone to act with me or my family?
4. Timely — How can I minimize the time spent (on this procedure, block, technique, assessment)?
5. Efficient — What do I REALLY need (to perform this assessment, procedure, block, technique)?
6. Equitable — Is this what I would want (do) for me or my family?

As anesthesiologists, we are among the best physicians medicine has to offer. We demonstrate it daily by being safe, effective, patient-centered, timely, efficient and equitable. IOM has "certified" us as being the best. Now, amid the drug and personnel shortages, we must do it all, with one hand tied behind our backs.

No problem, because we are the best!

— M.J.L.

A T-Shirt Suits Some Just Fine

I also was approached at meetings after my rebuttal (November 1998, "Emperor's New Clothes: II") to the "Emperor's New Clothes" (September 1998, "Ventilations") editorial was published. None was supportive of you, I must say. A basic point you seem to be missing in your October editorial "Medicine — The Next Potemkin Village" is that "clothes do not a man make."

Yes, there is such a thing as dressing appropriately for the occasion. However, like the pompous emperor, you continue to worry about your clothes too much. I would expect you to address more important topics for discussion. Clearly you must have nothing better to do.

You justify your argument with flawed examples. My favorite is that "our founding fathers dressed nice." Most of them were slave owners, Washington included. Why not bring back slavery as well? And wearing suits may be a tradition at the Mayo Clinic, but it is *not* what makes it a highly respected institution.

Patients should be able to tell we are physicians by **the way we care for them, how we answer their questions and work to solve their medical dilemmas** — not because we are in suits (nurse anesthetists also can wear suits). Residency programs should be required to educate residents on the basics of coding and billing. Responses such as "I don't know, call the business office" are ridiculous. They should understand the basics of how they are reimbursed, not only to be able to protect themselves but also to avoid cases of unwillingness to provide services due to incorrect fear of nonpayment (an almost taboo subject, but I have seen this happen more than once).

"1,500 miles from home, severely injured…," I remember a thank you note I received from the father of an injured child. I came directly to the emergency room in a bathing suit and T-shirt. "I'm so thankful you didn't take the time to change clothes, but instead came to take care of my child."

Please find something better to write about. Or next time, call me for a better idea.

Eddy Fraifeld, M.D.
Danville, Virginia

It's A Peasant Place to Visit

Are appeals for anesthesiologists to "dress for success" (October 2000 "Ventilations") analogous to the Czarina's minister ordering the peasants to don pleasing ethnic garb, i.e., a *de facto* Potemkin Village? Perhaps yes, for a workforce that lost its professional status when it gave up personal preanesthetic and postoperative visits without a fight.[1]

Kirk Hogan, M.D.
Madison, Wisconsin

Reference:

1. Brodsky JB. Injury to the anesthesiologist. In: Benumof JL, Saidman LJ, eds. *Anesthesia and Perioperative Complications*. St. Louis, MO: Mosby; 1999:641.

Attired and Loving It

I have always enjoyed the "Ventilations" section in the *ASA NEWSLETTER*, under your authorship/scholarship.

So saddening and maddening is the ruling by the judge in the Diggs case as outlined in "Farewell to Corridor Consultations" (November 2000 "Ventilations"). Our eminent trial lawyers continue the slow strangulation.

Also dear to my heart was the article relating to professional dress code. In 1995, I retired from the practice of anesthesiology, yet I still cringe when reviewing the hallway, patient rooms and the elevator that some of our colleagues frequented. When attired as a professional, we *act* differently and we *project* differently than when we try to be "different" in our dress. Keep up the good work.

McKinley "Red" Phelps, Jr., M.D.
Albuquerque, New Mexico

Where is ASA 'PAC'king My Money?

I have a question about ASA dues. In 2000, the dues were $350, with 15 percent for nondeductible activities. This year, the dues were raised to $450, but 56 percent is not

deductible. During the last election, the Republican Party rightly deplored the practice of trade unions and teachers' associations taking member dues and using them for political activities without their consent. Is that not what ASA is doing?

I understood the ASA Political Action Committee was responsible for raising funds for ASA political activities. These funds are voluntary contributions from ASA members and totaled more than $1.1 million in 2000. As a member, I do not recall being asked if I wanted to make further contributions through an increase in annual dues.

Please explain how I can welcome this move by ASA and still criticize unions such as the Teamsters — and keep a straight face!

Gregory C. Allen, M.D.
Olympia, Washington

We're Just Keeping PACe: Mr. Bonilla Responds

I understand your concern about the reduction in the portion of your deductible dues. In responding to your questions, however, it is necessary to differentiate the issue of lobbying expenses and their deductibility from the issue of political funds used by "trade unions and teachers' associations."

Lobbying expenses are nondeductible monies spent trying to influence legislative outcomes. In the case of ASA, these expenses are supported through ASA's operating budget, which is funded through member dues and association reserves. Last year, as a result of the unusual congressional and regulatory environment in Washington, D.C., ASA was compelled to spend a relatively higher amount on lobbying expenses than in previous years. Specifically, it was necessary to spend funds on lobbying related to the Health Care Financing Administration supervision issue, managed care reform, pain-related legislation, Medicare payment rules and a number of other legislative and regulatory issues directly impacting the practice of anesthesiology and pain management. It is because of this increased level of lobbying activity, not ASA's political activities, that ASA members are unable to deduct 56 percent of their membership dues from their federal income taxes.

Political funds are those monies used to influence election outcomes. ASA does not use its members' dues for political activities. Instead, ASA's political funds are drawn from a separate, segregated account known as ASAPAC. These funds are used specifically to participate in political activities through donations to candidates for the U.S. House of Representatives and the U.S. Senate and to party committees. All ASAPAC nondeductible contributions are raised voluntarily — separate from ASA membership dues — and in complete compliance with federal election law. In fact, federal law strictly prohibits the inclusion of ASA membership dues in the ASAPAC account. ASAPAC is ASA's sole funding source for election activities.

Regarding your question, it is true that some unions and associations use other funds, in addition to their federally regulated PAC accounts, to influence elections. ASA does not support this controversial practice of "soft money," so-called because it is not regulated by federal election law, because it is frequently drawn from the dues paid by union and association members — many of whom oppose the use of their monies for political activities. It is also controversial because it is sometimes used to make extremely large donations to party committees and to air "issue advertisements" — advertisements that appear to be political advertisements but, because of the intentional exclusion of certain words or phrases, cannot be regulated by federal election law. Indeed, virtually every major campaign finance reform proposal introduced in recent years seeks to ban the use of "soft money." It is anticipated that any campaign finance reform proposal ultimately enacted into law will include some limitation or restriction on this type of political funding.

I hope this answers your questions. Please feel free to contact me with any further questions at (202) 289-2222.

Manuel E. Bonilla
Assistant Director of Governmental Affairs (Federal)

FAER Partners With Anesthesiology Societies

Anesthesiology societies make significant contributions to progress in anesthesiology. Although each organization has unique objectives, they all share common values and goals. Central to these common goals are the advancement of anesthesiology and the improvement of patient care. This shared vision unites various anesthesia societies and is furthered by their commitments to education, research and their ongoing partnership with FAER. These societies have sponsored several researchers through FAER. Some of the most recent people and projects are listed below.

American Geriatrics Society

Deborah J. Culley, M.D., Brigham & Women's Hospital, "Aging and Postanesthetic Cognitive Dysfunction"

Hilary P. Grocott, M.D., Duke University, "The Effect of Temperature on Cognitive Impairment and Cerebral Inflammation Following Cardiopulmonary Bypass"

American Society of Critical Care Anesthesiologists

Ryan E. Lesh, M.D., Columbia University College of Physicians & Surgeons, "Rho G-Proteins and Airway Smooth Muscle"

American Society of Regional Anesthesia

Timothy J. Brennan, M.D., Ph.D., University of Iowa, "Central Neuronal Hyperexcitability in Postoperative Pain"

Helene Benveniste, M.D., Ph.D., Duke University, "In vivo Magnetic Resonance Microscopy of Continuous Spinal Anesthesia: Mechanisms of Local Anesthesia Neurotoxicity"

Scott H. Mittman, M.D., Ph.D., Johns Hopkins University, "Selective Expression of Na+ Channel Alpha-subunit Isoforms on Nociceptors"

Thomas S. McDowell, M.D., Ph.D., University of Wisconsin-Madison, "Mechanisms of Analgesia in Primary Nociceptive Neurons"

Society for Ambulatory Anesthesia

Alex Macario, M.D., M.B.A., Stanford University, "Patient Preferences for Postoperative Outcomes"

Society of Cardiovascular Anesthesiologists

Mark A. Gerhardt, M.D., Ph.D., Duke University, "Acute Beta-adrenergic Receptor (BAR) Desensitization During Cardiopulmonary Bypass in Patients with Cardiac Valve Disease"

Paul M. Chetham, M.D., University of Colorado, "Regulation of Ischemia-Reperfusion Pulmonary Edema by Endothelial Cell Phosphatases"

Paul F. Lennon, M.D., Brigham & Women's Hospital, "Mechanisms of Vascular Injury Following Complement Activation"

Steffen E. Meiler, M.D., Massachusetts General Hospital, "The Pickwick Locus in Zebrafish: A Proposed Model of Cardiac Cell Differentiation by Inductive Interaction"

David M. Roth, Ph.D., M.D., University of California-San Diego, "Increased Adenylylcyclase Expression and Cardiac Function"

Charles D. Collard, M.D., Brigham & Women's Hospital, "Reoxygenation of Hypoxic Human Endothelial Cells Activates the Lectin Complement Pathway"

Wei Chao, M.D., Ph.D., Massachusetts General Hospital, "Role of Insulin-like Growth Factor-I in Preventing Cardiomyocyte Apoptosis"

Thomas F. Floyd, M.D., University of Pennsylvania, "Perfusion MRI and Neurologic Injury Associated With Cardiopulmonary Bypass"

Society for Education in Anesthesia

Timothy N. Harwood, M.D., Wake Forest University, "Computer-Assisted Instruction Versus Traditional Lecture: Short- and Long-Term Knowledge Retention"

Society of Neurosurgical Anesthesia and Critical Care

James G. Hecker, Ph.D., M.D., University of California-Davis, "Transient Expression of Intracellular Proteins for Preoperative CNS Protection"

Patricia F. Mack, M.D., Weill Medical College of Cornell University, "The Effect of Intraoperative Hypothermia on the Cerebrospinal Fluid Cytokine Response in Intracranial Aneurysm Surgery"

Additional FAER recipients will be listed in future FAER Reports.