Certificate of Need laws block physician ownership of ASCs
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Future meetings

Clinical Congress
2007 New Orleans, LA, October 7-11
2008 San Francisco, CA, October 12-16
2009 Chicago, IL, October 11-15

Spring Meeting
2007 Las Vegas, NV, April 21-24
2008 To be announced
2009 To be announced

On the cover: General surgeons in Georgia are facing a struggle regarding the restrictions placed on them by Certificate of Need laws (see page 23). Photo courtesy of Punchstock.
NEWS

Edward M. Copeland III
installed as 87th ACS President

Patricia J. Numann receives
2006 Distinguished Service Award

College names six Honorary Fellows in 2006

Citation for Sen. Sirpa L. Asko-Seljavaara, MD
Mary H. McGrath, MD, MPH, FACS

Citation for Prof. Jorge Cervantes
Carlos A. Pellegrini, MD, FACS

Citation for Prof. Clair Nihoul Fékété
Andrew L. Warshaw, MD, FACS

Citation for Prof. Armando Marquez-Reveron
Eduardo A. Souchon, MD, FACS

Citation for Prof Maurice E. Müller
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Citation for Prof. Niall O'Higgins
John E. Connolly, MD, FACS

Surgery Down Under: Report of the 2006 Australia
and New Zealand Travelling Fellow
Robert R. Cima, MD, FACS, FASCRS

Report of the 2006 ACS Traveling Fellowship to Germany
Michael G. Franz, MD, FACS

2008 ACS ANZ Chapter Travelling Fellowship available

A look at the Joint Commission:
Wrong site surgery and the Universal Protocol

Operation Giving Back: Volunteer opportunities available

Senior civilian surgeons sought
for combat trauma care program

NTDB® data points: Horse sense
Richard J. Fantus, MD, FACS, and John Fildes, MD, FACS

Trauma meetings calendar

The American College of Surgeons is dedicated to improving the care of the surgical patient and to safeguarding standards of care in an optimal and ethical practice environment.
NEW: DISCLOSING SURGICAL ERROR: VIGNETTES FOR DISCUSSION: This DVD demonstrates two approaches used by a surgeon to disclose to the patient’s family a major technical error that occurred in the operating room. The vignettes demonstrate effective disclosure techniques, as well as approaches that need improvement. This project was supported by a grant from the Agency for Healthcare Research and Quality and is available at no cost.

SYLLABI SELECT: The content of select ACS Clinical Congress postgraduate courses is available on CD-ROM.

BASIC ULTRASOUND COURSE: This course has been developed on CD-ROM to provide the practicing surgeon and surgical resident with a basic core of education and training in ultrasound imaging as a foundation for specific clinical applications. It replaces the basic course offered at the Clinical Congress and is available for CME credit.

PROFESSIONALISM IN SURGERY: CHALLENGES AND CHOICES: This CD presents 12 case vignettes, each including a scenario followed by multiple-choice questions related to professional responsibilities of the surgeon within the context of the case. The program provides a printable CME certificate upon successful completion.

PERSONAL FINANCIAL PLANNING AND MANAGEMENT for Residents and Young Surgeons: This CD uses an interactive/lecture format to equip residents and young surgeons with the knowledge to manage their personal financial future, including debt management and financial planning for surgical practice. This program provides a printable CME certificate upon successful completion.

PRACTICE MANAGEMENT for Residents and Young Surgeons: This CD uses an interactive/lecture format to equip residents and young surgeons with the knowledge to manage their surgical future, including how to select a practice type and location, the mechanics of setting up or running a private practice, the essentials of an academic practice and career pathways, and surgical coding basics. This program provides a printable CME certificate upon successful completion.

BARIATRIC SURGERY PRIMER: This CD addresses various aspects of bariatric surgery, including the biochemistry and physiology of obesity, appropriate candidates, basic bariatric procedures, comorbidity and outcomes, and surgical training, as well as facilities, managed care, liability issues, and ethics.

ONLINE CME: Courses from the ACS’ Clinical Congresses are available online for surgeons. Each online course features a video introduction, slideshow presentations with synchronized audio of session, printable written transcripts, and printable CME certificate upon successful completion. The courses are accessible at www.acs-resource.org.
From my perspective

As the nation seeks to build a safer, more effective, consumer-based health care system, it will no longer be enough for surgeons and other physicians simply to say that they provide quality care. They will need to support such claims with data.

To ensure that surgeons have the necessary and appropriate information available to them, medical and surgical organizations are being asked to engage in a new spectrum of activities. More specifically, we are moving into an era where surgical practice is expected to be more transparent. What surgeons do, how we do it, and how well we perform is information that payors and patients expect us to provide so that they can make value-based health care decisions. Hence, the College now finds that it must lead and participate in efforts to accumulate, evaluate, and apply outcomes and quality data relevant to surgical practice.

All of the College’s efforts in taking a leadership role to create a more data-driven, quality-based health care system will require increased use of both our financial and our human resources. However, our resources will be well spent because we must make certain that we can continue to develop programs that generate accurate outcomes data and quality measures.

New expectations for the ACS

The Centers for Medicare & Medicaid Services (CMS) and other government agencies are looking to the College and to other medical and surgical organizations to develop accurate and meaningful quality measures. These groups intend to use this information to reward physicians and other providers who apply evidence-based medicine to improve patient care. As a result, the College is participating in a number of activities to generate outcomes data and to establish quality measures as well as guidelines for surgical care.

To these ends, we have been bringing the ACS National Surgical Quality Improvement Program (ACS NSQIP) into the private sector. At this point, the ACS NSQIP, the only validated, risk-adjusted tool for assessing surgical outcomes, is now being applied in more than 100 hospitals. An emerging challenge for the College will be to develop defined modules of ACS NSQIP, so that medical centers can focus their outcome measures on specific types of surgical care.

In addition, we are working with a number of consortia that are vetting quality measures, including the American Medical Association’s Physician Consortium for Performance Improvement, the AQA (formerly the Ambulatory Health Quality Alliance), the National Quality Forum, and the Hospital Quality Alliance. Because these coalitions are looking at quality measures across the spectrum of health care services, we recently formed the Surgical Quality Alliance (SQA). This group is composed of more than 20 surgical specialty societies, all working together to generate metrics of quality care specific to this profession.

We also need to make the most of our National Cancer Data Base and National Trauma Data Bank®. These repositories hold the types of information that will be useful in developing quality indicators and measures, which can then be provided to the various agencies and panels that are studying quality improvement.

““Our resources will be well spent because we must make certain that we can continue to develop programs that generate accurate outcomes data and quality measures.””
Furthermore, we need to adopt a more academic orientation, having more surgeon researchers working within our divisions to evaluate the information we are amassing and to report our findings. To encourage young surgeon participation in these activities, we have launched a clinical scholars program. Presently, two surgical residents are working full-time at the College within the Division of Research and Quality Improvement as part this effort.

Another area that is critical to our viability in a transformed health care system is our clinical trials programs. We will need to evaluate not only treatments for cancer patients, but for individuals experiencing other conditions that involve operative care as well. In order for these clinical trials to succeed, we need the support and active involvement of surgeons, calling upon them to enroll patients in these promising efforts to improve patient care.

**Resources needed**

Needless to say, it takes resources to conduct all these significant projects. Just as importantly, we want to keep our dues at their current level. Hence, we are actively exploring alternative sources of revenue beyond our traditional dues and fee structure to offset these inextricable costs.

Currently only approximately 30 percent of the College’s operations are supported by dues. Other sources of funding include the educational grants and meeting sponsorships that corporations provide, the clinical trials funding we receive from the National Institutes of Health, and our endowment fund earnings.

One way to develop the new financial resources we foresee being necessary to fund our widening sphere of activity would be to seek further corporate and foundation support. However, in this era of increased public scrutiny, we must avoid even the perception of conflicts of interest.

Hence, we will be very carefully exploring all appropriate funding sources, including those companies and other organizations that will benefit from the work we are doing. Because the quality-based, data-driven work we are doing will be of value to employers, insurance carriers, and government agencies seeking to reduce their health care costs, we might consider seeking investments from these entities. As we pursue new revenue sources, we will do so in an uncompromisingly ethical and transparent manner.

In addition, we anticipate that the recently formed American College of Surgeons Foundation will prove to be an effective vehicle for acquiring new funding while nurturing the growing spirit of philanthropy among Fellows. The brainchild of the late Oliver H. Beahrs, MD, FACS, the Foundation provides numerous opportunities for Fellows to give back to our wonderful profession. Because its operating costs are supported by the College, every dollar contributed through the Foundation is applied directly to fund the program or project for which it is accepted. To learn more about the individual giving opportunities available through the Foundation, go to [www.facs.org/acsfoundation/](http://www.facs.org/acsfoundation/).

The College is currently in the unique position of being able to play a leadership role in helping surgeons navigate the new health care delivery system. Please feel free to contact me to confidentially discuss how you can leave a legacy that will enable the College to maintain and strengthen its leadership role in the years ahead.

Thomas R. Russell, MD, FACS

If you have comments or suggestions about this or other issues, please send them to Dr. Russell at fmp@facs.org.
CMS administrator resigns

After more than two years as Administrator of the Centers for Medicare & Medicaid Services (CMS), on September 5, Mark B. McClellan, MD, PhD, announced his plans to vacate that post in early October. Before heading CMS, Dr. McClellan served as Commissioner of the U.S. Food and Drug Administration and, before that, as a member of the White House Council of Economic Advisers and as a senior health policy aide to the President.

At press time, possible successors, at least on an interim basis, included the following: Leslie V. Norwalk, Deputy Administrator of CMS; Herb Kuhn, Director of the agency’s Center for Medicare Management; and Julie Goon, Special Assistant to President Bush and former Director of Medicare outreach at the U.S. Department of Health and Human Services (HHS). The CMS Administrator oversees Medicare, Medicaid, and the federally subsidized State Children’s Health Insurance Program, which together serve approximately 90 million Americans and account for more than $535 billion a year in federal spending. For more information about CMS, go to http://www.cms.hhs.gov/.

Executive order promotes transparency

On August 22, President Bush signed an executive order intended to increase the “transparency” of the nation’s health care system. The order applies to all federal health care programs administered or sponsored by HHS as well as the Department of Defense, Department of Veterans Affairs, and Office of Personnel Management. The order calls on these entities to carry out the following efforts:

• Share with beneficiaries information about payments to health care providers
• Provide information to beneficiaries about the quality of services provided by physicians, hospitals, and other health care providers; the standards for measuring quality are to be developed in collaboration with multistakeholder groups and alliances
• Encourage adoption of health information technology (IT) standards to facilitate the rapid exchange of health information
• Support facilities and providers identified as providing high-quality and efficient care

The Administration anticipates that this information will enable consumers to make informed choices when selecting physicians and hospitals and that they will seek care from proven providers and avoid unnecessary costs. Private and non-federal health programs are being encouraged to collaborate with the federal government on these efforts. The executive order takes effect January 1, 2007. For more information, go to http://www.hhs.gov/news/press/2006pres/20060822.html.

CMS acts to implement order

To help ensure timely implementation of the executive order for increasing transparency in health care, HHS Secretary Mike Leavitt convened a summit of business and health care leaders on August 24 to discuss related issues. Among the concepts discussed at the meeting were plans to construct a network of pilot programs for increasing transparency through the use of health IT and price and quality measures.
In another effort to implement the order, HHS plans to charter six “collaboratives” across the country, which will be charged with finding the best ways to gather price and quality information and report it to consumers. Quality and price information collaboratives will continue to be established until that information is available throughout the nation. Efforts to establish those entities and carry out many other tasks essential to making the health care system more transparent will be coordinated by a steering committee that was set up before the summit took place.

In addition, HHS has launched a Web site on its transparency-related activities, which can be accessed at http://www.hhs.gov/transparency/.

ASC transparency information posted

In related news, CMS announced August 21 that Medicare payment information for 61 procedures performed in ambulatory surgery centers (ASCs) is available on its Web site. The announcement marks the second set of geographically based information about cost and/or quality that CMS has made available; data on Medicare payment for 41 procedures performed in inpatient hospital settings were posted in June. The ASC cost information covers charge and Medicare payment data for facility costs associated with a limited number of services, broken down at the county, state, and national levels. The Administration plans to post additional information on quality and cost pertaining to hospital outpatient and physician services this fall. The new ASC information is accessible at http://www.cms.hhs.gov/HealthCareConInit/03_ASC.asp#TopOfPage.

Specialty hospital report issued

On August 8, CMS released a report and regulatory plan regarding physician ownership of specialty hospitals, as required in the Deficit Reduction Act enacted earlier this year. CMS found that by “focusing on certain types of cases, specialty hospitals have the potential to increase the quality of care and to provide care (including surgical procedures) in a more efficient manner.”

Release of the report effectively ended the moratorium that CMS had imposed on extending Medicare coverage to new specialty hospitals. However, the plan includes new enforcement measures requiring the facilities to disclose to CMS their financial arrangements with physician investors and to inform patients, before providing care, that staff physicians have ownership interests in the hospital. In addition, current anti-kickback laws prohibit specialty hospitals from providing a physician investor with a return that is disproportionately larger than his or her investment.

With respect to emergency care, CMS clarified that the Emergency Medical Treatment and Active Labor Act requires specialty facilities, regardless of whether they have an emergency room, to accept patient transfers if they have the capacity to appropriately care for the patient. For a copy of the report, go to http://www.cms.hhs.gov/apps/media/press/release.asp?Counter=1941.
What surgeons should know about...

Developments in pay for performance

by Julie Lewis, Associate for Quality Programs,
and Shawn Friesen, Government Affairs Associate, Division of Advocacy and Health Policy

Over the course of the past two years, federal policymakers—legislative and regulatory—have devoted considerable effort to developing a Medicare physician reimbursement system that links payment with the quality and efficiency of patient care, also known as value-based purchasing or pay for performance (P4P). As a first step in this transition, immediate attention has been directed at finding ways of measuring processes of care that lead to better patient outcomes.

At both the legislative and regulatory levels, Fellows of the American College of Surgeons and staff of the ACS Division of Advocacy and Health Policy are educating federal policymakers about the organization’s ongoing efforts in surgical quality improvement (QI). We have discussed the potential promise of utilizing quality efforts in a P4P framework as well as the potential challenges associated with many P4P models.

The question surrounding P4P is no longer a question of if, but a question of when. The government, private health insurance companies, and other private organizations are actively developing P4P models. The following questions and answers are designed to help Fellows understand the history, current environment, and possible impact of a P4P system.

What is the history/concept behind value-based purchasing?

Over the past several years, the Institute of Medicine (IOM) released reports, known as the Pathways to Quality Care series, promoting a patient-centered, evidence-based approach to health care. The series extends the work of the first report released in 2001, Crossing the Quality Chasm, which reached the conclusion, “Quality problems are everywhere, affecting many patients. Between the health care we have and the care we could have lies not just a gap, but a chasm.”¹ In response to that conclusion, the IOM developed six aims to improve health care, including safe, effective, patient-centered, timely, efficient, and equitable care.

Other studies and reports followed, supporting the IOM’s claim that a significant opportunity for health care improvement exists. In 2004, Rand Health conducted a study of 13,000 adults in 12 metropolitan areas and reviewed 6,700 medical records. The study, which included 439 indicators for 30 acute and chronic conditions, revealed that adults receive only 55 percent of recommended care.² The Rand report is but one example of the growing body of evidence to support the IOM’s conclusions.

These reports, in conjunction with the skyrocketing costs of health care, brought all stakeholders to the table to explore ways to improve quality and lower costs. It is generally understood that the current payment model often rewards physicians’ ability to control volume rather than quality. The assumption behind value-based purchasing is that providing high-quality health care is less financially draining on the system. For surgery, it is assumed that high-quality care reduces surgical complications, length of stay, and readmission rates, all of which lead to cost savings. For patients, the rewards include receiving evidence-based care, avoiding unnecessary complications, and returning to daily activities and work sooner.

What role does the Centers for Medicare & Medicaid Services (CMS) play in this effort?

In October 2005, CMS announced the launch of the Physician Voluntary Reporting Program (PVRP) to collect performance data on physicians. The PVRP collects clinical data through submission of G-codes by the physicians on claim forms. G-codes are administrative codes that include a “G” followed by four digits and represent actions the physician has (or has not) taken. The PVRP
has undergone many changes within the last year, including a reduction in the number of included performance measures. Today, 16 measures are available for physicians to report to CMS. Five of the measures pertain to surgery: two that are specific to coronary artery bypass grafts and the rest related to antibiotic prophylaxis, deep vein thrombosis prophylaxis, and use of autogenous AV fistula in end-stage renal disease patients.

Unfortunately, the program has been fraught with problems, including specifications of measures that limit participation by many specialties and measures that evaluate a facility or system of care rather than the actions of the individual physician. The College, through the Surgical Quality Alliance (SQA), sent two letters to CMS regarding the PVRP, asking for problems with the program to be addressed and for additional measures to be included, allowing for greater surgical participation. CMS has acknowledged the flaws in the program but has been slow to correct them.

It is important that Fellows are familiar with this program. Depending on congressional action this year, a pay-for-reporting or P4P system could resemble or include the PVRP. Although the College has successfully developed performance measures that more accurately represent evidence-based guidelines and the surgeon’s responsibilities, the foundation of the program is likely to remain, including the collection of clinical data through additional administrative codes.

What are the latest developments in congressional efforts to move toward a P4P system?

On July 25 and 27, the House Energy and Commerce Subcommittee on Health held a two-day hearing, “Medicare Physician Payment: How to Build a Payment System that Provides Quality, Efficient Care for Medicare Beneficiaries.”3 Frank G. Opelka, MD, FACS, testified on behalf of the College and outlined the organization’s QI efforts as well as the challenges surgery faces in developing reliable measures.4 Dr. Opelka also updated subcommittee members on the College’s efforts to develop quality measures for potential use in a P4P program, noting our formation of the SQA and involvement in the perioperative workgroup of the American Medical Association’s (AMA) Physician Consortium for Performance Improvement (PCPI). He also explained that because of the unique nature of surgery, a P4P system designed for hospitals or primary care physicians may be inapplicable to surgery.

The day before the hearing, Rep. Michael Burgess, MD (R-TX), introduced the Medicare Physician Payment Reform and Quality Improvement Act of 2006 (H.R. 5866). H.R. 5866 is the third bill introduced in the past two years that would set parameters for quality reporting. H.R. 5866 would establish a voluntary quality reporting program using measures that are evidence-based and risk-adjusted and developed by physician organizations and specialty societies. The structure of the quality program would be similar to the physician-led approach to P4P envisioned in the Medicare Value-Based Purchasing for Physicians’ Services Act of 2005 (H.R. 3617), which was introduced in July 2005 by Rep. Nancy Johnson (R-CT), Chair of the Ways and Means Health Subcommittee.

In June 2005, Sen. Charles Grassley (R-IA) and Sen. Max Baucus (D-MT), the respective Chair and Ranking Minority Member of the Senate Finance Committee, introduced the Medicare Value Purchasing Act of 2005 (S. 1356). That bill would have set more general parameters and provided greater discretion to the Secretary of Health and Human Services and, ultimately, CMS in measure development. Although the bills differ, both envision some form of vetting process that includes physician organizations and specialty societies, such as the College and the AMA PCPI.

What are the implications for Medicare physician payment?

On August 8, CMS announced that the formula used to calculate annual updates to the Medicare physician fee schedule conversion factor, known as the sustainable growth rate (SGR), will produce a cut of 5.1 percent in Medicare payments for physician services in 2007. Combined with additional regulatory changes, this reduction would actually result in cuts of 10 percent or more for some surgical procedures. In May, the Medicare trustees released their projections that Medicare physician payments will be reduced
4.7 percent to 5.1 percent annually through 2015. These decreases result from the design of the SGR, which requires that whenever a year’s spending on physician services exceeds the designated spending target, the money must be recouped in future years. Because of the cumulative nature of the SGR, the cost of repealing the SGR is estimated at $218 billion over 10 years.

Because of the belief that improved patient outcomes will ultimately reduce costs, any effort to reform the Medicare physician payment system will almost certainly include some form of P4P. All three bills discussed earlier would attach an incentive or reward to participation in a quality measurement program. Both H.R. 3617 and S. 1356 would base Medicare reimbursement levels on participation in a quality reporting program and ultimately on patient outcomes; and although H.R. 5866 would not directly link Medicare payments to quality reporting, it would allow participating physicians to “balance bill” high-income Medicare patients. In addition, along with their quality reporting programs, both H.R. 3617 and H.R. 5866 would repeal the SGR.

The link between Medicare payment rates and P4P was particularly evident in last year’s discussions regarding the Deficit Reduction Act (DRA), which retroactively rescinded the 4.4 percent payment cut that went into effect January 1. In December 2005, during DRA negotiations with House and Senate leaders at the House Ways and Means and Senate Finance Committees, the AMA, in exchange for the guarantee of stopping the scheduled 4.4 percent cut in Medicare payments in 2006, agreed to develop 140 measures covering 34 clinical subjects by the end of 2006. The AMA also agreed to ensure that physicians would report on three to five quality measures in 2007.

The development of the 140 performance measures is on schedule for the end of 2006, and the College has been actively engaged in conversations with policymakers about surgery’s progress in measure development and the related need to avert the 5.1 percent cut. Whether physicians will ultimately be required to report on three to five measures come January 1 remains uncertain.

In addition, the College has also been actively engaged in promoting Medicare payment reform that could facilitate the move toward P4P in a manner that recognizes the unique nature of surgery and other physician services. Dr. Opelka outlined this proposal, developed by the College and the American Osteopathic Association, in his testimony on July 27. The proposal would eliminate the universal volume target of the SGR and replace it with the service category growth rate, with separate volume targets based on the type of service. Not only would this proposal recognize that some services, such as major procedures, are not experiencing the same volume growth as other services, but it also would provide a framework for initiating a basic P4P system with measures that are applicable to the specific type of service and have proven to be effective. For example, in the case of major procedures, measures that could apply to most situations and may improve patient outcomes include preoperative smoking cessation, marking the surgical site, a surgical timeout, and appropriate postoperative follow-up.

At press time, Congress had not yet taken action on Medicare payment and quality reporting. College leaders and staff had been in regular contact with members of Congress about the need to stop the cut, the need to provide an increase in Medicare payments, and possible P4P models and other payment reforms.

What could a P4P structure look like in the coming years?

In discussions about the model for Medicare physician payment reforms, the Hospital Quality Initiative (HQI) led by CMS has received the most consideration. In 2003, as a part of the Medicare Modernization Act (MMA), hospital organizations—in exchange for full inflationary payment increases in 2005, 2006, and 2007—agreed to report on 10 basic measures. Those hospitals not reporting the data would not receive the full payment update and instead would have their inflationary payment increase reduced by 0.4 percent in those years.

Like the HQI, physician P4P would initially provide increased payments to physicians who follow basic protocols; ultimately, though,
policymakers want to base payment levels on outcomes. To a great extent, both Representative Johnson and Senators Grassley and Baucus envision modified versions of the HQI for physician P4P in their bills. Through different approaches, both would set payment levels for physicians who report on basic quality measures and ultimately move toward basing payment on physicians’ patient outcomes. Physicians who do not report the quality measures or meet the quality threshold in future years would be paid at lower levels. Because outcome measurement, if wrongly structured, could undermine care provided to higher-risk patients, the College has stressed the importance of including appropriate risk adjustments. Related provisions have been included in each of the bills mentioned earlier.

Critical to a meaningful P4P system that produces better patient outcomes is the compilation of clinical data that cannot be captured in claims. To this end, the College has encouraged policymakers to not create incentives that would discourage surgeons from participating in data-collection instruments, such as the ACS National Surgical Quality Improvement Program (NSQIP). One option under discussion is allowing physicians to participate in clinical databases in lieu of reporting on basic quality measures.

What performance measures might surgeons have to report on?

At press time, Congress had yet to define the structure of a pay-for-reporting or P4P system for 2007. Measures could be very general “structural” measures, including the use of information technology, participation in clinical databases, or practice in an accredited facility. However, Congress could implement a program similar to the PVRP discussed previously, in which performance measures are submitted through the claims processing system. This system would likely include process (not outcome) measures for surgery.

In an effort to ensure that appropriate surgical measures are used, the College serves as the lead organization for the development of perioperative care performance measures in cooperation with the AMA’s PCPI. The perioperative care workgroup, co-chaired by R. Scott Jones, MD, FACS, Director of the ACS Division of Research and Optimal Care, developed a measure set that was scheduled for final PCPI approval in October. The following measures aimed at reduction of surgical infections and venous thromboembolism are included in the set:

- The surgeon ordered prophylactic antibiotics to be delivered within one hour before incision
- The anesthesiologist administered prophylactic antibiotics within one hour before incision
- The surgeon ordered appropriate cefazolin for antibiotic prophylaxis
- The surgeon ordered prophylactic antibiotics to be discontinued within 24 hours of surgery end-time (non-cardiac patients)
- The surgeon ordered prophylactic antibiotics to be discontinued within 48 hours of surgery end-time (cardiac patients)
- The surgeon ordered appropriate venous thromboembolism prophylaxis

Following approval by the PCPI, the measure set will be submitted to various organizations for additional vetting and endorsement.

What else is the College doing regarding P4P?

Over the past year, the College has dramatically increased its own efforts and its focus on efforts by private and government payors to implement performance measurement and value-based purchasing programs. The College continues to manage the SQA, chaired by Dr. Opelka, which includes 20 surgery-related specialty societies that organize efforts around quality improvement initiatives. To align the activities and increase collaboration among surgical specialties, the SQA coordinates letters to private and government entities on behalf of the surgical community. The SQA also has provided opportunities for specialties to speak with federal and private health care leaders to educate them about current surgical efforts to improve quality and lower costs and continued on page 61
A growing crisis in patient access to emergency care:

A different interpretation and alternative solutions

by Donald D. Trunkey, MD, FACS, Portland, OR
The Division of Advocacy and Health Policy of the American College of Surgeons has recently come out with a very timely white paper entitled, “A Growing Crisis in Patient Access to Emergency Surgical Care,” which addresses a true crisis in patient care. The paper recommends some short-term solutions and ends with long-term solutions for dealing with the crisis. However, it is my contention that short-term and long-term solutions tweaking the current system will not work. In my opinion, because of its many problems, our health care system is dysfunctional and this, in turn, leads to dysfunctional care.

Measures of an effective system

In February 2000, former President Bill Clinton said, “We do have the best health care system in the world,” a sentiment echoed by President George W. Bush in June 2003: “We live in a great country that has got the best health care system in the world, and we need to keep it that way.” Unfortunately, the evidence does not support the statements of these two Presidents. One barometer of measuring effectiveness of a health care system is the average life span and the per capita cost. In the U.S., we have an average life span of 77.8 years at a cost per capita per year of $4,887. Compare these figures with those in Spain, where the life span is 79.6 years at a cost of $1,100; Canada, where the average life span is 80.2 years at a cost of $2,792; and Japan, where they live an average of four years longer than we do in the U.S. and at a cost of $2,003 per year.

Another measure of health care system effectiveness is the infant mortality rate. In the U.S., the infant mortality rate is 6.9 deaths per 1,000 live births. In Denmark, it is 5.3; France, 4.6; Sweden, 3.4; and Japan, 3.2. In fact, in the World Health Organization (WHO) Global Ranking of Healthcare, the U.S. is number 29, between Costa Rica and Slovenia, which are both developing countries.

Access is a major problem in the current system, with 44 million having no insurance and another 105 million underinsured. The costs of coverage are 50 percent greater in the U.S. than in any other Western society—$1.7 trillion— which is 16 percent of our gross domestic product (GDP). In addition, pharmaceutical costs are out of control. There has been a 1,250 percent increase in these costs in the last 25 years. That is eight times more than defense and nine times more than Veterans Affairs (VA) services and benefits. Furthermore, there are problems with malpractice insurance costs. The U.S. is the only Western society that has a contingency fee and where punitive damages go to the plaintiff or the attorneys; in most instances, punitive damages were designed to fix the process or system that is at fault. The current U.S. health care system could be described as the best mediocre health care in the world. Access to U.S. health care is a lottery, and what used to be a not-for-profit system has become a for-profit system.

Origins of the crisis: Managed care

To better understand the crisis in health care, we only have to go back a few years. When I was growing up, there were several hospitals in eastern Washington but no health maintenance organizations (HMOs).

The first HMO was started just before World War II. Edgar J. Kaiser founded the system to take care of shipyard workers, and it was a relatively effective system. It is noteworthy that, as I personally observed, organized medicine, including administrators and physicians, shunned Kaiser and perceived it as a socialized form of medicine. The next advance in managed care is attributed to Alain Enthoven, a whiz kid who served under Robert McNamara during the early parts of the Viet Nam War. It was Enthoven who came up with the “body count” methodology for measuring the progress of the war and whether the U.S. was successful. To quote a three-star general, this concept was “the height of arrogance.” After Viet Nam, Enthoven went to Stanford University, where he developed his Consumer Choice Health Plan alternative to combat the high cost of health care (10.5% of our GDP) at that time. This, in turn, led to the development of two fairly large HMOs, U.S. Healthcare and Humana. These were both very unpopular with physicians because fees were negotiated or salaries were provided.

In contrast, the chief executive officers of these firms did extremely well, and at least one made
it into the *Forbes* list of 400 richest Americans. The concept of managed care also received an additional stimulus after Bill Clinton was elected President in 1990. He charged Hillary Clinton with developing a strategy for a nationalized health care system. The Jackson Hole Conference was held in 1992, but its failure to include the very providers of health care in this plan was not met with enthusiasm. The conference did lead, however, to increases in HMOs, both government and for-profit systems.

For-profit systems soon outstripped government plans. Most of the government plans have been failures, including those in Tennessee and Oregon. According to an article in the *Wall Street Journal* in December 2004, TennCare, a government-managed care system, cost the State of Tennessee one-third of its entire budget. It did cover 1.3 million of the state’s 5.8 million people, but the article characterized it as beset by 10 years of mismanagement and lawsuits. The Oregon plan—championed by John Kitzhauber, MD, an emergency physician who at the time was in the state senate—was very comprehensive, but the legislature removed the portion that would require small businesses to contribute to employee health insurance under the modified Medicaid system. It was also very innovative in that there was public input, particularly on prioritizing the various diagnostic treatment pairs; however, the legislature was not required to cover all diagnoses and/or treatments. The inception of HMOs was intended to control costs; however, corrupt management has become common.

Private HMOs took off, and the largest of these is the Hospital Corporation of American (HCA), which now consists of approximately 200 hospitals. Under this for-profit paradigm, there are several tiers of fees for various disease processes. For example, at the Oklahoma Medical Center, a craniotomy for an uninsured patient is $85,400. This is essentially a “retail” price. The same procedure, when billed to Blue Cross Blue Shield, is $14,600, and the same procedure under Medicare is $13,900. In Orlando, FL, the Seventh Day Adventist Hospital charges an uninsured patient $35,200 for an appendectomy, whereas under commercial insurance, it’s $7,000, and for Medicare, $6,200. From the patient’s perspective, it’s difficult to understand these various fees and how they are determined.

An illustrative example is from Presbyterian/St. Luke’s Medical Center, a HCA hospital in Denver, CO. A woman gives birth to a baby girl who has defective bronchial tubes. This requires the baby to stay in the hospital for several weeks, after which time, the patient is discharged, and the father receives a bill for $213,802. This charge is six times the father’s salary. He writes back that he cannot pay this bill, and the hospital responds by adjusting the bill downward by $85,520. This leaves a settlement amount of $128,281, on which the hospital demands payment in 30 days. If the baby’s father cannot pay the adjusted amount, he is offered a credit card. The entire amount is charged to the credit card, and he has 40 years to pay at 17 percent interest. The total amount paid would be $777,153, with annual payments of $21,833, which is two thirds of the father’s annual salary.

HCA’s record is very blemished. In 2003, the company made $21.8 billion in revenue. HCA defrauded Medicare, Medicaid, and Tricare out of $63 million and overcharged the uninsured in 2002 by $2.1 billion. The company has paid $840 million in criminal fines, civil restitution, and penalties of $250 million were paid to Medicare to settle overbilling. Altogether, HCA has paid more than $1.72 billion for fraudulent practices. The second largest HMO is Tenet, since buying National Medical Enterprises. Tenet physicians and administrators have allegedly overbilled patients, insurers, and Medicare. The company has also charged for services and treatment never provided; signed false insurance claims; paid $40 million to doctors in kickbacks; and paid $379 million in criminal fines, civil damages, and penalties.

Managed care is not limited to hospitals. There are very large physician practice groups that have also set up organizations to provide outpatient care. One of the largest is MedPartners, a southern California practice group that allegedly made $6 billion per year and in 1995 went public. PhyCor, the second largest practice management group, proposed a merger with MedPartners. When the books were examined, there was a mythical profit, and, in fact, the company had
lost more than $1.2 billion. MedPartners went into bankruptcy, and the company was bought at a significant discount by KPC Medical Management. For the next few months, KPC offered insurance to multiple people, and it, in turn, went bankrupt; however, the owner, Kali P. Chaudhuri, MD, did not suffer personal financial losses.

**Call centers**

There are other scams that can adversely affect our current health care system. One such scam is the so-called call center.2 Ostensibly, the purpose of such call centers is to triage calls and to direct the patient to the appropriate clinics or possibly even the emergency room. Unfortunately, these call centers are also used to delay any visits in the expectation that the patient may not need it at a later date. It is particularly unfortunate that the individuals who are doing triage may have limited training and may not appreciate the emergent nature of some of these calls.

To better understand how call centers work, consider the example of a 74-year-old woman in San Leandro, CA. She’s been a patient at a given HMO for 50 years. She awakens one morning with pain in her abdomen but primarily in her back. She calls her physician’s office at 8:15 am, and this call is forwarded to a call center. The person at the call center says that her physician cannot see her today because he is not in. The patient’s daughter comes over, and they make a second call, again trying to get access to the HMO. Subsequently, a third and fourth call are also made, both with an appeal to somehow be seen by a physician. After the fifth call, shortly after noon, an appointment is scheduled for her to see her physician at 4:30 pm. He sees her and makes an immediate diagnosis of an abdominal aortic aneurysm and sends her to the hospital, whereupon the aorta ruptures. She is rushed for emergency surgery and receives 20 units of blood. Postoperatively, she never regains consciousness and dies.

There are offshore call centers that handle physicians’ appointments and even diagnostic capabilities, such as X rays. Many of these centers go under the rubric of “Night Hawk” and may be located in the U.S. or abroad. These diagnostic radiology call centers primarily read X rays during our nighttime hours. These X rays are digitized, sent to these various centers, and a report is returned, usually within approximately 30 minutes. The following morning when the U.S. radiologists come back to the hospital, though a therapeutic decision has been made, they do “over reads” of these X rays and charge for these. In many instances, the surgeon or specialist surgeon has already read his or her own X rays at night or relied on the report from the “Night Hawk” radiologist. This is unethical.

**Bureaucracy**

With the development and expansion of HMOs, the medical bureaucracy—including Current Procedural Terminology (CPT) codes—has also soared.2 There are more than 7,800 of these codes that allow physicians and hospitals to bill patients through their insurance...
companies. These CPT codes are developed by the American Medical Association (AMA), which has a 16-member editorial panel, including 11 physicians, that applies five-digit numbers to various diagnoses and procedures. These codes are used throughout the U.S., and royalties are charged for these codes. This brings in approximately $70 million to the AMA.²

There are geographic differences in what these procedures are worth, and there is manipulation of the codes by applying modifiers dealing with complexity and time spent. This leads to a “reimbursement jungle.” There is an American Academy of Professional Coders, which consists of more than 35,000 members.² Their job is to maximize billing or, if they work for the government, to make sure that the codes are legitimate. In Seattle, there are more than 755 health insurance products. This plethora of health insurance products is due to various coders from different organizations trying to maximize the billing. It is no wonder that the patients cannot understand the concept of retail prices, insurance prices, and Medicare prices. Similarly, there are length-of-stay guidelines developed by Milliman, which are used in utilization review and reimbursement of hospitals by insurance companies. Some of these guidelines are arbitrary and essentially relieve the physician or health care extender (NP, PA) of using judgment.

The cost of the medical bureaucracy is staggering. In the U.S., it’s $1,059 per capita per year. In contrast, in Canada, it’s $307. In the U.S. health care system, administrative workers account for 27.3 percent of total health care costs. In Canada, this figure is 3.1 percent. If the U.S. had a single payor system, this would save $375 billion a year in health care costs, according to a 2003 article in the New England Journal of Medicine.⁴ The authors of this study estimated that there are 1 million workers (specifically, middlemen) who are doing unneeded work.

Pharmaceuticals

Physicians and pharmaceutical companies also contribute to unneeded charges. A particularly noteworthy example is what happened with TAP, a partnership of Abbott Laboratories in the U.S. and Takeda Laboratories in Japan. This partner-

ship primarily sells Lupron, a medicine for prostate cancer that essentially does an endocrine orchietomy. The other drug marketed by this firm is Prevacid, a drug for acid reflux. Starting in the mid-1990s, TAP provided free samples of Lupron to urologists. It was heavily marketed, and 14,316 urologists prescribed Lupron in 1997. It is noteworthy that 482 of these urologists received 25 percent of the entire Medicare payments ($126 million) for Lupron. Overall, TAP made $2.5 billion. In many instances, the free samples were sold by the physicians to the patients and they also billed Medicare. TAP provided a 2 percent management fee to high-volume urology practices and a $25,000 unrestricted educational grant. For urologists who were particularly frequent prescribers of Lupron, lavish entertainment and trips were provided by TAP.

But TAP is not the only pharmaceutical firm involved in fraud cases. Under similar circumstances, Pfizer was fined $49 million for its drug, Lipitor. Glaxo-Smith-Kline was fined $88 million for fraud in marketing Paxil, an antidepressant. Bayer paid $275 million in fines for its drug Adol, a drug for high blood pressure. Astra Zeneca was fined $355 million for misuse of Zoladex, a drug similar to Lupron.²

Workforce shortages

There are numerous other problems adversely affecting health care delivery. In 2002, Cooper published an article on physician supply.⁵ He predicted that there would be a shortage of physicians that would not be relieved by physician extenders, including nurse practitioners and physicians’ assistants. A follow-up paper in 2004 stated that by 2020, the deficit will be as great as 200,000 physicians, primarily specialists, particularly in the surgical fields but also gastroenterology and cardiology.⁶ This shortage will have a profound negative effect in several areas—including rural surgery and care for the elderly—and, as noted in the ACS’ white paper mentioned previously in this article, is already a major problem in trauma and emergency surgery.

The shortage of trauma surgeons is now exacerbated and will be worse in 2010 when the
Baby Boomers begin to reach age 65. The average age of a general surgeon in the U.S. is 52 years. There has been a recent decline in applicants to general surgery programs, and this is further influenced by gender. (See Figures 1 and 2, this page). Graduating medical students are at least 50 percent female, but very few apply to general surgery (7%, or a little more than 500 applicants). Based on my own observations over the past 20 years, part of this disinterest in general surgery seems to be the hours required, part of it is lifestyle, and part of it is a desire to combine a professional career with a traditional role as a parent, and it also reflects that the general surgery programs have not provided a structure whereby physicians can do both.

In addition, general surgery continues to become more fragmented and specialized, but the general surgery specialists have one commonality: they don’t want to take trauma call. In a 1990 study, Esposito polled all surgeons in Washington state about treating trauma patients (response rate of 50%). The top four factors influencing the decision not to treat trauma patients were time commitment, compensation, dissimilar reimbursement, and a perceived increased medical/legal risk.

In the ACS’ white paper, similar findings were found. The report indicates that surgeons are taking call five to 10 times a month; they may do this at two or more hospitals, and the hospital bylaws, which

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**Figure 1**

![Graph showing positions matched in General Surgery by US Seniors.](http://www.nrmp.org/matchoutcomes.pdf)


**Figure 2**

![Graph showing students' first choice of specialty.](http://www.nrmp.org/matchoutcomes.pdf)

typically require surgeons to participate in on-call panels, may allow older surgeons to opt out. There was a perception by surgeons that they were being sued by patients who were first seen in the emergency department.

A problem that is not mentioned in the white paper is that specialty surgeons and general surgeons are increasingly asking for exorbitant on-call pay. This monetary request ranges anywhere from $1,000 a night to more than $7,000 in some of the subspecialties, such as neurosurgery.

A related problem is the recruitment of medical students into general surgery and some surgical specialties, particularly neurosurgery (see Table 1, this page). The data from the National Residency Matching Program show the number of positions offered by general surgery and neurosurgery are flat or slightly decreased, whereas the number of positions in orthopaedics is slightly increased. Also note that general surgery and, to a lesser extent, neurosurgery in the U.S. have depended on international medical graduates to fill their available positions.

A major problem by 2010 will be the 30 percent increase in the elderly population. It used to be that the peak in death rate from injury was in the age range of 16 to 24 years. We are now seeing a bimodal distribution with an increased death rate in the elderly. They are more active, and unfortunately, the mortality rate for an injury severity score >15 is 3.5 times higher than the rate for their younger counterparts. They spend more time in the intensive care unit and do not have a good return to independent living status or quality of life after trauma episodes.

The lack of general surgeons also negatively affects the Department of Defense (DOD) and its need for surgeons. Approximately 20 percent of DOD surgeons are active-duty surgeons; 80 percent must come from the reserve. Unfortunately, young surgeons do not tend to join the reserves. Studies conducted by the U.S. General Accounting Office after Desert Storm showed that surgeons were not being trained properly for trauma, particularly the active duty surgeons; however, the DOD has recently improved this over the last four years.9-11

Another negative impact on trauma care is that many trauma centers are closing or downgrading their level of care. Since 2003, “dumping” has become an increasing problem for level I and II trauma centers. This phenomenon is characterized by community hospitals calling the trauma centers and speaking to an emergency physician or surgeon because they have a trauma case that they cannot provide care for—either because of lack of personnel or the patient’s case is too complex. Once many of these patients reach the trauma center, they are observed and then discharged the following morning.

Table 1: Positions offered in various specialties and percentage filled

<table>
<thead>
<tr>
<th>Specialty</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Offered</td>
<td>% filled, U.S.</td>
<td>% total</td>
</tr>
<tr>
<td>General surgery</td>
<td>1,039</td>
<td>75.3</td>
<td>94.4</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>39</td>
<td>74.4</td>
<td>82.1</td>
</tr>
<tr>
<td>Orthopaedics</td>
<td>569</td>
<td>93.0</td>
<td>99.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specialty</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Offered</td>
<td>% filled, U.S.</td>
</tr>
<tr>
<td>General surgery</td>
<td>1,051</td>
<td>80.4</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>19</td>
<td>84.7</td>
</tr>
<tr>
<td>Orthopaedics</td>
<td>610</td>
<td>91.0</td>
</tr>
</tbody>
</table>
Another major problem in trauma care is that rehabilitation beds are not available after a severe injury. The General Accounting Office did a study showing that only one in eight patients with traumatic brain injury receive appropriate rehabilitation following their acute care. Rehabilitation is particularly a problem in patients who have no insurance. I treated a male patient approximately eight months ago who was 36 years of age, married, and had four sons. He started his own construction company but, unfortunately, he did not have enough money to buy health insurance, which would have cost $6,000 a year for a family of six. He fell while constructing a building and became paralyzed. As a result of the accident, his acute care was provided by my hospital free of charge, but we could not find a rehabilitation facility that would take him. We taught his wife the bare necessities of care for a paraplegic, but obviously he is at high risk for complications, and with his wife doing most of the care at home, she will be unable to work and provide for the family. With so many stories like this, it is not surprising that the WHO ranks U.S. health care in the range of developing countries.

What can be done?

The solutions necessary for this dysfunctional health care system will require a major paradigm shift. I do not believe that tweaking the current system or maintaining the status quo will be acceptable. The current system is an ad-mixture of employer/employee (patient), union-negotiated health care. There is government-provided health care, including the military, VA, and public health. There is government-contracted health care, which is made up of Medicare, Medicaid, and Tricare. And there are a number of patients who are not insured or underinsured. This system is aggravated by a free-enterprise pharmacy industry and a medical litigation system that does not fix what’s wrong with health care and that primarily benefits trial lawyers.

There is no question that the current system is already undergoing some changes and/or tweaking based on the global economy. In Thomas L. Friedman’s book *The World is Flat*, he points out that the U.S. is already outsourcing pharmaceuticals, and we even outsource some surgical procedures. We have been importing health care professionals for many years—

| Table 2: Comparison of costs of procedures in the U.S., India, Thailand, and Singapore |
|-----------------------------------------------|---------------------------------|-----------|-----------|-----------|
| | U.S. insurers’ cost | U.S. retail | India | Thailand | Singapore |
| Angioplasty | $25,704–37,128 | $57,262–82,111 | $11,000 | $13,000 | $13,000 |
| Gastric bypass | 27,717–40,035 | 7,988–69,316 | 11,000 | 15,000 | 15,000 |
| Heart bypass | 54,741–79,071 | 122,424–176,835 | 10,000 | 12,000 | 20,000 |
| Heart valve | 71,401–103,136 | 159,326–230,138 | 9,500 | 10,500 | 13,000 |
| Hip replacement | 18,241–26,407 | 43,780–63,238 | 9,000 | 12,000 | 12,000 |
| Knee replacement | 17,627–25,467 | 40,640–58,702 | 8,500 | 10,000 | 13,000 |
| Hysterectomy | 9,591–13,854 | 20,416–29,489 | 2,900 | 4,500 | ----- |
| Spinal fusion | 25,302–36,547 | 62,778–90,699 | 5,500 | 7,000 | 9,000 |
primarily nurses, but more recently physicians and surgeons. In order to fill general surgery slots, 18 percent to 23 percent are being filled by foreign medical graduates. I’ve already mentioned in this article that the U.S. outsources diagnostic radiology—the country also outsources medical bureaucracy, and medical call centers serving the U.S. are common in India. It is ironic that one of the top three reasons for U.S. manufacturers to outsource to Asia and Mexico is the high cost of U.S. health care.\textsuperscript{13}

Outsourcing surgical procedures is already a reality, and patients are traveling to India, Thailand, and Singapore for major surgical procedures.\textsuperscript{14} As shown in Table 2 on page 19, the cost to hospitals for each operation, based on U.S. insurers’ cost and U.S. retail cost, are compared with the same costs in India, Thailand, and Singapore. It should be noted that the costs in these countries as shown in the table include airfare.\textsuperscript{14}

There are many disadvantages to a “world is flat” model. This includes the brain drain from these developing countries. There is also a major problem in assessing knowledge and professional competence. For example, India has 205 medical schools, of which 20 are private.\textsuperscript{15} Medical degrees from these private schools can sometimes be bought. A recent study in the \textit{British Medical Journal} showed that the state-run medical schools in India have problems with infrastructure, such as inadequate faculty and facilities, in almost 50 percent of these state-run schools.\textsuperscript{16}

Another problem exists in regards to importing surgeons from these countries. The only test they must pass is the U.S. Licensing Medical Examination. This exam does not include knowledge or psychomotor tests related directly to surgery. Knowledge tests could be developed that would be similar to the ones that the American Board of Surgery administers, and with virtual simulators, psychomotor skills could be tested. These virtual simulators, however, are quite costly. Probably the biggest disadvantage of the “world is flat” model is that it is a short-term solution. It does not ensure a steady output of physicians and/or specialists in the U.S.

A vexing issue is the one of gender. At the present time, female medical students mostly have not been attracted to the field of surgery. This is potentially the biggest pool of talented individuals who could solve the shortage of general surgeons. In order to attract them into the specialty, we will have to solve lifestyle issues such as protected time, both during training and during their practice. Emergency medicine has increasingly become an attractive career choice for women because they can do shift work. The concept of the emergency general surgeon who would do trauma and emergency surgery is most likely going to be accomplished by full-time surgeons who do shift work in acute care hospitals. Based on a 40-hour workweek, full-time surgeons work approximately 160 hours a month. To assign 12 or 13 shifts of 12 hours each would come close to this, which means that within a two-week period, a surgeon could fulfill his or her workload and have the next two weeks off. (There are obviously many variations of this model.) This is precisely what occurs in emergency medicine. Hospitals could participate by providing 24-hour child care for physicians and nurses. There are probably few perks that would be more attractive from the standpoint of maintaining a professional career and a traditional role as a parent.

\textbf{Health care as a public good}

I have noted elsewhere that most economists argue that medicine should be considered a public good similar to military, firefighters, and police.\textsuperscript{17} This public good could be provided by government-directed care as opposed to contracted care. The access problem would certainly be solved. The disadvantages of a public good model is it does not address who pays, costs may be excessive, and there would be a loss of incentives. Detractors of the public good model also point to the European experience as an example of “bad” care, largely due to the wait time for elective surgery cases. This is particularly true in England and Scandinavian countries. Detractors also complain about the lack of specialty surgeons in just a few centers. In most public good systems, there is still a double standard, as some individuals will always pay more through insurance or through their own means to have “better” care, usually characterized by upscale private hospitals and clinics.
**Solutions**

In the recent book *Critical Condition*, Bartlett and Steele suggested 13 solutions for the dysfunctional U.S. health care system. They argue strongly for universal health care, which I would strongly support. They also argue for a single payor system. This approach may or may not be the best method. Countries such as Germany have a multiple payor system that seems to work quite well and may provide competition by insurers.

The authors also argue for a commission, which they arbitrarily name the U.S. Council on Healthcare, to oversee this change. They suggest that this be modeled after the Federal Reserve System and be a quasigovernment council. My impression is that the Federal Reserve is a very ponderous bureaucracy and not one to emulate. Every patient in this new system would have a defined level of basic care; there would be flexible copays and catastrophic care. All of these items I would certainly support. The patient would have freedom of choice, both for physicians and hospitals, and this is also easily supportable. There would be a disease prevention component to the solutions to the crisis, and this is sorely needed. Japan’s very strong disease prevention emphasis most likely contributes to the increased longevity of its citizens. Bartlett and Steele also argue that there should be a curtailment of out-of-control drug costs. There should be patient education and oversight of insurers. The final two solutions would be to reverse overdiagnosis/overtreatment and to arbitrate malpractice cases.

A simpler set of solutions has been proposed by the Progressive Policy Institute. This group argues for universal health care equal to what the members of Congress have, which would also require a shared responsibility for the cost of coverage. Physicians and hospitals would be paid according to their performance, and information technology would be deployed for better care and lower cost. Health courts would be created for reliable justice in malpractice cases, and a national care center would be created to speed medical breakthroughs.

Another vexing solution will be payment of the system. I believe a national commission on health care should be appointed by Congress. The commission’s first charge would be to determine who pays how much now. This would include government, such as VA, Tri-Care, Medicare, and Medicaid. It would also include commercial insurance that employers pay for and Workers’ Compensation. The commission should then determine if the amount paid by the various payors is fair. If not, it should assign a percentage or per capita amount to the various groups.

I would propose that the remainder of the costs would be paid by a value-added tax on essentially all goods. That means that all potential users of the health care system would be responsible for a share of medical costs.

I personally would favor a multiple payor system. The health care commission would also have to address such issues as responsibility of providing care, as in the example of retirees: Is continued medical care and/or insurance after retiring the responsibility of the firm they worked for or the government, or is it a shared responsibility? Another issue that may have to be addressed if managed care organizations continue in the U.S. is the creation of a watchdog organization with teeth that could deal with corrupt practices. Corrupt management should not be tolerated. If the U.S. had universal health care, it is projected that one-fourth of the current budget would be eliminated just simply by eliminating the bureaucracy of the current system.

I would favor arbitration or medical courts to solve the malpractice issue. One of the more vexing issues is how to solve pharmaceutical costs. There are lots of problems with the current system. Congress has contributed to these problems, such as by forbidding Medicare to be able to negotiate with pharmaceutical companies in order to get discounted drugs on a mass purchase basis.

Another practice that has to be discouraged is the relationship of pharmaceutical companies to physicians. “Detail” men and women should not be able to give free drugs and/or free trips to physicians or pay for educational expenses.

**Summary**

In summary, the current U.S. health care system is broken. It is a high-cost, mediocre system. Access is a major problem. Pharmaceutical costs are out of control. Malpractice insurance costs
are egregious, and there is no question that solutions will be difficult. In my opinion, leadership will not come from the Executive Branch of our government, and Congress is so partisan at the present time that the elected officials are simply impotent in dealing with health care and other problems. Until recently, organized medicine has not provided any solutions either. I believe the American College of Surgeons has been taking a leadership role. However, long-term solutions will require more than tweaking the current dysfunctional system.

References


Dr. Trunkey is professor of surgery, Oregon Health & Science University School of Medicine, Portland, OR.
Surgical care in this country has made tremendous strides over the past couple of decades. New technology and improvements in surgical technique have revolutionized the provision of this care, including a shift in site of service for some procedures from hospitals to ambulatory surgery centers (ASCs). Millions of patients benefit from this change, receiving high-quality, cost-effective, and safe surgical care for a variety of surgical procedures.

In some states, certificate of need (CON) laws can be highly restrictive when it comes to the construction of ASCs, making it more difficult for patients to receive care in these settings. One state in particular, Georgia, not only tightly controls the development of health care facilities and services through the CON process, it also controls which surgical specialties may apply for exemptions to the CON process for ASCs. In fact, under the state’s CON program, single specialty ASCs are exempt from the CON requirements and do not have to obtain a CON to build and operate their facility. Rather, they must apply to the Department of Community Health (DCH) for a letter of non-reviewability (per regulations issued in 1998). Because general surgery is defined as a “multispecialty” rather than a “single specialty,” general surgeons are ineligible for the exemption.

In other words, the state of Georgia, contrary to every other state in the nation, considers general surgeons to be nonspecialists.
Why Georgia’s CON rule is a problem

Because of the current definition of general surgery in the state’s CON regulations, general surgery groups have been prevented from opening ASCs in Georgia. In one particular, Albany Surgical PC, began the process in a different way: Instead of applying for a letter of non-revocability they knew the proprietors wouldn’t get, they filed a lawsuit to overturn the definition of general surgery as a multispecialty. As the lawsuit worked its way through the Georgia courts, the American College of Surgeons and the Medical Association of Georgia filed amicus briefs in support of Albany Surgical. After years of legal wrangling, the state’s Court of Appeals ruled that general surgery did not qualify for the single specialty exemption, and the Georgia Supreme Court affirmed that the regulation defining general surgery as a multispecialty was authorized by the CON statute. However, the courts did rule DCH had the authority to determine what a specialty was and how it was defined.

Additional attempts to change the rules

After the case was finished in 2003, other efforts were undertaken to gain recognition for general surgery as a single specialty in the CON rules. In 2004, the DCH considered revisions to its guidelines governing CON for ASCs, with organized medicine urging the group to add general surgery to the definition of a single specialty. The DCH insisted it did not have the authority to do this despite the specific rulings of the appellate courts to the contrary. Subsequent to this, the Board of Community Health was asked to consider a similar action, but an opinion issued February 1, 2005, from the attorney general’s office reiterated the position that the department does not have the authority to revise what is in the CON statute.

Georgia Attorney General Thurbert E. Baker was asked to reconsider the previous opinion and issue an opinion putting his office in line with the courts by stating that the DCH has full authority to promulgate rules defining what is or is not a single specialty within the CON process. In addition, the Surgery State Legislative Action Center, a Web-based advocacy tool sponsored by the College, was activated to provide Georgia surgeons the opportunity to send a letter to Gov. Sonny Perdue (R), urging him to work with the DCH to address this issue.

The origin of CON regulations

During the 1970s, the federal government enacted legislation requiring states to adopt CON programs. The intent of CON legislation was to restrain skyrocketing health care costs, prevent the unnecessary duplication of health resources, and achieve equal access to quality health care at a reasonable cost. By the early 1980s, most states were in compliance, although by 1986, Congress had repealed this requirement in light of the ascendency of free markets and competition and decreasing reliance on government regulation.

The U.S. Federal Trade Commission and the Department of Justice issued a report—Improving Health Care: A Dose of Competition—in 2004, recommending that states with CON programs should reconsider whether these programs best serve their citizens’ health care needs. This report notes that, “On balance, CON programs are not successful in containing health care costs, and that they pose serious anti-competitive risks that usually outweigh their purported economic benefits. Market incumbents can too easily use CON procedures to forestall competitors from entering an incumbent’s market.... Indeed, there is considerable evidence that CON programs can actually increase prices by fostering anti-competitive barriers to entry.”*

Further advocacy—Change the definition

In 2005 and 2006, other efforts were undertaken to revise the definition of general surgery. The Georgia General Assembly, while refusing to pass legislation to do so, did adopt a bill establishing the State Commission on the Efficacy of the Certificate of Need Program in the Department of Community Health; its mission is to conduct a broad study of the CON program and report back with recommendations by July 1, 2007. As such, the commission began meeting on a monthly basis.

At one such meeting, in October 2005, Thomas Gadacz, MD, FACS, ACS Governor for Georgia, provided evidence that CON programs are not successful in containing health care costs, and that they pose serious anti-competitive risks that usually outweigh their purported economic benefits. Market incumbents can too easily use CON procedures to forestall competitors from entering an incumbent’s market.... Indeed, there is considerable evidence that CON programs can actually increase prices by fostering anti-competitive barriers to entry.”

testified on behalf of the Georgia Chapter that general surgery is a single specialty. Not only did he thoroughly describe the education and training that general surgeons receive, but he presented letters from the American Board of Medical Specialties, American Medical Association, American College of Surgeons, American Board of Surgery, American Society of General Surgeons, Georgia Chapter, and Georgia Surgical Society that general surgery is a single specialty.

Not unexpectedly, the commission voted to continue to discuss the issue and to address it in the final report for the legislature in 2007.

In February 2006, the Georgia Health Strategies Council invited representatives from the Georgia Chapter, Georgia Society of General Surgeons, and Medical Association of Georgia to address the issue of general surgery as a single specialty. Once again, Dr. Gadacz presented incontrovertible evidence that general surgery is a single specialty, only to have politics and profit win out over patient care when the council voted 12-9 to table the definition until the commission presents its report.

Also in February, surgeons met with Rhonda Medows, MD, the new Commissioner of the Georgia Department of Community Health. At this meeting were W. Lynn Weaver, MD, FACS, President of the Georgia Chapter; Lamar McGinnis, Jr., MD, FACS, ACS Representative; Chris Smith, MD, FACS, president of the Georgia Society of General Surgeons (GSGS); and Dr. Gadacz. During this collegial conversation, Dr. Medows recognized general surgery as a single specialty.

**No meetings in Georgia**

The College received a request from the Medical Association of Georgia (MAG) that the ACS inform Governor Perdue and the state Chamber of Commerce that the College would no longer conduct meetings in Georgia until the general surgery situation is resolved. The ACS Executive Committee agreed to this request in December 2005, and the governor and Chamber of Commerce were notified of this decision in early January 2006. The economic impact of this decision is sizeable, since the College’s annual Clinical Congress generates an economic benefit of $30 million to $60 million.

**From this point forward**

The ACS, Georgia Chapter, the GSGS, and MAG will continue to advocate on behalf of general surgeons. The GSGS has hired an executive director/lobbyist to assist with these efforts. Advocacy will certainly focus on the definition of general surgery but could expand to complete repeal of the state’s CON program (depending on the CON Commission report recommendations).

An independent political action committee (PAC) was formed earlier this year with the stated goal of repealing CON in Georgia. The CON PAC believes that CON regulations are unconstitutional, stifle free markets, and discriminate against physicians.

In the interim, it is important for Georgia general surgeons and their allies to attend meetings of the CON Commission, Board of Community Health, and Health Strategies Council to maintain visibility and involvement in the process. Hospital representatives are always in attendance at these meetings, as they clearly understand the importance of advancing their agenda within the state’s regulatory structure. (The meeting dates are available at the DCH Web site at http://dch.georgia.gov/02/dch/home/0,2467,31446711,00.html). Georgia hospitals do not want to compete with ASCs and will do whatever it takes to keep general surgeons (and any other specialists) from being able to open these facilities. A recent example of such efforts is that hospitals have been buying up surgical practices, achieving greater control over the health care marketplace in their geographic areas, and ensuring that freestanding ASCs won’t be built.

Finally, Georgia surgeons should be staunch grassroots advocates and regularly contact their state legislators to discuss these issues. Ultimately, it will be up to the Georgia General Assembly to act on the recommendations coming from the CON Commission, and established rapport with legislators will be essential for surgery to achieve desired results: recognition of general surgery as a specialty.
Error reduction through team leadership:

The surgeon as a leader

by
Gerald B. Healy, MD, FACS, Boston, MA;
Jack Barker, PhD, Miami, FL;
and Capt. Gregory Madonna, Ft. Lauderdale, FL

Authors’ note: This is the third in a series of articles we have prepared for publication in the Bulletin, focusing on how the crew resource management (CRM) training techniques used in aviation may be applied in surgery. In the first article of the series (Bull Am Coll Surg. 2006;91[2]:10-15), we presented the basic concepts of CRM training and its possible application in the operating room. In the second article (Bull Am Coll Surg. 2006;91[6]:24-26), we focused on the seven principles for leading high-performance teams. In this article, we discuss the learned behaviors of effective leaders.
iven the intensity of surgical training, many individuals assume that once a resident has mastered the technical skills and scientific knowledge involved in surgery, his or her education is complete. However, research in other industries shows that technical excellence alone does not always guarantee a positive outcome. Because the systems in which surgeons work are becoming increasingly complex, and because of the heightened emphasis on patient safety and performance measures, surgeons must position themselves not only as trained technicians, but also as leaders of high-performance teams. Furthermore, effective leadership is rooted in formal training targeted at developing the behaviors necessary to bring out the best in each member of the operative team.

Soon after starting his practice, one of the authors of this article (GBH) encountered a patient in extreme airway distress with a massive obstructing carcinoma of the larynx. Feeling immense confidence in his surgical ability after five years of training and two years in the military, the author took the patient to the operating room for an emergency tracheotomy. Believing that no unmanageable problems would arise, the surgeon chose not to discuss a plan of care with either the nurses or anesthesiologist assigned to the case. But suddenly, as the patient was being prepared, he arrested. The young anesthesiologist assigned to the case had never experienced this situation and literally froze. He was helpless to establish an airway by intubation. The nurses present were giving lunch relief to the regular nurses assigned to the room and were inexperienced in this type of situation and, thus, of no help. Thus, this surgeon had placed himself on a surgical island of his own creation, surrounded by a group of individuals who were of no assistance to the most important person in the room: the patient. After shouting numerous commands to a dysfunctional team, the surgeon was able to perform a cricothorotomy and establish an airway while getting cardiac function to resume.

This inexperienced surgeon failed to exercise any leadership and to evaluate the skills of the team assembled. In addition, he neglected to educate the team and develop a plan of action to deal with any eventuality. In spite of his military training, the author had failed his first test of leadership. Needless to say, the valuable lesson this experience provided remains with him to this day.

As this example demonstrates, being a good leader and getting the most from a team are not directly linked to clinical expertise. Leadership requires formal training centered on advancing the associated behaviors. Because leadership is a learned skill, it requires constant practice and reinforcement until it becomes second nature. Furthermore, the culture within which one operates must reinforce these behaviors.

**Command**

Before discussing leadership, a closely related but significantly different concept must be addressed: command. Command involves a governing figure granting another individual the power to exercise authority in a formal and, oftentimes, impersonal way. Command is prevalently addressed in military, aviation, and some business circles, but it is infrequently discussed in the health care setting.

Because representatives of many different specialties often collaborate on a case, it is common for people of equal rank to compete for final authority. However, if a team or an organization can formalize who is in command for any given procedure, more effective teamwork is possible. In the operating room or a catheter laboratory, it is much more evident who will be in command. Nonetheless, that individual must still serve as a good leader.

In discussing leadership in aviation, it is important to remember that a commander who seeks to capture the team’s collective wisdom is not suffering from “paralysis by analysis” or encouraging “groupthink.” Rather, he or she is employing a highly effective model for achieving the best outcomes. Nothing we discuss regarding gathering input or even changing an opinion based on that input reduces the real or perceived authority of the person in charge.

Again, no direct parallel exists in health care, but the federal regulations and com-
perty manuals that apply to aviation all state unequivocally that the pilot is in command and is responsible for the safety of the passengers, crew, cargo, and aircraft. The captain is accountable for every aspect of a flight. Although maximum collaboration is encouraged, for a team to operate effectively, there must be one—and only one—final decision maker.

Leadership
Leadership is defined by the commander’s willingness to let team members exercise their rights and responsibilities to ensure a safe and positive outcome. In other words, although there can be only one commander, anyone on the team can exhibit leadership. Also note that leadership is both a right and a responsibility. Team members may have a right to speak up, but they also have a responsibility to do so—in terms of health care, this means a responsibility to the patient, to fellow team members, even team members’ own professional conscience.

Some people may claim that ascribing these duties to all members of the team is just “hot tub” medicine, but exactly the opposite is true. How difficult do you think it would be for a junior team member to suggest a difficult strategy to a department chair, for example, and risk a public dressing down? Or even for a peer to approach a colleague? Team training is designed not to create a perfect world but to improve synergy in an imperfect world.

So, leadership means two things: (1) individual team members have a right and responsibility to voice their opinions and concerns; and (2) the team leader must create a synergistic environment. It cannot be emphasized enough that encouraging and promoting teamwork does not weaken the respect that surgeons receive. Indeed, the experience of the authors suggests that surgeons who encourage teamwork in the operating room engender higher levels of respect.

Leadership characteristics
Teams that have effective leadership are distinguished by the following characteristics: a positive team climate, briefings and timeouts, and professionalism.

A good leader fosters a positive climate that allows for a free and synergistic exchange of ideas. Think about the different teams on which you have served. How did the teams with a positive climate differ from those with a poor climate? Which ones functioned better?

A study by Robert Ginnett, PhD, shows that the long-term outcome of a team’s performance can be determined within its first 90 seconds together.* A team with a leader who gathers the team together to discuss the procedure beforehand always performs better than a team that skipped the preoperative briefing. Briefings allow the team to review the case and set expectations. They also include discussion of contingency plans in the event of complications. Dr. Ginnett’s study also showed that teams that conducted briefings performed better when faced with a surprising situation, even if the contingency plan discussed was not the one actually used.

Timeouts are already used in the operating room, but this process should be taken one step further by expanding these timeouts into more comprehensive briefings. Briefings don’t have to be exhaustive. An exchange of first names, a brief synopsis of the case, and anticipated outcomes in both normal conditions and abnormal conditions are all that are necessary. People respect strength and humanity. It is a very powerful combination, and briefings provide an opportunity for the person in command to exhibit these traits. In a study at Concord Hospital, Concord, NH, Ginnett found that briefings were either time neutral or even saved time as a result of better understanding of expectations. Briefings are an extraordinarily effective means of building loyal, highly functioning teams, and they establish the attending surgeon as the leader.

Leadership is also defined by professionalism. Interestingly, the very first definition of a “profession” in the dictionary centers on the taking of vows in a religious community. Like religious leaders, professionals in other fields typically have the highest regard for their calling and will strive to meet the highest standards. Although it is important that we have these expectations of ourselves, leaders also seek to draw excellence from their team members.

A leadership exercise

During the authors’ leadership workshop, physicians are asked to break into smaller groups and discuss the various leadership styles they observed over the years. They are asked to share stories with each other and with the whole class.

Typical behaviors that workshop participants associate with poor leaders are a lack of communication skills, a tendency to guard rather than share information, an “it’s all about me” attitude, uncontrolled temper, and arrogance as a cover for low self-confidence. Conversely, the students generally describe strong leaders as excellent communicators who are willing to put the team first (sometimes at great sacrifice to themselves), highly competent, unflappable, and self-confident.

This emphasis on self-confidence—among surgeons, in particular—almost inevitably leads to a discussion of the pitfalls of big egos. However, it could be asserted that surgeons, like pilots, must have tremendous egos and supreme self-confidence. Surgeons and pilots couldn’t do what they do without believing in their ability to handle any problem—they couldn’t survive. Nonetheless, a good leader knows how to keep that ego in check to achieve high performance.

Surgeon leaders

Unquestionably, the current surgical training process produces professionals of the highest technical caliber and cognitive ability. However, these attributes alone do not guarantee positive outcomes. To achieve excellence and ensure patient safety, surgeons need a complete understanding of their role as leaders and must undergo formal training in team dynamics. A major challenge before the profession is that surgeons know how to fully take on a leadership role in the clinical setting and improve the synergy of operative teams.

Modern medicine makes extraordinary demands on surgeons’ time, so some readers may believe that leadership training is too time-consuming and not worth the effort. However, the experience of the authors has shown that obtaining this skill set can lead to improved performance, reduced effort and mental strain, and better outcomes.
Almost four decades ago, the Committee on Trauma (COT) of the American College of Surgeons (ACS) developed a list of standardized equipment for ambulances. Since 1988, the American College of Emergency Physicians (ACEP) has published a similar list. Both of those organizations collaborated on the existing joint document, published in 2000. With this revision, the National Association of EMS Physicians (NAEMSP) has agreed to participate in this collaboration.

All three organizations adhere to the principle that emergency medical technicians (EMTs) at all levels must have the appropriate equipment and supplies to optimize prehospital delivery of care. Since EMTs care for patients of all ages, with a wide variety of medical and traumatic conditions, the ACS COT, ACEP, and NAEMSP have joined to produce this document to serve as a widely accepted standard in the field of emergency ambulance service both in the United States and Canada. Based on the need for increased domestic preparedness, this current revision addresses for the first time those resources needed on ambulances for appropriate terrorism preparedness.

PRINCIPLES OF PREHOSPITAL CARE

High-quality, consistent emergency care demands continuous quality improvement and is directly dependent on effectively monitoring, integrating, and evaluating all components of the patient’s care.

The goal of prehospital care is to minimize further systemic insult or injury through a series of well-defined and appropriate interventions.

Integral to this process is medical oversight of prehospital care by preexisting protocol (indirect medical oversight) or by physician via voice and/or video communication (direct medical oversight). The protocols that guide patient care should be established in concert by medical directors for ambulance services, emergency physicians, trauma surgeons, and appropriately trained basic and advanced emergency medical personnel.

EQUIPMENT AND SUPPLIES

The guidelines list the supplies and equipment that should be stocked on ambulances to provide patient care. Previous documents regarding ambulance equipment have referred to essential or minimal equipment necessary to adequately equip an ambulance. However, very little scientific evidence supports requirements for specific equipment and supplies. Equipment requirements will vary, depending on the certification levels of the providers, population densities, geographic and economic conditions of the region, and other factors.

THE FOLLOWING LIST REPRESENTS A CONSENSUS OF RECOMMENDATIONS FOR EQUIPMENT AND SUPPLIES THAT WILL FACILITATE PATIENT CARE ACTIVITIES IN THE OUT-OF-HOSPITAL SETTING.
BASIC LEVEL PROVIDERS

A. VENTILATION AND AIRWAY EQUIPMENT
1. Portable and fixed suction apparatus
   - Wide-bore tubing, rigid pharyngeal curved suction tip, tonsillar and
     flexible suction catheters, 5F–14F
2. Portable and fixed oxygen equipment
3. Oxygen administration equipment
   - Adequate length tubing: mask (adult, child, and infant sizes),
     transparent, non-rebreathing and valveless; nasal cannulas;
     (adult, child, and infant sizes)
4. Pocket mask with one-way valve
5. Bag-valve mask
   - Hand-operated, self-expanding bag (adult and infant sizes),
     with oxygen resuscitation/accumulator; clear mask (adult, child,
     infant, and neonate sizes); valve (clear, disposable, operable in
     cold weather)
6. Airways
   - Nasopharyngeal, oropharyngeal (adult, child, and infant sizes)
7. Alternative airway devices (e.g., Larynx Trach [oral-tracheal/ double lumen airway]) as
   approved by local medical direction

B. MONITORING AND DEFIBRILLATION
Automatic external defibrillator is strongly recommended for systems
that do not have immediate availability of an advanced life support service.
All ambulances should be equipped with an automated external defibrillator unless staffed at all times by advanced life support personnel with a monitor/defibrillator.

C. IMMobilization devices
1. Cervical collars
   - Rigid for children ages 2 years or older, infant, child, and adult
     sizes (small, medium, large, and other available sizes)
2. Head immobilization device (not sandbags)
3. Firm padding or commercial device
4. Lower extremity (femur) traction devices
5. Lower extremity, limb-support slings, padded ankle hatch,
   padded pelvic support, traction strap (adult and child sizes)
6. Upper and lower extremity immobilization devices
7. Joint-above and joint-below fracture site (adult and child sizes),
   rigid support appropriate material (cardboard, metal,
     pneumatic, vacuum, wood, or plastic)
8. Radiolucent backboards (long, short) and extraction devices
9. Joint above and joint-below fracture site (chain strap alone
   should not be used for head immobilization), adult and child
   sizes, with paddles for children; handholds for moving patients,
   short (extraction, head-to-pelvis length), long (transport, head
   to feet), with at least 3 appropriate restraint straps

D. BANDAGES
1. Burn pack
   - Standard package, clean burn sheets (or towels for children)
2. Triangular bandages
3. Dressings
   - Sterile multilayer dressings (various large and small sizes)
   - ABDs, 10" x 12" or larger
   - 4" x 4" gauze sponges
4. Gauze rolls
   - Sterile (various sizes)

5. Elastic bandages
   - Nonsterile (various sizes)
6. Occlusive dressing
   - Sterile, 3" x 6" or larger
7. Adhesive tape
   - Various sizes (including 2" or 3") hypoallergenic
   - Various sizes (including 2" or 3") adhesive

E. COMMUNICATION
1. Two-way radio communication (VHF, UHF) between EMT,
   dispatcher, and medical oversight (physician)
2. Two-way disaster communication
3. Cellular phone

F. OBSTETRICAL
1. Kit (separate sterile kit)
   - Towels, 4" x 4" dressing, umbilical tape, sterile scissors or other
     cutting utensil, bulb suction, clamps for cord, sterile gloves,
     blanket
2. Thermal absorbent blanket and head cover, aluminum foil roll, or
   appropriate heat-reflective material (enough to cover newborn)
3. Appropriately sized heat source for ambulance compartment

G. MISCELLANEOUS
1. Sphygmomanometer (infant, pediatric, and adult regular and
   large, for example, thigh sizes)
2. Stethoscope (pediatric and adult)
3. Length/weight-based chart for pediatric equipment sizing
4. Thermometer with low temperature capability
5. Heavy bandage or paramedic scissors for cutting clothing, belts,
   and boots
6. Cold packs
7. Sterile saline solution for irrigation (1-liter bottles or bags)
8. Flashlights (2) with extra batteries and bulbs
9. Blankets
10. Sheets, linen or paper (minimum 4), and pillows
11. Towels
12. Triage tags
13. Disposable emesis bags or basins
14. Disposable bedpan
15. Disposable urinal
16. Wheeled cot (properly secured patient transport system)
17. Folding stretcher
18. Stair chair or carry chair
19. Patient care charts/forms
20. Lubricating jelly (water soluble)
21. Appropriate CBRNE PPE (chemical, biological, radiological,
   nuclear, explosive personal protective equipment), including
   respiratory and body protection
22. Applicable chemical antidote autoinjectors (at a minimum
   for crew members' protection; additional for victim treatment
   as appropriate)
### ADVANCED LEVEL PROVIDERS

For EMT-Paramedic, include all the equipment listed for the basic level provider plus the following additional equipment and supplies. For EMT-Intermediate (and other nonparamedic advanced levels), include all the equipment for the basic level provider and selected equipment and supplies from the following list, as appropriate.

#### A. VASCULAR ACCESS

1. Crystalloid solutions, Ringer’s lactate or normal saline solution (1,000-ml bags x 4), 5% dextrose in water (optional) (fluid must be in bags, not bottles)
2. Antiseptic solution (alcohol wipes and povidone-iodine wipes preferred)
3. IV pole or roof hook
4. Intraosseous needles
5. Intravenous arm boards, adult and pediatric.

#### B. AIRWAY AND VENTILATION EQUIPMENT

1. Laryngoscope handle with extra batteries and bulbs, adult and pediatric
2. Laryngoscope blades, sizes 0, 1, and 2, straight; sizes 3 and 4, straight and curved.
3. Endotracheal tubes, sizes 5.5–6.0 mm uncuffed and 6.5–8.0 mm cuffed (2 each), other sizes optional
4. Meconium aspirator
5. 10-ml non-Luerlock syringes
6. Stylettes for endotracheal tubes, adult and pediatric
7. Magill forceps, adult and pediatric
8. Lubricating jelly (water soluble)
9. Nasogastric tubes, pediatric sizes SF and 8F, Salten sump sizes 14F, 16F, and 18F.
10. End-tidal CO₂ detectors

### F. OPTIONAL ADVANCED EQUIPMENT

1. Portable automatic ventilators
2. Blood sample tubes, adult and pediatric
3. Automatic blood pressure device

### C. CARDIAC

1. Portable, battery-operated monitor/defibrillator
   - With tines, wireless recorder, defibrillator pads, quicklook paddles or hands-free patches, ECG leads, adult and pediatric chest attachment electrodes, adult and pediatric paddles, with capability to provide electrical discharge below 25 watt-seconds.
2. Transcutaneous cardiac pacemaker
   - Either stand-alone unit or integrated into monitor/defibrillator

### D. OTHER ADVANCED EQUIPMENT

1. Nebulizer
2. Glucometer or blood glucose measuring device
   - With reagent strips
3. Pulse oximeter with pediatric and adult probes

### E. MEDICATIONS (PRE-LOAD WHEN AVAILABLE)

Medications used on advanced level ambulances should be compatible with current standards as indicated by the American Heart Association’s Emergency Cardiac Care Committee, as reflected in the Advanced Cardiac Life Support Course, or other such organizations and publications (ACEP, ACS, NAEMSP, and so on). In general, medications should include:

- Cardiopulmonary medications, such as 1:10,000 epinephrine, atropine, antidysrhythmics, calcium channel blockers, beta-blockers, nitroglycerin tablets, aspirin, pressors
- Cardiopulmonary/porary medications, such as albuterol (or other inhaled beta agonist), 1:1,000 epinephrine, furosemide
- 50% dextrose solution (and sterile diluent or 25% dextrose solution for pediatrics)
- Analgesics, narcotic and nonnarcotic
- Antiepileptic medications, such as diazepam or midazolam
- Sodium bicarbonate, magnesium sulfate, glucagon, naloxone hydrochloride
- Bacteriostatic water and sodium chloride for injection
- Sedation or other intubation adjuncts such as paralytics should only be used with approval and close medical oversight
APPENDIX

EXTRICATION EQUIPMENT

Adequate extrication equipment must be readily available to the emergency medical services responders, but is more often found on heavy rescue vehicles than on the primary responding ambulance.

In general, the devices or tools used for extrication fall into several broad categories: disassembly, spreading, cutting, pulling, protective, and patient-related.

The following is necessary equipment that should be available either on the primary response vehicle or on a heavy rescue vehicle.

Disassembly Tools
- Wrenches (adjustable)
- Screwdrivers (flat and Phillips head)
- Pliers
- Bolt cutter
- Tin snips
- Hammer
- Spring-loaded center punch
- Axes (pry, fire)
- Bars (wrecking, crow)
- Ram (4 ton)

Spreading Tools
- Hydraulic jack/spreader/cutter combination

Cutting Tools
- Saws (hacksaw, fire, windshield, pruning, reciprocating)
- Air-cutting gun kit

Pulling Tools/Devices
- Ropes/chains
- Come-along
- Hydraulic truck jack
- Air bags

Protective Devices
- Reflectors/flares
- Hard hats
- Safety goggles
- Fireproof blanket
- Leather gloves
- Jackets/coats/boots

Patient-Related Devices
- Stokes basket

Miscellaneous
- Shovel
- Lubricating oil
- Wood/Wedges
- Generator
- Floodlights

Local extrication needs may necessitate additional equipment, that is, water, aerial, or mountain rescue.

REFERENCES

Equipment for Ambulances
ACEP Policy Statement American College of Emergency Physicians
http://www.acep.org

Medical Direction of Emergency Medical Services

Resources for Optimal Care of the Injured Patient
American College of Surgeons Committee on Trauma
Chicago 1999, 2006

Equipment for Ambulances
It was a historic day for the American College of Surgeons on June 28, because the ACS Program for Accreditation of Education Institutes made its first set of accreditation decisions. Seven institutions were accredited as level I ACS-accredited education institutes (see box, next page). The decisions were made by the Accreditation Review Committee (see box, next page) based on the review of the completed applications and surveyors’ reports. Accrediting education institutes was a significant milestone for the College.

The program was officially unveiled at the 2005 ACS Clinical Congress in San Francisco, CA. The aim of the program is to offer new and innovative educational programs to surgeons, surgical residents, medical students, members of the surgical team, and surgical patients. The program should enhance patient care and patient safety through education. The goals of the program are consistent with the College’s mission.

During the fiscal year 2006-2007, the ACS Division of Education expects to receive 20 to 25 applications from either level I or level II institutes. ACS staff has been contacted by several institutions about the requirements necessary to become accredited or for applications. Many of the institutions requesting
accreditation information are in the process of building their own facilities, which will house surgical skills centers. In anticipation of the work required to process these new applications during the next year, ACS staff is aiming to recruit and train an additional 25 surveyors.

Based on the goals of the program and the interest among institutions, we believe the ACS Program for Accreditation of Education Institutes will shift the paradigm for how surgical education is delivered and will enhance the educational opportunities available. The institutes will offer educational programs to support acquisition and maintenance of competence and maintenance of certification. The institutes will also engage in collaborative education research and development.

For future information about the ACS Program for Accreditation of Education Institutes or how to apply for accreditation, please contact Kathleen Johnson at kjohnson@facs.org or 312/202-5276.

ACS Program for Accreditation of Education Institutes

Dr. Pellegrini is Henry N. Harkins Professor and chair, department of surgery, University of Washington, Seattle, and a member of the Board of Regents.
Murphy Memorial Building restored

by Stephen J. Regnier, Editor
Attendees at last month’s Clinical Congress in Chicago, IL, had the opportunity to see the newly restored historic John B. Murphy Memorial Building at 50 East Erie St. This year, a number of tours of the Murphy Memorial were conducted during the week of the Clinical Congress, and participants witnessed firsthand the remarkable detail the preservation architect used to bring the auditorium back to its original splendor.

**History**

The Murphy Memorial Building was built in honor of Dr. Murphy (1857–1916), a founding member of the College. Shortly following his death, his friends sought to honor him by forming the John B. Murphy Memorial Association. A major goal of the association was to erect a building that would be the first part of a center devoted to education in surgery, which was also to include an auditorium and library. The Murphy Auditorium was built on the property of the American College of Surgeons, with the agreement that the College would maintain the building as a memorial to Dr. Murphy.

Ground was broken on the Murphy Auditorium in 1923, and dedication ceremonies took place June 10–11, 1926. The building was accepted by Rudolph Matas, MD, FACS, President of the College. The cost was $600,000, subscribed by more than 2,000 individuals and organizations. The Murphy Memorial Building was hailed by many as one of the most impressive monumental buildings of the time.1

**Design**

The architects of this gorgeous building were Marshall and Fox. The architectural design of the auditorium was in the French Renaissance style and is reminiscent of the Chapelle de Notre-Dame de Consolation, which memorializes the victims of a fire that destroyed the Bazar de la Charite in May 1897. The similarity in architectural design is evident on both the exterior and interior of the auditorium.

The entrance to the Murphy Auditorium remains visually striking. “A central door at the street level is embraced by curved stairways which return to a central porch between round pillars reaching up to the portico.”1 The front of the building is dominated by high bronze doors that were contracted for production through the Tiffany Studios at a cost of $19,650.2 A green colored patina was added to the doors in 1987. Plans are under way to restore the bronze finish and to coat the doors to inhibit future corrosion.

The doors are broken into sculptured panels, six of them portraying important names in medicine: (1) Aesculapius, the Greek god of medicine who is also depicted on the College’s seal alongside a Western medicine man; (2) Louis Pasteur, PhD, a French chemist and microbiologist, whose discovery that microorganisms cause disease led to the origination of a preservation process that bears his name; (3) Ephraim McDowell, MD, an American surgeon who performed the first successful ovariotomy in 1809; (4) Joseph Lister, MD, an English surgeon and baron, whose work ushered in the modern era of antiseptic surgery; (5) Sir William Osler, MD, an English physician perhaps best remembered as a great clinician and skillful writer; and (6) William Crawford Gorgas, MD, a military sanitarian who prevented the spread of yellow fever during the construction of the Panama Canal.2

The interior of the auditorium features a large, domed central space. The space above the dome, accessible by a small elevator, housed the library and reading rooms until 1963. Thereafter, it was a repository for books and used infrequently.

In the center of the north wall of the auditorium is a tall, multicolored stained-glass window with back-lighting (see photo, opposite). This magnificent window was designed and manufactured by the Willet Company of Philadelphia, PA, and was presented by C. H. Mathiessen, a friend of Dr. Murphy.1

Adorning the walls of the auditorium are portraits of Dr. Murphy; ACS Founder Franklin H. Martin, MD, FACS; and many ACS Past-Presidents. Most of the subjects are shown in presidential robes.

**Renovation**

The Murphy Auditorium was first renovated in 1987, because of the growing need for space by various departments of the College. In 2003, several years after the College moved all its offices

Opposite: The stained glass window in the Murphy Memorial Auditorium.

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1. History and description of the building's design.
2. Details on the Tiffany Studios production of the doors and the patina added in 1987.
3. Description of the interior features and the significance of the portraits.
to the new headquarters building at 633 N. Saint Clair St., restoration work began on the interior auditorium.

The restoration architectural firm of Antunovich Associates, under the direction of architect William A. McMillan, conducted the restoration. Seating was removed from the main floor area and a floating wood floor was installed. Moveable platforms were custom-made to extend the stage area an additional six feet to accommodate larger stage events. A new audio/audiovisual system was installed, and the heating and air conditioning systems were completely overhauled.

The work was completed in June 2006 and the Murphy Auditorium has been returned to its original glory. Virtually every detail has been restored or replicated to its original design.\(^3\)

**Event venue**

The College maintains ownership of the Murphy Auditorium and in June opened it to the public as one of Chicago’s premier event venues. The auditorium can accommodate up to 210 guests for banquets, 300 guests for receptions, 166 guests for classroom functions, and approximately 520 guests as a theater.

Further information regarding the Murphy Auditorium may be obtained online at www.murphyauditorium.com, or by contacting Kelly Neilson, Event Coordinator, at 312/202-5298 or e-mail kneilson@facs.org, or Susan Rishworth, Archivist, at 312/202-5270 or e-mail srishworth@facs.org.

**References**

Edward M. Copeland III, MD, FACS, a surgical oncologist from Gainesville, FL, was installed as the 87th President of the American College of Surgeons during Convocation ceremonies that preceded the College’s 2006 Clinical Congress in Chicago, IL. Dr. Copeland is the Edward R. Woodward Distinguished Professor, department of surgery, University of Florida College of Medicine, Gainesville.

Dr. Copeland, a native of McDonough, GA, received his bachelor’s degree from Duke University, and is a 1963 Alpha Omega Alpha graduate of Cornell University Medical School, New York, NY. He completed his general surgery residency in the department of surgery at the Hospital of the University of Pennsylvania, Philadelphia (1964–1969). From 1966 to 1967, he was a research fellow in the Harrison Department of Surgical Research Hospital of the University of Pennsylvania, and from 1968 to 1969, he served as a clinical fellow for the American Cancer Society at the Hospital of the University of Pennsylvania, Philadelphia.

Following his residency, Dr. Copeland served as a major in the U.S. Army (1969–1971) and received a Bronze Star for his service in Viet Nam. He then completed an advanced senior fellowship in cancer surgery at the M.D. Anderson Hospital and Tumor Institute, University of Texas, Houston, from 1971 to 1972. He became a diplomate of the American Board of Surgery in 1971.

Dr. Copeland’s career as a surgical educator began at the University of Texas Medical School at Houston, and at M.D. Anderson Hospital, where he progressed from assistant professor of surgery to professor of surgery (1972–1982). He also served as project director for the National Large Bowel Cancer Project of the National Cancer Institute from 1981 through 1982.

Dr. Copeland’s time at the University of Texas ended in 1982, when he moved to the University of Florida College of Medicine in Gainesville, serving as chairman of the department of surgery (1982–2003). He was then elected distinguished professor—a position he has held since 2004. In addition, from 1994 to 1999, Dr. Copeland was the first director of the University of Florida Shands Cancer Center and served as the interim dean of the University of Florida College of Medicine (1996–1997).

A Fellow of the American College of Surgeons since 1974, Dr. Copeland has been an active participant in and leader of numerous College activities, including serving as Chair of both the Board of Governors and the Board of Regents. He has served on the College’s Board of Governors as Chair of the Executive Committee (1995–1996); Secretary of the Executive Committee (1994–1995); and as a member of the Committee on Socioeconomic Affairs (1995–1996), the Committee to Study the Fiscal Affairs of the College (1994–1995), and the Committee on Physician’s Health (1992–1994).

Dr. Copeland has been an active member of the College’s Board of Regents since 1997. In addition to serving as Chair (2003–2005), he served as Chair of the Executive Committee (2003–2005), Chair of the Finance Committee (2003–2005), Chair of the Member Services Liaison Committee (2001–2003), Vice-Chair

Dr. Copeland has also served in leadership roles on numerous other College committees including Chair (2002–2003) and Vice-Chair (2001) of the Program Committee; Executive Chair (1990–1993) and Executive Vice-Chair (1988–1990) of the Medical Motion Pictures Committee; and as Chair of the Committee on Young Surgeons (1982–1983). He has also served as a member of the Executive Compensation Committee (2003–2006), Nominating Committee of the Fellows (1991–1992), Committee on Video-Based Education (1987–1997), and Committee on Young Surgeons (1978–1983). In addition, Dr. Copeland has been actively involved as a member of the College’s Commission on Cancer.

In addition to his service to the College, Dr. Copeland has held many leadership positions in organized surgery. He has served as chairman (1990–1991) and vice-chairman (1989–1990) of the American Board of Surgery and president of the Association for Academic Surgery, Halsted Society, Society of Surgical Chairs, Society of Surgical Oncology, Southern Surgical Association, and the Southeastern Surgical Congress. He is a member of many other surgical organizations, including the American Surgical Association, Eastern Surgical Society, Society of Clinical Surgery, International Society of Surgery, and Society for Surgery of the Alimentary Tract. Dr. Copeland is also the recipient of the Distinguished Alumnus Award from the M.D. Anderson Hospital and Tumor Institute.

Dr. Copeland has shown a strong commitment to the dissemination of surgical knowledge, having served as a member of 17 editorial boards, including the Journal of the American College of Surgeons, Journal of Surgical Research, Annals of Surgery, Surgery, Cancer, Annals of Surgical Oncology, Cancer Research, and Surgical Oncology. Furthermore, he has published 435 journal articles and book chapters and 84 abstracts and editorials. He has been the editor or co-editor of 18 books, including The Breast: Comprehensive Management of Benign and Malignant Diseases, which is now in its third edition.

Dr. Copeland has devoted a major part of his career to surgical research in surgical nutrition, metabolism, and tumor biology. He has collaborated on multiple studies funded by the National Institutes of Health.

Dr. Copeland currently resides in Gainesville with his wife, Martha. They have two children—Ted (IV), who practices law in Tampa, FL, and Cathy, who works for Coca-Cola in Atlanta, GA.

Patricia J. Numann receives 2006 Distinguished Service Award

The Board of Regents of the American College of Surgeons presented Patricia J. Numann, MD, FACS, of Syracuse, NY, with the 2006 Distinguished Service Award last month during the Clinical Congress in Chicago, IL. The Board honored Dr. Numann with the College’s highest honor for her lifelong interest in education; in appreciation of her influence and support in shaping the careers of women in surgery; in acknowledgement of her skill as a surgeon; for contributions to the surgical literature in matters of surgical interest; for her concerns regarding the social setting of quality surgical practice; for her dedication to the maintenance of responsible, professional conduct through surgical and medical societies; and in admiration of her many accomplishments, commitment, devotion, and...
unselfish service to further the higher causes of the surgical profession.

Dr. Numann is currently the Lloyd S. Rogers Professor of Surgery at State University of New York (SUNY) Upstate Medical University in Syracuse. She graduated from SUNY Health Science Center (HSC) in Syracuse in 1965 and completed her residency in general surgery at SUNY HSC University Hospital from 1966 to 1970. After completing her postgraduate training, Dr. Numann began her service at the Veteran’s Administration Hospital and SUNY Upstate University Hospital in 1970; she continues to work as staff surgeon there today.


Since Dr. Numann became a Fellow of the American College of Surgeons in 1974, she has made outstanding contributions to and on behalf of the College. She was Second Vice-President of the College from 1999 to 2000. She has also served as a member of the Education Task Force on Practice-Based Learning and Improvement (2002); member, Ad Hoc Committee on the Environment of Residency Education (2002); the American Board of Surgery (ABS) Representative to the Advisory Council for General Surgery (1999–2002); member, Board of Regents Communications and Organization Liaison Committees (1999–2000); member (1993–1999) and Cancer Liaison Physician for the Committee on Cancer (1985) and member of its Education Committee (1993–1999); Co-Chair (1982–1999) and member (1976–1981), Surgical Education and Self-Assessment Programs 3 through 10; member, Graduate Medical Education Committee (1992–1998); member, Committee on Surgical Education in Medical Schools (1987–1996); Chair, Nominating Committee of Fellows (1995); member, Task Force for Physician Reimbursement Review Committee (1989); member, Continuing Education Committee (1978–1988); and member, Public Service Announcement Task Force (1983).

In addition to Dr. Numann’s involvement with the College, she has also been a leader of numerous organizations within the surgical community, including Chair of the ABS (2001–2002) and founder of the Association of Women Surgeons (1981), as well as an active member of the American and International Association of Endocrine Surgery, International Society of Surgery, American Society of Breast Surgeons, American Surgical Association, Association for Academic Surgery, Association for Surgical Education; Association of Veterans Administration Surgeons, Central New York Surgical Society, and Society of University Surgeons.

Moreover, Dr. Numann has been a key contributor to the surgical profession through a wide body of published works that she has authored or co-authored.

In recognition of Dr. Numann’s continued and dedicated service to and on behalf of the College and the surgical community, the Board of Regents is pleased to present Dr. Numann with the College’s highest honor, the 2006 Distinguished Service Award.
College names six Honorary Fellows in 2006

Honorary Fellowship in the American College of Surgeons was awarded to six prominent surgeons from Switzerland, Venezuela, Mexico, France, Finland, and Ireland during Convocation ceremonies at last month’s Clinical Congress in Chicago, IL, that preceded the official opening of the College’s annual Clinical Congress. At the awards presentation—one of the highlights of the Congress—the following recipients were honored:

- **Sirpa Asko-Seljavaara, MD.** Dr. Asko-Seljavaara is a senator in the Parliament of Finland.
- **Jorge Cervantes, MD, FACS.** Dr. Cervantes is head of the surgical program at American British Cowdray Hospital, Mexico City, Mexico.
- **Claire Nihoul Fékété, MD.** Dr. Fékété is chief of the department of pediatric surgery, Hôpital des Enfants Malades, Paris, France.
- **Armando Marquez-Reveron, MD.** Dr. Marquez was professor of surgery, Central University of Caracas, and staff surgeon, Centro Médico de Caracas and Centro Médico Docente La Trinidad, Caracas, Venezuela.
- **Maurice E. Müller, MD.** Professor Müller is a founder of the Maurice E. Müller Foundation for Continuing Education, Research, and Documentation in Orthopaedic Surgery, Berne, Switzerland.
- **Niall O’Higgins, MB, BCh, BAO(Hon).** Professor O’Higgins is chair of surgery and a senior professor of surgery, University College, Dublin, Ireland, and consultant surgeon, St. Vincent’s University Hospital, Dublin.

The Honorary Fellowships were presented on behalf of the College by the following individuals: Mary H. McGrath, MD, MPH, FACS, San Francisco, CA; Carlos A. Pellegrini, MD, FACS, Seattle, WA; Andrew L. Warshaw, MD, FACS, Boston, MA; Eduardo A. Souchon, MD, FACS, Houston, TX; Bruce D. Browner, MD, FACS, Farmington, CT; and John E. Connolly, MD, FACS, Orange, CA.

This year, 1,186 surgeons from around the world were admitted into Fellowship during the College’s Convocation ceremonies.

Sir Rickman Godlee, President of the Royal College of Surgeons (England), was awarded the first Honorary Fellowship in the College during the College’s first Convocation in 1913. Since then, 401 internationally prominent surgeons, including the six chosen this year, have been named Honorary Fellows of the American College of Surgeons.

Citation for Sen. Sirpa L. Asko-Seljavaara, MD

by Mary H. McGrath, MD, MPH, FACS, San Francisco, CA

Madam President, it is an honor to present to you Sirpa L. Asko-Seljavaara of Helsinki, Finland, for Honorary Fellowship in the American College of Surgeons.

Senator Asko-Seljavaara is a plastic surgeon who has been serving since 2003 as a member of the Parliament of Finland. She is the vice-president of the Parliament Members of Uusimaa (South Finland) and is a member of the Administration Committee and the Committee of Health and Social Affairs. Senator Asko-Seljavaara also sits on the City Council of Helsinki and is the vice-president of the Health Committee of Helsinki City.

Her interests in the parliament are health care, physicians and other health care personnel, senior citizens, university politics, maritime interests, and environmental issues.
Sirpa graduated from high school in Lahti, a little city 100 km north of Helsinki. Her hobbies as a teenager were girl scouting and horseback riding. She met her husband, Seppo Seljavaara, during a teenage theater production in which they both had acting roles. Sirpa and Seppo have been married 38 years and have two adult sons and three grandchildren (Lumi who is five; Luka, age two; and Rasmus, who is also two). Sirpa’s and Seppo’s hobbies are sailing and spending time in their summer house in the Finnish Archipelago.

Dr. Asko-Seljavaara completed training in surgery and plastic surgery at the University of Helsinki and joined the faculty there in the department of plastic surgery. She became chief of the department of plastic surgery at Helsinki University Hospital in 1990, was named professor by the president of Finland in 1994, and was announced as the professor of plastic surgery at Helsinki University in 2002.

Sirpa is one the world pioneers in reconstructive microsurgery. She did her first free microvascular flap in the late 1970s. Since then, she has replanted and transplanted thousands of free flaps to cover leg injuries, head and neck tumors, and breast reconstructions. She developed and taught microvascular and flap dissection techniques throughout Scandinavia and Europe and took her expertise to Russia, Taiwan, and Saudi Arabia.

She has made major contributions as one of the international leaders of microsurgical innovation, publishing more than 300 scientific papers in national and international journals. Her research over two decades has focused on the development of new microneurovascular flaps, the pathophysiology and blood flow dynamics in free flaps, and the hemodynamics and wound healing of burns.

Sirpa has been a guest lecturer at multiple international plastic surgical and burn society meetings. She gave the 1984 Everett Evans Memorial Lecture for the American Burn Association and became an honorary member of the organization. She was overseas visiting professor for the American Society of Plastic Surgeons Educational Foundation in 1991. In 1997, she gave the named address, the Maliniac Memorial Lecture, at the annual meeting of the American Society of Plastic Surgeons in San Francisco, CA. She was awarded the Pohjola Award by the Finnish Medical Foundation in 2001 and became an honorary member of the European Association of Plastic Surgeons in 2006.

She was president of the Finnish Surgical Society from 2000 to 2002. Prior to that, she served as president of the Finnish Association of Plastic Surgeons from 1983 to 1985 and as president of the European Association of Plastic Surgeons from 1996 to 1997. She sat on the executive committee of the International Confederation of Plastic and Reconstructive Surgery from 1995 to 2003, and on the executive committee of the European Burn Association from 1992 to 1995. In all, she is a member, honorary member, or corresponding member of 18 international medical societies and on the editorial board of nine international medical journals.

Sirpa’s great joy is teaching, and she has supervised eight graduate students for their doctoral examinations in the faculty of medicine at Helsinki University. The thesis of her recent 2006 doctoral candidate is titled "Functional Outcomes after Free Flap Reconstructions in Oral and Pharyngeal Cancer."

Sirpa is an extraordinary woman—a plastic surgeon, a senator, a researcher, a teacher. She has an incisive mind and is courageous and independent in a most charming way. I am proud to recognize her as a colleague, role model, and friend. Madam President, it is my privilege to present this distinguished plastic surgeon, Sen. Sirpa Asko-Seljavaara, for Honorary Fellowship in the American College of Surgeons.
Madam President, it is my pleasure to introduce Dr. Jorge Cervantes, a Fellow of the American College of Surgeons and a most distinguished surgeon from Mexico City.

Dr. Cervantes was born April 27, 1938, in the small town of Guasave in the state of Sinaloa, Mexico, where his family had lived for several generations. He bore the name of the most famous writer in the Spanish language and exhibits even to-day many of the emotional traits of that writer's main character, Don Quixote de la Mancha. His first five years of education were in a small “centro escolar” in Guasave. At a very early age, his parents sent him away to pursue his high school education elsewhere since there were no such facilities in Guasave. Alone, and for the first time in a semi-foreign place, young Jorge developed some of the attributes of leadership that would characterize his future life when he was elected to the presidency of his school’s student association.

Upon completion of high school, he moved to Mexico City, where he entered the Autonomous University of Mexico in 1955 and obtained his bachelor’s degree in 1957. By then, he had developed an interest in medicine and was admitted to the medical school at the University of Mexico when he was only 19 years of age. An important event that would have a profound influence in his life also occurred at this early age. While bicycling one day, he met a young lady by the name of Lucero. It was love at first sight and they would be married five years later. The Spanish word Lucero refers to light, specifically the light associated with the rising morning sun. It is the light that guides the farmers as they start their morning chores. It is the light that brings the songs of the birds that brighten the day. Lucero has been the light that has provided Jorge with his guidance and his cheer. Together they have three daughters and two sons, all of whom are in the audience today.

Toward the end of medical school, Jorge applied to the Organization of American States for a special scholarship that would allow him to come to Washington, DC, first for a rotating internship and then for a full residency at Georgetown University. At the completion of his training, he joined the faculty as an instructor and remained there until the day he successfully completed his American Board of Surgery certification. At that time, and following the commitment to his family and to himself, he returned to Mexico City to join the American British Cowdray (ABC) Hospital and its school of medicine as a clinical professor. He has remained in the same institution for more than 30 years, rising through the ranks to become the chief of surgery, organizing a service that is second to none and introducing to Mexico the field of minimally invasive surgery. In a very recent ceremony, he was given the ABC’s gold medal for achievement and service in recognition of his long-standing service to the institution.

His leadership and his American surgical education manifested themselves during these years in many ways. Dr. Cervantes was instrumental in the development and growth of the Mexico Federal District Chapter of the American College of Surgeons and was one of the founding members of the Mexican Society of Surgery in 1977, a society that would make him its president in 1983. He has been instrumental in the organization of several Latin
American meetings in Mexico and has played a major role in the Latin American Federation of Surgery and, most recently, in the International Society of Surgery. He has been a constant promoter of excellence in surgery and has written two books, approximately 100 chapters, and 200 papers on all aspects of medicine, and he participates actively on many editorial boards in the U.S., Mexico, and Colombia.

Madam President, it is with great honor that I now present to you a great surgeon, a powerful leader of surgery in Latin America and the Spanish-speaking world, a teacher of the art and science of surgery, and a great friend, Dr. Jorge Cervantes, to be admitted to Honorary Fellowship in the American College of Surgeons.

Citation for Prof. Clair Nihoul Fékété

by Andrew L. Warshaw, MD, FACS, Boston, MA

Madam President, I am honored to present to you Prof. Claire Nihoul Fékété of Paris, France, for Honorary Fellowship in the American College of Surgeons.

Professor Fékété was born in Belgium and did her medical training in Paris. She trained in pediatric surgery with Professor Pellerin at the Hôpital des Enfants Malades in Paris and with Peter Rickman at the Alder Hey Children’s Hospital in Liverpool. During that time, she visited the unit of W. Hardy Hendren at Massachusetts General Hospital (MGH) and began an enduring friendship and professional association with Prof. Patricia Donahoe, like her a world leader in pediatric surgery, whose work focuses on gender development and repair of intersex anomalies. She has been a professor of pediatric surgery since 1975 at the Medical School of the Paris 5th University. In 1998, she was named Professor Exceptional Class. In 1990, she became chief of the department of pediatric surgery at the Hôpital des Enfants Malades.

In addition to her roles in the important medical and scientific societies of France, Professor Fékété has been active in delivering surgical care to the underserved abroad. For many years, she has been a council member of the Chain of Hope, which provides pediatric surgical services in underdeveloped countries in Africa and Southeast Asia. Since 1988, she has gone on missions to perform operations for congenital malformations and to teach in West Africa. She is the founder of “Hand in Hand,” a benevolent association for hospitalized children. She is an honorary member of the surgical section of the American Academy of Pediatrics, the American Pediatric Association, and the British Association of Pediatric Surgeons from which she received the Forshall Medal in 2003. In 2004, my institution, MGH, had the privilege of hosting her as the fifth annual MGH/Johns Hopkins lecturer and visiting professor.

Professor Fékété’s research and clinical accomplishments have been broad and deep. Her group was the first to define a gene mutation in Hirschsprung’s disease. They were also the first to discover the molecular pathogenesis of neonatal hyperinsulinism and to work out effective methods of determining the focal form from the diffuse form, thereby saving many babies from 95 percent pancreatectomy. She is regarded as one of the world authorities on intersex abnormalities, to which she has contributed enormously through her innovative surgery and her understanding.

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of the molecular pathogenesis of these disorders. Most recently, her group has also discovered additional genetic defects contributing to the Rokitansky Syndrome, which causes absence of the Mullerian structures. She is the author of approximately 200 publications.

One of Professor Fékété’s great skills is regional organization. She has contributed greatly to the organization of the referral of infants diagnosed prenatally with congenital anomalies in the Paris region and has served as an expert at the Court of Appeal of Paris for Fetal Medicine and Pediatric Surgery. She is working with colleagues around Europe to establish an extensive European database for rare malformations for which they are seeking to define therapeutic classification and treatment protocols. For her many contributions, she has been awarded a Chevalier de l’Ordre National du Mérite in 1980 and the Chevalier de l’Ordre de la Légion d’Honneur in 1999 by the president of France. She was recently appointed to serve as the representative from France to the European Union to deal with health issues.

For diversion, Professor Fékété loves music and sailing and has successfully raised two sons.

Madam President, it is my privilege to present this world-renowned surgeon, Prof. Claire Nihoul Fékété, for Honorary Fellowship in the American College of Surgeons.

Citation for Prof. Armando Marquez-Reveron

by Eduardo A. Souchon, MD, FACS, Houston, TX

Madam President, Fellows and Guests. It is with great pride and honor that I present to you Prof. Armando Marquez-Reveron for Honorary Fellowship in the American College of Surgeons. Armando Marquez-R was born in Caracas, Venezuela, in 1921. He received his medical (MD) degree in 1945 from the Central University of Caracas. At that time, he started his academic career as an instructor to medical students, teaching the art of physical examination in the school of medicine.

His interest in the field of oncology started when he was a medical student and he noticed that cancer patients were placed in the most distant and lonely rooms of the hospital wards. When he asked the nurses the reason why that was done, the answer he received was: "There is nothing we can do for those patients. They are going to die anyway, so we keep them far away from the others who we can cure."

This reply did not concur with Armando’s ideas of being a physician. He decided to become a junior resident in the recently opened Oncologic Hospital of Venezuela, The “Luis Razetti Institute.” It was at that center where he learned the basic principles of surgical oncology from one of his mentors, Dr. Bernardo Guzman-Blanco, who induced him to go to “the ‘Memorial’ Hospital,” later Memorial Sloan-Kettering (MSKCC). At MSKCC, he rotated under the tutelage of the legendary surgeons such as Hayes Martin, George Pack, Alexander Brunshwig, Frank Adair, Edward (Ted) Miller, and so on. There he earned the nickname of “Armando Commando,” when he became the star fellow performing the “commando” operations of the head and neck, as well as radical pelvic exenterations. He also learned the team approach...
to the treatment of the cancer patient with radiation and chemotherapy applied as adjuncts for the treatment of patients with neoplastic diseases.

After his chief residency, he stayed at MSKCC for three more years. When departing for his native Venezuela, one of his mentors, Dr. George Pack, wrote him this note:

My dear Armando: One of the rich rewards which comes to the practitioner and teacher of surgery, is the reflected credit which accrues to him through the accomplishments of his pupils. What I am attempting to say, my dear Armando, is how proud I am of you, and how I rejoice in your inevitable great destiny in our chosen and mutual profession. Sincerely, George Pack (May 13, 1958).

Armando went back to Caracas and started a campaign to educate surgeons and residents in radical surgical techniques and comprehensive care for cancer patients as well as teaching rudiments of physical therapy and rehabilitation.

Later, Armando was an invited guest as an instructor at MSKCC for the postgraduate courses for the treatment of head and neck malignancies organized by Dr. John Conley at Columbia University. Armando was appointed chief of the surgical gynecologic service of the Luis Razetti Hospital. His leadership in the fight against cancer continued as he became president of the Latin American Cancer Federation, consultant to the Minister of Health in Venezuela on cancer-related problems, and president of the Venezuelan Oncology Society.

He earned numerous national and international decorations and mentions related to cancer patient care and well being. He became a member of numerous surgical societies, but he was particularly dedicated to the American College of Surgeons and always encouraged young surgeons to join the ACS. He always said the College is “the only society dedicated to the well being of patients by improving the quality of the surgeons and keeping them honest.”

He dedicated extra time in educating students at the medical school where he became full professor and the mentor of many generations of surgical residents. Armando became a legendary surgeon as he operated tirelessly, performing radical head and neck surgery as well as radical gastrointestinal and gynecologic surgery with exemplary, clean surgical technique and excellent post-operative care. He set examples of continuity of care when he dedicated many hours in his clinic, personally following all the patients. He published many surgical papers, articles, and book chapters in the Hispanic literature.

Armando Marquez-Reveron became a true surgical maestro to residents during his career as professor in the medical school. He was not only a maestro in medical-related issues but also in other topics such as opera, art, antiques, wine, and dressing codes. He became an enthusiast of the yearly Salzburg festival, an event that he attended for almost 40 years until he physically could not travel anymore.

Armando was a maestro in surgery and the art of patient care and a storyteller. He was legendary for remembering data from the history of surgery and of his native Caracas, as well as jokes that he told to make patients and people around him happy. He was a true maestro as a human being, as a son, as a father, and as a husband, and he was a good friend to all.

At the age of 84, he became a cancer patient and as such he became an example to all when he stated, “I need to finish this chemotherapy quickly so I can go back to work and care for my patients.” Unfortunately, he cannot be here to receive one of the highest honors the College can give to one of its most devoted members. Armando died on June 9.

He was so proud when he was notified about the nomination as honorary member. In the name of his family, his wife and teammate in surgery, and in the name of all the Venezuelan surgeons, we thank the College for this special posthumous nomination.

Madam President, it is a privilege, a pleasure, and an honor to present to you my mentor, teacher, and friend, Maestro Armando Commando Marquez-Reveron, for an Honorary Fellowship in the American College of Surgeons.
Citation for Prof. Maurice E. Müller

by Bruce D. Browner, MD, FACS, Farmington, CT

Madam President, I am honored to present to you Prof. Maurice E. Müller from Bern, Switzerland, for Honorary Fellowship in the American College of Surgeons. Professor Müller has had a distinguished career and has contributed greatly in many areas of orthopaedic surgery, but he is best known as the architect of modern fracture surgery.

Prior to his revolutionary efforts, fractures had been treated for decades with plaster and traction. An excessive emphasis on rest, thought necessary for boney union, led to frequent joint stiffness and muscle atrophy. The turning point in his career came in February 1950 when he visited Robert Danis in Brussels, Belgium. Danis had achieved absolutely stable osteosynthesis through plates with compression devices. His methods allowed the patient immediate mobilization of the injured extremities and prevented the stiffness and disability that were usually seen with traditional methods. These concepts formed the basis of the system of fracture treatment that Maurice Müller subsequently developed.

He formed an association with a small group of other Swiss surgeons who were impressed with his surgical results and saw the potential for his ideas. In November 1958, they realized their dream of organizing an association for internal fixation with the formation of the Die Arbeitgemeinschaft für Osteosynthesefragen (AO), which is roughly translated into the Association for the Study of Internal Fixation.

In the succeeding 48 years, the AO has evolved from its humble beginning to become an influential international network of surgeons, scientists, educators, manufacturers, and businessmen that dominates the field of fracture surgery. Maurice Müller has been the formative genius at the center of this amazing story. Recognized early in his career for his technical mastery of hip reconstruction and fracture surgery, he also had great organizational talent. He understood that his revolutionary surgical methods could only become universal if they were promulgated by a committed group of surgeons who would continuously expand in numbers to form a school of fracture management. He applied his leadership and management skills to shape the AO to be the organization that made his vision of modern fracture management a reality.

By 1960, he had already designed a full armamentarium of instruments and implants, which served as the basis for all future developments. In an arrangement, which is still unique to this day, he negotiated to have the manufacturers return a portion of the profit on the implants to the AO to underwrite education and research. Understanding years before many others the importance of recording clinical results, he established an organized documentation process to capture information on fracture procedures performed at AO clinics throughout Switzerland and many other countries. He championed the development of a technical commission that brought surgeons, engineers, manufacturers, and marketing experts together to develop instruments and implants utilizing the information gleaned from the documentation process.

Professor Müller insisted on the development of a basic science institute to examine the biologic and mechanical basis of fracture fixation and heal...
The AO Institute in Davos became one of the world’s foremost research centers, and its investigators have elucidated important aspects of fracture healing following internal fixation.

Education has been another major interest for Professor Müller. He ensured that fracture methods be taught to surgeons through highly organized courses that included bioskills laboratories. The annual AO courses in Davos have been acclaimed as models for such educational endeavors.

The period in which I trained was the cusp of the old English system of fracture management. It was routine to keep femur fracture patients hospitalized for six weeks in traction followed by months in cumbersome plaster spica casts. We treated other fractures with long plaster casts that immobilized the joint above and below the fracture, and we kept everyone at rest.

As a chief resident in 1977, I learned of a Swiss group of surgeons called “AO” that was just beginning to introduce new surgical methods for fracture treatment to the U.S. Having developed an interest in trauma, I traveled to Davos to attend their annual course. At the center of a largely European faculty was Professor Müller, who radiated an unusual dynamism and had a larger than life presence. It was obvious that their beautifully organized Swiss-made equipment and sophisticated education methods would captivate American orthopaedic surgeons. In fact, things did change rapidly in the years following my graduation. Most of the methods I learned as a resident are now historical notes.

Gifted with extraordinary surgical talent, intellectual capacity, determination, vision, organizational skill, and charisma, Maurice Müller caused a revolutionary change in fracture management. Thousands of patients all over the world can trace their survival or recovery from skeletal injury and return to function to the tireless work of this remarkable man. Prof. Maurice Müller has definitely played a pivotal role in the history of surgery, and it is with great pride that I present him for Honorary Fellowship in the American College of Surgeons.

Citation for Prof. Niall O’Higgins

by John E. Connolly, MD, FACS, Irvine, CA

Madam President, it was my pleasure exactly 25 years ago in 1981, before this Convocation, to present Professor Eoin O’Malley, a distinguished cardiac surgeon of Dublin, Ireland, for honorary Fellowship in our College. Now tonight it is my distinct pleasure to present his first cousin, Prof. Niall O’Higgins, also of Dublin, for the same honor. Could it be that both Eoin and our Niall are descendants of the 5th century Irish warlord known as Niall of the Nine Hostages, who it is thought can be genetically traced to at least one of every 12 Irishmen worldwide?

Our Niall is the professor of surgery in the University College, Dublin, the outgoing president of the Royal College of Surgeons in Ireland, and a prodigious author of 255 articles in peer-reviewed surgical journals. He is also past-president of the World Federation of Surgical Oncology Societies; an honorary member of both the French Academy of Surgery and the Royal College of Surgeons of Glasgow; and a world-renowned authority on breast cancer, particularly on prognostic and predictive factors.

Education and medicine run
in the O’Higgins family. Both of Niall’s parents were physicians, as is his wife, Rosaleen, and one of his children.

Not only is Niall an active, accomplished surgeon, but both the current dean of his medical school and the president of his university selected him when they were housemen for further training or, as we would say, interns.

I suspect also that we have never had an Honorary Fellow more devoted to student teaching. Of the 200 students going through surgery each year at his medical school, he personally undertakes the surgical training of half of the class. It is no exaggeration that the students characterize him as a god for his devotion to their teaching. Any students who need special help get it personally on Saturdays from this professor, who graduated first place in his medical school class.

His number-one hobby is cycling—say, for example, a short jaunt of 376 miles from Bordeaux to Paris, even in a heat wave of 106 degrees! Also, he is fond of his MG sports car and camping in France with his wife and their four children each August.

Thus, it is my special honor to present this remarkable, erudite, warm, and modest surgeon for Honorary Fellowship in our College.
The American College of Surgeons Division of Education presents the **Personal Financial Planning and Management Course for Residents and Young Surgeons**, which uses an interactive/lecture format to arm surgeons with basic financial management skills. The course is designed to educate and equip young surgeons with the knowledge to manage their personal financial future, including debt management, preparation for significant life events (such as retirement or college education of their children) and proper planning for financial stresses related to their surgical practice.

**Objectives**
At the end of the course, the participants will be able to describe:
- The essentials of personal financial management as they relate to young surgeons in practice and residents and their families.
- The impact of interest rates and time upon loans, compound interest, and the implications for debt management.
- The building blocks necessary for the surgeons to invest successfully.
- The importance of time in reducing the risk of investing.
- The basics of mutual funds, stocks, bonds, and other investment vehicles.
- How to evaluate and choose a financial advisor.

**Intended Audience:**
- Surgical residents and surgeons recently in practice.

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**Fellows of the American College of Surgeons:** $120  
**Non-Fellow:** $215  
**RAS member:** $75  
**Surgical Resident, not a RAS member:** $95  

*Non-RAS residents must supply a letter confirming status as a resident from a program director or administrator, and are limited to one CD-ROM.  
(Additional $16 for shipping and handling of international orders.)

Orders may be placed through ACS Customer Service at 312/202-5474 or via the College’s Web site at:  
[www.acs-resource.org](http://www.acs-resource.org)  
For more information contact Linda Stewart at lstewart@facs.org, or tel. 312/202-5354
“Take frequent vacations from active work, to attend clinics and walk hospital wards. See things for yourself; reading alone is not enough.”

—Dr. William J. Mayo, graduation address, Rush Medical College, June 15, 1910

It was those words of Dr. William J. Mayo that inspired me to apply for the American College of Surgeons Australia and New Zealand (ANZ) Travelling Fellowship. The ANZ Travelling Fellowship was a chance for me to walk the wards and interact with surgeons who had a different style of training in a totally different health care environment. This would be an opportunity to see what was different; but as I found out, it was more of an experience that demonstrated how similar we are.

Newcastle

After approximately 23 hours of flying time, I arrived at my first stop in Australia, Newcastle, New South Wales. I had been invited to speak at the Hunter Valley Surgical Society annual meeting. As I rode into town from the airport, evidence of Newcastle’s industrial past was clearly evident. Large industrial sites lay in disrepair and there were enormous mounds of coal along the river’s edge. However, a closer look revealed a city undergoing a renaissance. The city’s waterfront is being revived with new restaurants, shops, condominiums, and green spaces. Newcastle has become a popular place for Australians to relocate. Just approximately two hours north of Sydney, there is a lower cost of living and less crowded environment without forsaking beautiful views of the ocean and a river. Also, the city sits in the center of the gorgeous countryside, which is home to some of Australia’s finest vineyards.

My host, Dr. Gerard Coren, FRACS, a general surgeon in a community hospital about 60 minutes further north of Newcastle, met me the next morning to bring me to the large regional medical center, The John Hunter Hospital. I was introduced to one of the colorectal surgeons. It was here that the question that I had in the back of my mind about this
whole trip—“How much would we have in common?”—was answered. To some extent, we had almost everything in common. We talked about the common problems I assume surgeons everywhere share: not enough time in the operating room, too long of turnover time, too much paperwork, not enough help, less resident coverage, and too much government bureaucracy.

The Hunter, as it is called, is the regional referral center for trauma, highly complex surgery, or critically ill patients. It was here that I began to notice a theme that repeated itself throughout my travels in Australia and New Zealand. Resource allocation and regionalization of care is affecting all the hospitals in ways that may not have been intended. In Dr. Coren’s smaller community hospital, there has been a shift in resources that has left it understaffed in many critical areas. This change by necessity requires more patients—even patients who could be treated in his hospital for such diseases as acute appendicitis—to be transferred to the Hunter for treatment, which, in turn, taxes the personnel and resources of the regional center for care that could and should be provided closer to the patients’ homes. This was a very important learning point, as I continue to hear about the ongoing discussions and debates about regionalization of care in the U.S.

The Hunter is a large teaching hospital that provides nearly all the tertiary care in the region. I had the great opportunity to meet with the junior and senior registrars to review cases. I presented a few complex inflammatory bowel disease cases. Most memorable was a comment from one of the junior registrars when asked what he would do for a very complex case of multiple enterocutaneous fistulas. His response was that although he didn’t know what to do, he certainly would “love to be at the operation”—surgeons are surgeons no matter where they practice, and I felt right at home.

**Hunter Valley Surgical Society**

The Hunter Valley Surgical Society meeting had a number of very stimulating presentations and discussions about the care of patients with intestinal malignancies. I gave two talks at the conference. The first presentation was on my institution’s multidisciplinary approach to advanced colorectal cancer, and the second was a discussion of how to assess surgical quality. There was a presentation by a medical oncologist about the new chemotherapeutic regimens for colon and rectal cancer. Although the talk was informative, the most important and telling point was in the discussion that followed. It was here that I was introduced to another theme that I would see again during my visit: the important role evidence-based medicine has on the allocation of resources in Australia and New Zealand. Nothing highlighted this more than discussing the role of the new biologic therapies in the treatment of advanced colorectal cancer and the astronomically high cost relative to the benefits in survival. This point led to an animated roundtable.
discussion on how to deliver quality care with limited resources and some of the very unique challenges that the Australian government faces.

It was fascinating for me to learn how the Australians are trying to deliver prenatal and obstetric care to a region the size of a couple of New England states but with a population of only 250,000 people. Although I am used to hearing about access problems in the U.S., this was a very unique situation that, although difficult, the Australian government and the Royal Australasian College of Surgeons (RACS) are trying to solve with ingenuity and by taking advantage of new communication technology. I will be very interested to see how they solve this problem because I think there will be a great deal to learn that could be used in the U.S.

Although it may sound as if I spent most of my time touring hospitals and talking, Dr. Coren and his colleagues certainly showed me a wonderful time with a festive dinner at which I sampled a number of the outstanding regional wines. The next day was spent touring the region after a morning on the ocean where we caught our lunch. Dr. Coren was kind enough to bring me to his beautiful home in the countryside where we grilled our morning catch and I could visit with his family. I could not have asked for a better start to my traveling fellowship.

Sydney/RACS congress

After three great days in Newcastle, I headed to Sydney for the annual RACS scientific con-
gress. The congress was held at the Sydney Convention Center on Darling Harbor. It was four days of lectures, seminars, and presentations. Having a limited number of obligations, I was free to attend many different lectures. The diversity of topics was outstanding. They ranged from the newest information on colon cancer genetics, to the history of military surgery in Australasia, to discussion of how to train residents and how to assess quality outcomes. Again what I was most struck by was that the issues discussed on nearly every level were similar to talks or discussions that I had heard discussed at the American College of Surgeons’ Clinical Congresses over the last few years. It seems that the challenges facing American surgery are not unique to us but rather to the practice of surgery in general. From what I heard in Sydney, there is much that we can learn and share with our colleagues Down Under.

There were a number of highlights for me at the congress. Certainly, the biggest was giving the Chapter of the American College of Surgeons’ lecture at the President’s plenary session. I discussed the evolution of the ileal-pouch anal anastomosis procedure and the current state of laparoscopy for this procedure. It was a distinct honor that I will always remember. Three other memorable highlights occurred over food and drink. I was asked to join the colorectal surgeon’s banquet held in a facility overlooking the Sydney skyline. Here I was able meet with colleagues that I knew in my specialty and many of the famous—or, as they like to refer to themselves, “infamous”—colorectal surgeons from Australia and New Zealand who I had known about from reading their multiple important publications. I also attended the Chapter of the American College of Surgeons luncheon. Here I met Stephen Deane, MBBS, FACS, the Past-President of the chapter, and Ross Blair, MB CHB, FACS, the current President. It was a wonderful lunch. Through
our conversations, I discovered the members of the chapter are particularly proud to be members of the RACS as well as the American College of Surgeons. The last social function was a gala dinner for the congress. It was a formal affair held across Sydney Harbor at Luna Park. We crossed the harbor at night on one of the harbor ferries. Although Sydney is a particularly beautiful city during the day, the view of the skyline, the famous harbor bridge, and opera house at night was spectacular. The dinner was highlighted by performances by members of the Sydney Opera. During this wonderful evening, I met Dr. John Royale, FRACS (retired), who was a former president of the RACS and is the current unofficial historian for the RACS. It was a great opportunity to learn about the structure of the RACS and how it came into existence. The most fascinating thing I learned was that the founders of my institution, the Mayo Clinic, were personally involved in initiating the process that lead to the formation of the RACS.

Auckland

After the Congress was over, I headed for Auckland, New Zealand. My host in Auckland was Dr. Eva Juhasz, FRACS, a colon and rectal surgeon at North Shore Hospital, one of three large public hospitals in the metropolitan area. I had contacted Dr. Juhasz because she had completed a portion of her colon and rectal surgery fellowship at the Mayo Clinic. During my day with Dr. Juhasz, I observed her doing a completion proctectomy for Crohn’s disease, toured the hospital during her ward rounds, and attended the hospital’s multidisciplinary colorectal tumor board.

This experience was really my first opportunity to get a brief glimpse of operating room procedures and of the hospital system in Australia and New Zealand. Again, what impressed me was the emphasis on measuring quality and efficiency for continuous process improvement. The issues that were being discussed such as operating room safety and patient outcomes are all the same things that U.S. surgeons are focusing on at this time.

One of the many processes I observed and internalized was a specific method of “counting” sponges, which I have brought to my operating room to see if it might be a practice that
could be implemented to try to further improve our OR’s safety and quality.

I spent two days in Auckland before driving south on the North Island. I spent a morning visiting with Dr. Blair in Hamilton at his clinic and learning how the private versus public system of care works in New Zealand. We then went on a walking tour of the city. The highlight of the tour was visiting the Maori Heritage Museum. This was a fantastic place to learn about the exceedingly interesting history of the indigenous people of New Zealand and how their culture and way of life were changed by the establishment of European settlements.

After leaving Hamilton, I headed to the geothermal hot springs in Rotorura. This region is certainly worth the day and a half that I spent there, as I have never visited any place quite like it. I guess I could say that it is perhaps one of the most geographically diverse and shockingly beautiful places I have ever visited. In a matter of a few hours, I traveled through an arboreal forest, to a rain forest, finally arriving on a black sand beach.

My tour of the North Island ended in Wellington, the capital of New Zealand. From Wellington, I took the car ferry across to the South Island. Along the way, the ferry was accompanied by dolphins that followed us all the way to our port along an inland waterway. As luck would have it, the ferry dropped me off in one of the best wine regions of the world. The Marlborough region is world-renowned for its wonderful white wines. However, I must say that I found many of the red wines to be outstanding, much to the dismay of many of my Australian colleagues who I was to meet later in the trip.

**Christchurch**

Although I could have stayed in the wine region for a few more days, I pressed on southward toward Christchurch, a beautiful city, to visit with Dr. Frank Frizelle, FRACS. The Christchurch Hospital is a very large tertiary referral center. I spent the day with Dr. Frizelle, touring the hospital, going on rounds with his fellows, and visiting the colorectal research facilities.

My visit to Christchurch was a little different than the one others might experience. I arrived in the city during a frenzy of activity. As it turned out, the weekend of my visit was the same as the championship rugby match for the Australia and New Zealand Rugby Union. The championship was between two New Zealand teams, one from Christchurch and the other from Wellington. Rugby was completely new to me but, as I quickly learned, this match was the equivalent of the Super Bowl, the World Series, and the National Collegiate Athletic Association Final Four basketball tournament, all rolled up into one. I enjoyed the match with Dr. Frizelle and his family after a delightful dinner, although I had no idea what was happening on the field.

**Melbourne**

Having finished my tour of New Zealand, I headed to my last stop, Melbourne. During
my brief stay in Melbourne, I was scheduled to meet with the colorectal surgeons at Cabrini Hospital. Two members of the group had done a portion of their colorectal training at the Mayo Clinic. After catching up on some gossip, we set about touring the hospital, the endoscopy suite, and the operating theaters. The day in the hospital ended with a mixer with surgeons from other hospitals in the city and the surgical clinical research staff at Cabrini.

To end the evening, we enjoyed a fabulous dinner at the home of Dr. Paul McMurrick, FRACS. The food was outstanding, the conversation was even better, and the Australian red wine was superb. When I mentioned my fondness for a number of New Zealand red wines, I was quickly and loudly informed that obviously my ability to discern high-quality wine was questionable.

I spent the next day touring the RACS headquarters. My tour guide was Dr. Royale. We visited all the meeting rooms, which housed a collection of beautiful antiques and paintings given to the RACS. Every one of those items had a fascinating story. I was also allowed to browse through the Gordon Craig Library, which contains an extensive collection of antique medical books.

Lastly, and most personally interesting to me, Dr. Royale laid out the history of how the RACS came into existence. As it turns out, an important impetus to its formation came from a deep friendship between the famous Australian surgeon, Hugh Devine, and the Mayo brothers, Charles and William. Both brothers, representing the American College of Surgeons, had toured Australia and New Zealand in 1924. The next year, Dr. Devine spent time in Rochester, MN, at the Mayo Clinic, where he traveled down the Mississippi River on the Mayos’ riverboat. To make the story complete, John showed me the chairs presented to the RACS by the Mayo Clinic in honor of its formation when Charles W Mayo was made an honorary member of the RACS. These three ceremonial chairs were for the president, vice-president, and secretary of the college. They currently sit in one of the large meeting rooms in the RACS headquarters in Melbourne.

Again, this small bit of history only further reinforced what I had learned since arriving in Newcastle: although we may be separated by more than half a world, we share more similarities than differences.

Lessons learned

Overall, my time in Australia and New Zealand as the American College of Surgeons Australia and New Zealand Travelling Fellow was one of the most rewarding personal and professional experiences that I have ever had. To be able to see such beautiful places and to interact with such wonderful people who happen to be very passionate about surgery and quality medical care was truly a unique opportunity. I learned that many of the problems relative to medical care and surgery that we are dealing with in the U.S. are similar to issues being dealt with in Australasia. The RACS’ past and current emphasis on the “audit” or surgeon-specific outcomes measures should be a model for the ACS’ push toward outcomes analysis of its members in order to improve quality of care. Although the same problem may have different solutions or approaches for different groups, it is important to note what others have done to determine if their solution is appropriate for us.

Lastly, the most long-lasting impact of this fellowship was the relationships formed. It is one thing to fly into a country to give a talk, but it is an entirely improved experience to also spend time “walking the wards,” and sharing a meal turns colleagues into friends. Already I was able to return the favor by hosting Dr. Deane at my institution before his visit to the Clinical Congress in October. For these relationships and experiences I had while visiting Australia and New Zealand, I am truly grateful to the American College Surgeons and the RACS Chapter of the American College of Surgeons for selecting me as the 2006 ANZ Travelling Fellow.

Dr. Cima is a consultant in the division of colon and rectal surgery at the Mayo Clinic, Rochester, MN.
I was honored and thrilled when chosen as the American College of Surgeons Traveling Fellow to Germany for 2006. The opportunity to observe surgery as it is practiced in Germany and to participate in the annual meeting of the German Surgical Society was very important to me. I have a strong professional interest in surgical science reported from Germany today and the history of German surgical scholars. Most agree that Theodor Billroth and his protégé, Emil Kocher, who trained and practiced in Germany, are the founders of modern abdominal and general surgery. The cornerstones of their approach to surgical problems were clinical excellence and investigative principles.

My journey actually began during the ACS Clinical Congress in San Francisco, CA, in October 2005, when I met my sponsor for the German fellowship, Dr. Norbert Senninger, professor of surgery at the University of Muenster. Dr. Senninger was a wonderful coordinator and host, who went out of his way to meet with me ahead of time and made my visit seamless and rewarding. When I arrived in Berlin for the beginning of the annual meeting of the German Surgical Society (Deutsches Gesellschaft fur Chirurgie, or DGC), Dr. Senninger kept in contact with me, often by cell phone, throughout the large, bustling city and impressive surgical congress.

Berlin is a beautiful European city, with a long history and a vibrant future. The people were friendly and seemed very cosmopolitan. Berlin is a true international center. The DGC was equally impressive. I was struck by the quality of the presentations and the enthusiasm of the attendees. Many sessions were standing-room only or completely filled. I was privileged to present my latest work and thoughts on incisional hernias during a general and laparoscopic surgery session mid-week. The German and other European presenters were considerate linguistic hosts, often speaking in English for the international audiences. An international surgeon’s trick I witnessed for the first time was to present written text or images (for example, via PowerPoint) in German but lecture in English, or vice versa.

Throughout the meeting, good food and refreshments were aplenty. On the final evening of the German Congress, I was the guest of president H. D. Saeger, MD, chief of visceral surgery at the Technical University of Dresden. The black-tie affair was held in the beautifully renovated Deutsche Telekom Building, inside what was formerly East Berlin. It was exciting taking the Berlin Metro into East Berlin and walking past historic places like the German State Opera House and the Max-Planck Institute on the way to the president’s ball.

**Being a tourist**

Saturday was my only agenda-free day of the whole visit. I used the time to get an up-close look at the famous city of Berlin. I caught the U-Bahn (subway) at the Charlottenburg station and rode to the Bahnhof Zoological Garden, affectionately known as the “Bahnhof Zoo.” The station and its street side were bustling with young and old from around the globe. I walked into the Tierpark,
the Berlin equivalent of New York’s Central Park but with a famous zoo within, until I arrived at the Siegessäule (Victory Column). The Siegessäule is one of the more famous sights of Berlin, designed by Heinrich Strack in 1864 to commemorate the victory of Prussia in the Danish-Prussian war.

Further along my long walk, I approached the center of the German government, the newly renovated Reichstag. Berlin was reestablished as the capital of the reunified Germany soon after the fall of The Wall in 1989. I was intrigued by the juxtaposition of a large Soviet military cemetery and memorial shrine immediately adjacent to the center of the German government. A little further into my walk, I stood beneath the equally famous Brandenburg Tor, the historic eastern gateway to Berlin.

Hannover

On Sunday, I traveled by train to the University of Hannover. There, my host, Prof. Ferdinand Koeckerling, chief surgeon (Chef Arzt), arranged for me to stay at a beautifully renovated hotel, the Kaiserhof, right on the main square in the center of Hannover, conveniently located across from the main train station (Hauptbahnhof). That evening, I joined Dr. Koeckerling and his family and friends for a wonderful German meal on the shores of Lake Machsee. Traditional white asparagus was in season and prepared in many different ways.

Dr. Koeckerling is a skilled laparoscopic surgeon who has led clinical trials validating minimally invasive inguinal hernia repair. He has developed a technique, with great attention to anatomic detail, that results in outcomes equivalent to any of the open operations with the advantages of minimal incisions. His scientific approach to this common surgical problem will contribute to the advance of laparoscopic surgery in general. Dynamic reconstruction of the abdominal wall during ventral hernia repair and the importance of the linea alba was another principle I appreciated in observing Dr. Koeckerling.

Aachen

My next stop was the University of Aachen, tucked in the western border of Germany where Germany, Belgium, and the Netherlands come together. In fact, my hotel was in the Netherlands, whereas my visit to the University of Aachen was in Germany. The department of surgery is led by Prof. Volker Schumpelick. Dr. Schumpelick is chief surgeon and renowned for his academic approach to surgical problems. The offices and hallways around the surgical wards proudly display posters outlining state-of-the-art scientific presentations made by the Aachen group around the world. Dr. Schumpelick is also the incoming president of the German Surgical Society.

Surgeons in Aachen are especially well-known for their basic descriptions of collagen isoform expression during wound healing and hernia formation. In Aachen, I had the opportunity to present data from my own wound healing laboratory and subject the work to the rich criticism of the Aachen surgical scientists. I was also impressed by the high volume of operations performed at the University of Aachen and the talented team of junior staff surgeons (Oberarzten) who support Dr. Schumpelick. The evening was spent on the center square, enjoying Aachen beer and more white asparagus. Aachen also has a rich history, including housing the site of the 9th century winter home of Karl the Great (Charlemagne).

Germany’s impact on surgery

In the end, my traveling fellowship to Germany was a success and exceeded all of my goals. The chance to witness surgical art and science firsthand confirmed my belief that modern surgery owes a great debt of gratitude to its German roots. And today, modern German surgical scientists carry on that important tradition. I also respected the ability of German surgeons to balance a rigorous day’s work with the appreciation of good food and friends. From the impressive German Surgical Congress to the inner laboratories of Aachen, German surgeons continue to serve society with competent and compassionate care and a continual drive to innovate and improve.

Dr. Franz is an associate professor of surgery at the University of Michigan in Ann Arbor.
to increase opportunities for collaboration.

As a member of the National Quality Forum (NQF), an organization that endorses performance measures for public reporting, the College comments and votes on many quality initiatives and is actively involved in NQF projects. ACS Executive Director Thomas R. Russell, MD, FACS, serves on the steering committee of the AQA (formerly the Ambulatory Care Quality Alliance), a multistakeholder organization concerned with the implementation of performance measures, and Dr. Opelka chairs the AQA surgery/procedure performance measurement workgroup. As mentioned previously, the College has been involved in measure development as a lead organization in the PCPI and serves on the PCPI Executive Committee.

The College continues to advocate that P4P programs should include evidence-based measures, improve quality for the surgical patient, reduce data collection and submission burden for the surgeon, and adequately reimburse surgeons for the additional obligations.

References


WHAT SURGEONS SHOULD KNOW ABOUT, from page 11
The International Relations Committee of the American College of Surgeons announces the availability of a travelling fellowship, the Australia and New Zealand (ANZ) Chapter of the American College of Surgeons Travelling Fellowship.

**Purpose**

The purpose of this fellowship is to encourage international exchange of information concerning surgical science, practice, and education and to establish professional and academic collaborations and friendships.

**Basic requirements**

The scholarship is available to a Fellow of the American College of Surgeons in any of the surgical specialties who meets the following requirements:

- Has a major interest and accomplishment in basic sciences related to surgery
- Holds a current full-time academic appointment in Canada or the U.S.
- Is younger than 45 years on the date the application is filed
- Is enthusiastic, personable, and possesses good communication skills

**Activities**

The Fellow is required to spend a minimum of two or three weeks in Australia and New Zealand:

- To attend and participate in the Annual Scientific Congress of the Royal Australasian College of Surgeons (RACS), which will be held in Hong Kong, China (May 12–15, 2008)
- To participate in the formal convocation ceremony of that congress
- To attend and address the ANZ Chapter meeting during that congress
- To visit at least two medical centres in Australia and New Zealand before or after the Annual Scientific Congress of the RACS to lecture and to share clinical and scientific expertise with the local surgeons

In the event that the selected applicant is from a surgical specialty that is not participating in the RACS Congress, specific negotiations will be necessary to ensure the Travelling Fellow’s participation in a national meeting of that specialty.

The academic and geographic aspects of the itinerary will be finalized in consultation and mutual agreement between the Fellow and the president or designated representative of the ANZ Chapter of the ACS. The surgical centres to be visited depend to some extent on the special interests and expertise of the Fellow and his or her previously established professional contacts with surgeons in Australia and New Zealand.

The successful applicant’s spouse is welcome to accompany him or her. There will be many opportunities for social interaction in addition to these professional activities.

**Financial support**

The Australia and New Zealand Chapter and the College will provide a sum of $12,000 U.S. to the successful applicant, who will also be exempted from registration fees for the Annual Scientific Congress. He or she must meet all travel and living expenses. Senior chapter representatives will consult with the Fellow about the centres to be visited in Australia and New Zealand, the local arrangements for each centre, and other advice and recommendations about travel schedules. The Fellow is to make his or her own travel arrangements in North America, as this makes available reduced fares and travel packages for travel in Australia and New Zealand.

**Applications**

The ACS International Relations Committee will select the Fellow after review and evaluation of the final applications. A personal interview may be requested before the final selection.

The closing date for receipt of completed applications is November 15. The successful ap-
Surgeons are vital partners in efforts to eliminate surgeries on the wrong site or on the wrong patient, or performance of a wrong procedure on a patient.

The Joint Commission on Accreditation of Healthcare Organizations’ Sentinel Event Database receives approximately nine voluntary reports per month of wrong site surgeries. This rate has increased since the July 2004 implementation of the Universal Protocol for Preventing Wrong Site, Wrong Procedure and Wrong Person Surgery™. The Joint Commission reviewed 83 cases of wrong site surgery in 2005.

The top three root causes of wrong site surgery in 2005 were communication (70%), procedural compliance (64%), and leadership (46%). Communication was also the main root cause of wrong site surgery (78%) from 1995 through 2004; orientation/training (45%) and procedural compliance (30%) were the other top root causes.

The specialties most commonly involved in wrong site surgeries that are recorded in the Joint Commission database are orthopaedic surgery, general surgery, and neurosurgery; the most frequent anatomical site of wrong site surgeries among cases in the Joint Commission database are knee, foot/ankle, and hand/wrist. For example, an operating room may be set up for a right-sided knee arthroscopy on Patient A. Patient A is delayed, but Patient B—who is also scheduled for knee arthroscopy, but on the left knee—is ready and is brought into the operating room. The equipment setup is not changed, and the patient is prepped and draped and the procedure is started based on the arrangement of the arthroscopy equipment.

The hospitals and ambulatory surgery centers that reported wrong site surgeries to the Joint Commission in 2005 frequently identified surgeon override of the Universal Protocol’s strategies as a contributing factor. If wrong site surgeries are to be eliminated, surgeons must strive to achieve 100 percent adherence with the Universal Protocol’s multiple, redundant strategies. The main components of the Universal Protocol include the following: (1) a preoperative verification process, (2) marking the operative site, and (3) taking a “time out” immediately before starting the procedure.

The Universal Protocol is endorsed by more than 50 of the nation’s leading health care and medical associations, including the American College of Surgeons. Its strategies represent the consensus of the leading names in health care—the College, the Joint Commission, the American Medical Association, the American Hospital Association, the American College of Physicians, the American Dental Association, the American Academy of Orthopaedic Surgeons, the Association of peri-Operative Registered Nurses, the American Nurses Association, and many others.

Each month, this column focuses on activities of the Joint Commission that are relevant to surgeons. For more information on the Joint Commission, and to sign up for Joint Commission e-mail newsletters and announcements, visit www.JointCommission.org.
ACS Career Opportunities

The American College of Surgeons’ online job bank

A unique interactive online recruitment tool provided by the American College of Surgeons, a member of the HEALTHeCAREERS™ Network

An integrated network of dozens of the most prestigious health care associations.

Candidates:
• View national, regional, and local job listings 24 hours a day, 7 days a week—free of charge.
• Post your resume, free of charge, where it will be visible to thousands of health care employers nationwide. You can post confidentially or openly—depending on your preference.
• Receive e-mail notification of new job postings.
• Track your current and past activity, with toll-free access to personal assistance.

Employers:
• Nationwide market of qualified surgical candidates.
• Resume Alert automatically e-mails notices of potential candidate postings.
• Exceptional customer service and consultation.
• Online tracking.

Questions?
Contact HealtheCareers Network at 888/884-8242 or candidates@healthecareers.com for more information.
Operation Giving Back

Volunteer opportunities available

Beginning with this issue, we will be publishing volunteer opportunities in the Bulletin, as provided by Operation Giving Back (OGB). OGB is the volunteerism initiative of the American College of Surgeons launched in 2004 to encourage and support surgeons in their volunteer efforts. One of OGB’s goals is to provide surgeons with information to assist them in finding opportunities aligned with their personal talents, interests, beliefs, and lifestyles. This column will help to serve that purpose.

The Operation Giving Back database continues to be augmented with new volunteer agencies, including the following:

- Lumiere Medical Ministries is looking for urologists, obstetricians/gynecologists, and orthopaedic and general surgeons to provide clinical and teaching services at hospitals located in Aux Cayes, Bonne Fin, and Port-au-Prince, Haiti.
- Health Volunteers Overseas provides training and clinical opportunities for orthopaedic, maxillofacial, and hand surgeons (general, plastic, and orthopaedic surgeons with specialty training in hand surgery) in Cambodia, China, Costa Rica, Ethiopia, Honduras, Nicaragua, Peru, Samoa, South Africa, St. Lucia, and Uganda.
- Doctors On Call for Service (DOCS) invites physicians from all specialties to travel with the DOCS’ continuing medical education team to provide teaching and training for African physicians in Rwanda and the Democratic Republic of Congo.
- Domestic volunteer opportunities include Fresh Start Surgical Gifts, which coordinates actively practicing plastic, maxillofacial, and pediatric surgeons; ophthalmologists; and otolaryngologists to serve during “surgery weekends” held seven times a year in San Diego, CA.
- The New Orleans, LA, area continues to have pressing needs for medical assistance, and surgeons of all specialties are welcomed at the clinic conducted jointly by Operation Blessing and International Medical Alliance.

For more information on these and other surgical volunteer opportunities, visit the Operation Giving Back Web site at www.operationgivingback.facs.org.

Senior civilian surgeons sought for combat trauma care program

The American Association for the Surgery of Trauma and the ACS Committee on Trauma have developed the Senior Visiting Surgeon in Combat Trauma Care Program.

This program is designed to develop a collaboration between civilian trauma surgeons and military surgeons caring for wounded soldiers returning from Iraq and Afghanistan. Volunteer participants are being sought to travel to Landstuhl Regional Medical Center in Germany to lend expertise and to gain insight into the military effort to reduce combat mortality.

For more details, visit http://www.facs.org/trauma/combattrauma.html.
Nine Courses for Surgeons on the Go

The American College of Surgeons’ Division of Education is pleased to make available the content of nine postgraduate courses on a CD-ROM, Syllabi Select 2006. This CD-ROM is able to run in the PC and Mac environments and offers you the ability to word-search throughout the CD, along with the convenience of accessing any of the courses when you want and where you want.

These syllabi can be purchased by calling 312/202-5474 or through the College’s Web site at www.facs.org.

|$69 for Fellows of the American College of Surgeons; $45 for Resident or Associate Members; $99 for nonmembers; $60 for surgical resident nonmembers* (Additional $16 shipping and handling charge for international orders.)

*Nonmember residents must supply a letter confirming status as a resident from a program director or administrator and are limited to one CD-ROM.
NTDB® data points

Horse sense

by Richard J. Fantus, MD, FACS, Chicago, IL, and John Fildes, MD, FACS, Las Vegas, NV

Ancestors of the horse once roamed the earth with dinosaurs. Over millions of years, the animal evolved into the modern horse that can weigh close to 1,100 pounds and travel upwards of 40 miles per hour. History is full of the varied roles the horse has played in transportation, battle, industry, sport, and recreation. In the U.S., approximately 30 million people are involved in equestrian activities each year.* This synergistic relationship with equines is not without consequence, however.

Throughout time, many well-known figures have found their demise on the back of a horse. In 1227, Genghis Kahn died from a fall off a horse. Five centuries later, William III of England died from injuries sustained after his horse tripped on a molehill. Recent history reminds us of the late Christopher Reeve, the actor who suffered a severe neck injury during an equestrian sporting activity. According to the U.S. Consumer Product Safety Commission, more than 200,000 people were treated for horseback riding injuries in 2004. Many of these injuries were sprains, strains, and fractures, but there are several thousand brain injuries each year. Brain injuries account for 17 percent of significant equestrian injuries but are responsible for 60 percent of equestrian-related fatalities. The American Medical Equestrian Association Safe Riders Foundation (http://www.ameaonline.org/) refers to a reduction in head injury fatalities through the use of riding helmets.

To examine the occurrence of these injuries in the National Trauma Data Bank® Dataset 5.0, we used the cause of injury code (E code) E 828.2 for an accident involving the rider of an animal being ridden. There were 5,913 records that contain animal riders that include all horseback riders. This group of patients were on average 37 years of age, and had an average length of stay of 4.1 days, an intensive care unit length of stay of slightly more than one day, and an average injury severity score of 9.6. There was a total of 88 deaths for an overall mortality of 1.5 percent. Helmets were worn by 469 and among those cases, two resulted in death (.43%) whereas the non-helmeted group accounted for 5,444 records and 86 deaths (1.58%). These data are depicted in the figure on this page.

With a fourfold greater mortality for the non-helmeted group, horse sense would tell us to wear a helmet when rid-

*According to the Web sites of the American Academy of Orthopaedic Surgeons (www.aaos.org), the Children’s Safety Network (www.childrenssafetynetwork.org), and the Hughston Sports Medicine Foundation (http://www.hughstonfoundation.com).

Mortality rate by helmet use in animal rider injuries

![Graph showing mortality rate by helmet use in animal rider injuries](image-url)
ing a moving object that puts us almost eight feet off the ground while traveling close to 40 miles per hour.
Throughout the year, we will be highlighting these data through brief monthly reports in the Bulletin. The full NTDB Annual Report Version 5.0 is available on the ACS Web site as a PDF file and a PowerPoint presentation at http://www.ntdb.org.

If you are interested in submitting your trauma center’s data, contact Melanie L. Neal, Manager, NTDB, at mneal@facs.org.

Trauma meetings calendar

The following continuing medical education courses in trauma are cosponsored by the American College of Surgeons Committee on Trauma and Regional Committees:

- **Advances in Trauma**, December 8–9, Kansas City, MO.
Complete course information can be viewed online (as it becomes available) through the American College of Surgeons Web site at: http://www.facs.org/trauma/cme/traumtgs.html, or contact the Trauma Office at 312/202-5342.

The Residency Assist Page of the American College of Surgeons offers a medium for program directors to acquire updates and advice on topics relevant to their needs as administrators and teachers.

Our goals are to offer practical information and approaches from summaries of published articles, invited editorials, and specific descriptions of lessons learned from program directors’ successful and not-so-successful strategies. Through the development of the Residency Assist Page, the ACS intends to support program directors and faculty by providing succinctly presented information helpful in addressing the challenges associated with administering state-of-art residency education.

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For additional information, please contact Linda Stewart, at lstewart@facs.org, or tel. 312/202-5354.