UNOS (United Network for Organ Sharing) Waiting List, December 2, 2011

112,447 patients

Sanctity and organ donation’s societal value
The ACS National Surgical Quality Improvement Program – a national effort to improve surgical care and cut costs run by the American College of Surgeons – is helping to prevent thousands of surgical complications each year, according to a study of 118 hospitals.

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Medical liability reform:
Evidence for legislative and alternative approaches
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Sanctity and organ donation's societal value
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On the cover: The history of organ transplantation reflects society's struggle to come to terms with the possibilities presented by medical technology in relation to religion, science, and law (see articles, pages 12 and 24).
Because each state handles medical liability issues in its own way, patients and their physicians must deal with the inequities that a lack of federal legislation creates.

Looking forward

The nation’s medical liability system continues to be one of the most troubling problems that surgeons must contend with. This statement particularly applies to those of us who are in private practice and high-risk specialties. Many surgeons and other physicians believe that the current system of resolving medical malpractice claims—the tort system—provides incentives for patients, their families, and trial lawyers to sue and seek exorbitant financial awards, regardless of whether their cases have merit.

In reality, though, most patients who are injured because of negligent care never file a lawsuit, and few patients who do sue ever receive compensation. So, this system is a failure from the perspectives of both patients and health care professionals.

Furthermore, the medical liability system has a negative effect on the nation’s sagging economy. The Congressional Budget Office estimates that reforming the means of resolving medical liability claims would reduce federal spending by $62.4 billion over 10 years. These savings would come about largely because physicians would be less likely to practice defensive medicine and would order fewer tests and provide fewer unnecessary services. In an era of budget cuts, such savings should be quite meaningful to lawmakers.

Moreover, as the number of liability cases and damage awards rise, physicians’ malpractice insurance premiums go up exponentially, adding to surgeons’ frustration. As a result, many surgeons avoid practicing in states where liability coverage is costly and in specialties that are at a greater risk for litigation, such as neurosurgery and obstetrics-gynecology.

Despite the fact that tort reform could reduce health care spending and waste and improve access to surgical care, efforts to pass federal legislation that would change the system have repeatedly failed to gain enough congressional support to pass.

Traditional reforms

In the article “Medical liability reform: Evidence for legislative and alternative approaches” (see page 6), Ian S. Metzler and John G. Meara, MD, DMD, FACS, provide a superb overview of all these issues. They also address the benefits and limitations of traditional approaches to medical malpractice reform, such as the provisions established in California’s Medical Injury Compensation Reform Act (MICRA) of 1975. These reforms include a $250,000 cap on noneconomic damage awards, a statute of limitations, constraints on attorneys’ contingency fees, a requirement that providers pay only their fair share of damages, and collateral offsets that prevent duplicate payments to plaintiffs.

Over the course of the nearly 37 years that have passed since MICRA was enacted, many states have passed similar legislation with varying degrees of success. For example, several state Supreme Courts have overturned noneconomic damage caps on constitutional grounds.

Because each state handles medical liability issues in its own way, patients and their physicians must deal with the inequities that a lack of federal legislation creates. As Mr. Metzler and Dr. Meara note, until national standards are set, the treatment of plaintiffs and defendants alike will remain inconsistent.
Nonetheless, MICRA-like liability reforms are unlikely to pass at the national level anytime soon. Hence, many health policy experts have begun examining alternative means of resolving malpractice claims. One option highlighted in the article by Mr. Metzler and Dr. Meara is the disclosure and offer approach. When this option is applied, the health care provider and the liability insurer proactively identify adverse outcomes, investigate them, and offer compensation without seeking to establish fault.

Other alternative forms of resolving medical liability claims highlighted in the article include the following:

• “Safe harbor” protections for physicians who adhere to established guidelines
• Requirements that health care organizations bear some of the liability for malpractice
• Alternative dispute resolution under which a third-party mediator, rather than a court, works with the parties to create a binding agreement for resolving the case
• Establishment of special “health courts”
• No-fault resolution of claims
• Standards that will assist in the prevention of adverse events

The ACS perspective

The American College of Surgeons (ACS) supports these alternative means of improving the medical liability system, as well as the following additional strategies: requiring plaintiffs to obtain certificates of merit, preventing “hired guns” from serving as “expert witnesses,” and ensuring that plaintiffs are barred from citing a surgeon’s apology for a negative outcome as evidence of poor or negligent care.

I want to commend Dr. Meara and Mr. Metzler for writing this article, which hopefully will stimulate other surgeons to think about and propose creative solutions to the liability problem. I further anticipate that this article will encourage surgeons to advocate for liability reform at both the national and the state levels. As lawmakers seek to develop a value-based health care system, they may be receptive to learning how tort reform and other means of resolving liability lawsuits can lead to cost savings, improved access to care, and better quality of care. For example, an argument could be made that “safe harbors” and similar protections may provide an incentive for physicians to participate in quality measurement programs given that these studies will likely serve as

If you have comments or suggestions about this or other issues, please send them to Dr. Hoyt at lookingforward@facs.org.
Medical liability reform remains a point of contentious debate in the U.S. A growing base of literature shows that the current system for litigating medical malpractice is inconsistent, wasteful, and damaging to physicians and patients. Most patients who sustain injuries due to negligent care never sue, and only one in six who do sue ever receive compensation. Conversely, nearly 40 percent of medical malpractice claims lack evidence of medical error or patient injury. Not easily dismissed, these non-meritorious cases account for 16 percent of medical liability costs. Furthermore, claims that are litigated have excessive administrative overhead. For every dollar spent on compensation to the injured patient, 54 cents are spent on lawyers, experts, and courts; yet despite the resources that are being poured into the system, patients must wait an average of five years after injury to achieve a resolution.

The cost of this inefficient system ultimately falls to health care providers and their patients. Premiums for liability insurance have been skyrocketing in recent years. In 2006, 21 states were declared as being in a liability insurance “crisis,” with premiums increasing by as much as 80 percent annually. Both affordability and availability have been compromised in these states as liability insurers abandon the market and the premiums charged by those who remain dramatically increase. The increasing severity and frequency of awards have contributed to rising premiums. The national average jury award nearly doubled, increasing to $6.2 million in 2002 from $3.9 million in 2001, largely due to noneconomic damages, which have no maximum in many states.

The burden of increasing litigation pressure does not stop at the physician's pocketbook; it negatively affects the care physicians provide to patients. A study examining quality of care in Pennsylvania as it entered a liability insurance crisis suggests that increased liability pressure reduces physician satisfaction and weakens the patient-physician relationship. Whereas the malpractice system may discourage negligent or harmful care, it may go too far, altering the practice of physicians and provoking the practice of “defensive” medicine.

Defensive medicine can be positive or negative. Positive defensive medicine occurs when physicians order a test, study, or procedure that isn't indicated or cost-effective but may protect them from litigation. One survey found that 93 percent of specialists believe that they altered their clinical practice due to malpractice concerns, and 43 percent ordered clinically unnecessary imaging to protect themselves from lawsuits. Negative defensive medicine occurs when physicians abstain from providing necessary care in order to mitigate the risk of litigation, or when they leave states with higher litigation pressures or exit the profession altogether. A total of 42 percent of surveyed physicians had restricted their practice in some way to reduce their exposure to litigation. The cost of this defensive medicine has been estimated to be 2.4 percent of health care spending or $56 billion per year.
Despite President Obama’s call to “scale back the excessive defensive medicine that reinforces our current system,” the Affordable Care Act does not explicitly address medical liability reform. Efforts to pass national tort reform legislation have long been stymied. Some states, including California as early as 1975, have implemented more progressive approaches, but success at the state level has been inconsistent. (The details of these federal and state liability provisions are discussed beginning on page 8.) In addition to the political contest surrounding medical liability reform, there is much debate about what policies would have the most beneficial effects. So far, the evaluations of traditional reforms have primarily focused more on measures of the liability system than on the downstream effects on patient care. Liability-related metrics include claims frequency; indemnity costs (amounts paid in verdicts or settlements); overhead costs; and the costs of malpractice insurance. Care-related metrics include the amount of defensive medicine, supply of physicians in an area, and patient outcomes. (See Table 1, this page, for a list of traditional legislative reforms and a summary of the evidence related to each approach.)

<table>
<thead>
<tr>
<th>Proposed reform</th>
<th>Description</th>
<th>Effects</th>
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<tbody>
<tr>
<td>Caps on damages</td>
<td>Limit amount of awards for non-economic losses or punitive damages</td>
<td>• Reduces some defensive practices&lt;br&gt;• Modestly improves physician supply&lt;br&gt;• Reduces indemnity payments&lt;br&gt;• Constrains growth of insurance premiums&lt;br&gt;• Limited or equivocal evidence on claims frequency or care quality</td>
</tr>
<tr>
<td>Statute of limitation and repose</td>
<td>Limit the amount of time a patient has to file a claim</td>
<td>• Associated with modestly lower premiums&lt;br&gt;• No effect on indemnity payments&lt;br&gt;• Limited or equivocal evidence on defensive medicine, physician supply, quality of care, claims frequency, and overhead costs</td>
</tr>
<tr>
<td>Pretrial screening panels</td>
<td>Expert panels review cases to determine merit</td>
<td>• May reduce defensive practices&lt;br&gt;• No effect on indemnity costs, claims, or premiums&lt;br&gt;• Limited or equivocal evidence on physician supply and quality of care</td>
</tr>
<tr>
<td>Certificate-of-merit requirement</td>
<td>Requires an affidavit from a medical expert affirming merit</td>
<td>• Limited or equivocal effect on defensive medicine, physician supply, indemnity costs, overhead costs, claims frequency, and premiums</td>
</tr>
<tr>
<td>Limit on attorneys’ fees</td>
<td>Limits amount plaintiff’s attorney may charge as a contingency fee</td>
<td>• No effect on indemnity costs, claims frequency, premiums, or physician supply&lt;br&gt;• Limited or equivocal evidence on defensive practices and quality of care</td>
</tr>
<tr>
<td>Joint and several liability “fair share rule”</td>
<td>When multiple defendants exist, liability is limited to the percentage of fault allocated to that defendant</td>
<td>• No effect on indemnity costs, premiums, overhead costs, or physician supply&lt;br&gt;• Limited or equivocal evidence on defensive medicine, quality of care, and claims frequency</td>
</tr>
<tr>
<td>Collateral-source rule</td>
<td>Allows deduction of an award if injured patient has received compensation from another source</td>
<td>• No effect on defensive medicine, physician supply, quality of care, indemnity costs, claims frequency, premiums, or overhead costs</td>
</tr>
<tr>
<td>Periodic payment</td>
<td>Allows awards to be paid over a period of time rather than lump sum</td>
<td>• No effect on physician supply or indemnity costs&lt;br&gt;• Limited or equivocal effect on defensive medicine, quality of care, claims frequency, premiums, and overhead costs</td>
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State legislation

Until the 1970s, public policies on medical liability were primarily determined by the state court system as part of common law, but as the cost of malpractice insurance rose, health care professionals began bringing the issue to the attention of state legislators.13 The types of reform passed in the states have varied, but legislation placing caps on damages has been gaining popularity. One of the earliest state reform efforts, the 1975 Medical Injury Compensation Reform Act (MICRA) of California, was established after Gov. Jerry Brown (D) called a special session to address the medical liability crisis in the state. Bipartisan California legislators enacted MICRA, which included a $250,000 cap on non-economic damages, limits on attorney contingency fees, a statute of limitations, and a provision for periodic payments for awards. Since MICRA was enacted, malpractice premiums in California have increased at a third of the national rate, and it has reduced health care spending, saving Californians $6 billion dollars annually.14

Currently, 35 states have established some sort of cap on damages. Amounts of the caps vary between $250,000 in California and $1.75 million in Nebraska. A total of 16 state courts have upheld caps, while 11 have overturned the limits on damage awards, maintaining that they are unconstitutional. For instance, the Illinois Supreme Court ruled that caps on noneconomic damages were unconstitutional in 2010. As a result, liability costs in Illinois are expected to jump by 18 percent this year.

The constitutions of four states, Arizona, Kentucky, Pennsylvania, and Wyoming, explicitly prohibit caps on damages.15 A 2006 analysis showed states that had successfully adopted caps on damages have 3 to 4 percent lower health care expenditures than those states without caps.16 These reductions translated into increases in private health insurance coverage.17 In states with reforms that directly reduce the expected malpractice award, such as caps on damages, physician supply increases by 3.3 percent.18 For example, Texas had a 59 percent larger annual growth rate of newly licensed physicians in the two years following reform compared with the two years before reform.19

This year has been remarkably successful for state-level reform, with nine states passing some type of medical liability legislation. North Carolina and Tennessee established caps on damages for the first time, with the North Carolina General Assembly overriding the governor’s veto of the bill. Oklahoma and South Carolina successfully enacted more stringent caps.20

Federal legislation

Whereas successes at the state level have been notable this year, until national standards are set, reform will remain inconsistent. With some state constitutions explicitly limiting medical liability reform and others having politically unfavorable environments, there is growing support for federal action on this issue. Medical liability reform has long been a strongly partisan issue, in large part lauded by Republicans and disparaged by Democrats.

The House of Representatives has passed comprehensive medical liability legislation more than a dozen times since 1995, as recently as 2005. However, from 2006 to 2010, legislation addressing liability never reached the House floor. In January 2011, the House Judiciary Committee held a special hearing titled Medical Liability Reform: Cutting Costs, Spurring Investment, Creating Jobs. During this session, experts testified on the damage that the current liability system is doing to our health care system and the need for comprehensive legislation based on successful state reforms. Several professional associations, including the American Medical Association, American College of Surgeons (ACS), and the American Congress of Obstetricians and Gynecologists, submitted statements supporting reform.21

The bill that has made the most progress in 2011 has been H.R. 5: The Help Efficient Accessible, Low-cost, Timely Healthcare (HEALTH) Act. This comprehensive bill comprises several traditional reforms, including a $250,000 cap on noneconomic damages, a three-year statute of limitations, joint and several liability, limits on attorney contingency fees, a collateral source rule, and limits on punitive damages. The House Energy and Commerce and Judiciary Committee has approved the legislation.22 In March 2011, the nonpartisan Congressional Budget Office (CBO) conducted an analysis of hypothetical reform with provisions similar to those in H.R. 5. The CBO estimated that mandatory and discretionary spending by Medicare and other governmental health care payors would be reduced by $50 billion and $1.6 billion, respectively. The CBO also estimated that premiums paid by employers that are tax-exempt would decrease, and the subsequent
increase in employee wages would generate $13 billion in tax revenues. The CBO concluded that comprehensive medical liability reform would save the U.S. government a total of $65 billion dollars in 10 years. Other comprehensive medical liability reform legislation has been introduced by the 112th Congress. H.R. 2205, Ending Defensive Medicine and Encouraging Innovative Reforms, introduced by Reps. Charles Dent (R-PA-15) and Erik Paulsen (R-MN-3), calls for caps on damages, allows periodic payments of awards, sets a fair-share rule, and requires that selected experts determine the merit of each case. H.R. 896, Medical Justice Act, introduced by Rep. Michael Burgess (R-TX-26), caps noneconomic and total damages, allows for periodic payment of awards, sets a fair-share rule, enacts a statute of limitation, and requires that a jury awarding punitive damages be unanimous in its decision. Additional proposed legislation, including H.R. 157: The Health Care Safety Net Enhancement Act, introduced by Rep. Pete Sessions (R-TX-32)—which protects health care professionals who provide medical services in emergency situations from liability—has also been proposed, but does not address other aspects of liability reform.

**Alternative dispute resolution**

Due to the fact that significant political roadblocks continue to discourage passage of federal and state level tort reform legislation, advocates for medical liability reform have turned their attention toward alternative methods of resolving malpractice claims. In 2010, $25 million in federal funding was allocated to states to examine and implement alternative dispute resolution (ADR) methods. ADR methods of resolving malpractice claims include guidelines protection, enterprise liability, binding alternative dispute resolution, health courts, no-fault, and disclosure and offer. These methods are compared in Table 2.

<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Guidelines protection</td>
<td>Physicians practicing within established guidelines would be presumed to be non-negligent</td>
<td>Pro: Encourages evidence-based medicine, Con: “Cookbook” medicine, implies negligence for not following guidelines</td>
</tr>
<tr>
<td>“safe harbor”</td>
<td></td>
<td></td>
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<tr>
<td>Enterprise liability</td>
<td>Organizations bear some of the liability for malpractice</td>
<td>Pro: Increased efficiency, direct physician monitoring, Con: Little evidence, rarely done privately now so may not have benefit</td>
</tr>
<tr>
<td>Binding alternative</td>
<td>Providers and patients submit disputes to a third party instead of a court</td>
<td>Pro: Compensation is faster, more equitable, and with lower transaction costs, Con: May be biased toward defendants due to relationships forming with third party, limited repeal options</td>
</tr>
<tr>
<td>dispute resolution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health courts</td>
<td>Specialist judge and committee hears all malpractice cases</td>
<td>Pro: More continuity and less variability, reduces erratic jury-determined settlements, Con: May not lower overhead or transaction costs</td>
</tr>
<tr>
<td>No-fault</td>
<td>Administrative body replaces court, grants awards without seeking to prove fault</td>
<td>Pro: Aims to compensate larger groups more equitably, with less administrative costs, Con: May lead to higher spending overall even if individual awards are less, may decrease disincentives to malpractice</td>
</tr>
<tr>
<td>Disclosure-and-offer</td>
<td>Insurer and insured institution proactively disclose adverse outcomes, investigate, apologize, and compensate</td>
<td>Pro: Aims to compensate larger groups, reducing over- and under-compensation, with less transaction costs, Con: May lead to higher spending overall even if individual awards are less, may decrease disincentives to malpractice</td>
</tr>
<tr>
<td>Adverse-event prevention</td>
<td>Targets improvements in communication about potential adverse outcomes and focuses on attempts to reduce adverse events from occurring</td>
<td>Pro: Greater effect on patient care measures, Con: Does not improve the process of litigation when claims are made</td>
</tr>
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</table>
located to the Agency for Healthcare Research and Quality (AHRQ) to develop demonstration projects for programs that will improve patient safety, reduce defensive medicine, and reform the liability system at the provider level. The Affordable Care Act authorized an additional $50 million for demonstration projects addressing medical liability and patient safety.

An early champion of non-traditional approaches to resolving liability claims is the University of Michigan Health System in Ann Arbor, which developed a disclosure and offer model. Under this paradigm, the provider institution and liability insurer proactively identifies adverse outcomes, investigates them, apologizes for them, and offers reimbursement without seeking to establish fault. This program led to a 36 percent reduction in frequency of claims, a 30 percent reduction in time until resolution, and a 44 percent reduction in cost per lawsuit.12 The AHRQ has funded planning grants and demonstration projects that would expand the Michigan disclosure-and-offer model outside of self-insured hospital environments.

Other approaches involve specialized branches of the judiciary system. For example, a small group of judges—trained in malpractice and assisted by a court attorney trained in nursing—adjudicate a claim, and the case is then seen to resolution by a single judge at a private hearing. Other projects focus entirely on prevention of adverse events before harm or subsequent litigation ever occurs. These projects seek to improve patient-physician communication about care plans, care-team cooperation, and adherence to evidence-based guidelines.12 (See Table 2, page 9, for descriptions of alternative approaches to liability reform.)

These alternative dispute resolution mechanisms have the potential to discourage claims from going through the costly litigation process, and some projects aim to prevent the adverse events from occurring in the first place. Many of these alternatives keep mediation of claims within the hospital system. The hope is that by avoiding litigation, a greater number of injured patients will receive compensation sooner and more equitably, even if the amount per patient is less, and that adverse incidents can serve to inform the systems of care about what steps they need to take to avert future adverse events. Despite the fact that these alternatives could reduce the frequency of adverse events and malpractice, some providers and insurers are still hesitant to take on risk without strong proof of the benefits or protection from federal or state laws.9

Conclusion

The future of medical liability reform remains uncertain, but the negative impact on physicians and patient care of our current inefficient and ineffective system worsens every year. In the current deficit reduction-focused environment, with Medicare potentially on the chopping block, it is critical to consider medical liability reform as a means of cutting health care spending, improving the patient-physician relationship, and increasing access to care. Action from medical professionals and patients is critical to express the urgency and wide base of support for reform efforts. The ACS supports medical liability reform, and specifically recommends the following:21

- Caps on noneconomic damages
- Alternatives to civil litigation, such as health courts and disclosure-and-compensation offers
  - Protections for physicians volunteering services in an emergency situation
  - Shields for physicians who follow established, evidence-based guidelines of care
  - Collateral source offsets that prevent duplicate payments
  - Fair share rule
  - Periodic payment of future damage awards totaling more than $50,000
  - Limits on plaintiff attorney contingency fees
  - Application of punitive damages only when the evidence indicates that the defendant intended to harm the claimant

The growing number of demonstration projects investigating alternatives to medical liability legislation highlights the sustained interest on behalf of providers, insurers, and patients to solve this problem with or without legislative help. These novel approaches may provide solutions that tort reform is incapable or politically hindered from achieving. Although public statements of support for medical liability reform are still sparse, funding for these projects from the Obama Administration provides hope that both parties may cooperatively address this issue. [11]

References

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**Mr. Metzler** is a student at Harvard Medical School studying health systems improvement and health care policy at Children’s Hospital Boston.
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Sanctity and organ donation’s societal value

by Michael R. Marvin, MD, FACS;
Kenneth M. Prager, MD;
Max V. Wohlauer, MD;
and James G. Chandler, MD, FACS
Individual sanctity is an essential component of humanness with deep roots in culture, religion, and law. Indeed, an individual’s sanctity transcends even death, persisting in the minds of those who knew or know of the decedent.

Society’s valuation of whole organ donation began cautiously with the successful transplantation of a 23-year-old monozygotic twin’s kidney into his twin brother on December 23, 1954. The Peter Bent Brigham Hospital team sought to minimize its ethical issues by advance airing in public fora and preliminary skin graft exchanging to verify their compatibility. Yet, as noted by Joseph E. Murray, MD, FACS (see photo, this page), in his 1990 Nobel Prize address, “For the first time in medical history, a normal, healthy person was to be subjected to a major surgical operation not for his own benefit.”

The recipient lived for eight years free of dialysis, and the donor lived to age 79, but Dr. Murray would not achieve success with a cadaveric renal allograft until 1962.

Whole organ allotransplantation for hearts began in December 1967, with dismal results. As of October 23, 1968, only two of the world’s 65 heart allograft recipients had survived for five or more months. Some viewed excising a donor heart as tantamount to ripping out the soul, and with these results, one could argue, “For what purpose?” Most early proponents paused to regroup, as Thomas Starzl, MD, FACS, had done with livers in 1963. In the U.S., Norman Shumway, MD, FACS (see photo, page 14), pressed on at Stanford, as did his former associate Richard Lower, MD, FACS, who had moved to the Medical College of Virginia (MCV) in 1965 to add hearts to the busy renal transplant program headed by David Hume, MD, FACS (see photos, page 14). Technical hurdles still had to be overcome, but the real culprits were the marginal therapeutic index of available immunosuppressants along with donor warm ischemia time and its ultimate companion, reperfusion injury.

B-D and Tucker v. Lower

Belgian surgeon Guy Alexandre, who had been a research fellow in Dr. Murray’s laboratory, minimized warm ischemia by harvesting a kidney from a beating-heart, severely head-injured, comatose donor at Louvain’s Saint Pierre Hospital on June 3, 1963, after convincing his chief, Jean Morelle, of the irreversibility of the patient’s coma dépassé (beyond coma). By 1966, he had harvested and transplanted kidneys from nine severely head-injured donors. In 1968, a Harvard ad hoc review panel essentially endorsed Alexandre’s work, defining irreversible coma as complete unresponsiveness, with no spontaneous movement, including breathing; and a flat electroencephalogram in the absence of confounding factors such as drugs or hypothermia.

Bruce Tucker was a 56-year-old intoxicated man, who sustained a basal skull fracture and was brought unaccompanied to MCV around 6:00 pm on May 24, 1968. An emergency craniotomy to evacuate a subdural hematoma and tracheotomy for ventilation failed to halt his deteriorating neurological status. Drs. Lower and Hume had been training their team for three years and were actively seeking a potential heart donor for a patient already in the hospital. They asked other people involved in the case, including the police, to search for Mr. Tucker’s family to discuss donation of his heart and kidneys, but no contact was ever made. Shortly after noon on May 25, a neurologist concluded that Tucker’s brain was dead, allowing the surgeons to move him to the operating room for removal of his heart and kidneys. The respirator was temporarily disconnected and after five minutes of apnea, the medical examiner agreed to begin the organ retrieval, despite a Virginia law requiring a two-day waiting...
William Tucker came to the hospital that evening, which was just down the street from his shoe repair shop, to inquire about his injured brother and was told that he had died in the afternoon, without mentioning his having been the world’s sixteenth heart transplant donor. Dick Lower was a remarkably sensitive and unassuming person, but in this situation he neither recognized nor respected Bruce Tucker’s sanctity. Bruce was black in a society that was still desegregating, but not the abandoned derelict he was presumed to be. The recipient of this ninth U.S. heart transplant was white and survived for just seven days before becoming the first heart recipient to die from acute rejection.

This ethical debacle assured a lawsuit, if not a murder charge, and could have provoked massive public disapproval. In fact, Prof. Jura Wada at Sapporo Medical University in Hokkaido was charged with murder for not doing more to revive a brain-death (B-D) donor, whose heart was used in Japan’s first heart transplant on August 8, 1968. The murder charge was eventually dropped due to insufficient evidence, but Japan would not allow another heart transplant for 31 years. In the U.S., Lower continued to perform heart transplants and had the pleasure of seeing a later 1968 recipient live for an additional 6.5 years.

The inevitable trial commenced on May 25, 1972. William Tucker, represented by future Virginia Gov. Doug Wilder, sued Dr. Lower and MCV, alleging that Dr. Lower had hastened Bruce Tucker’s death by shutting off the ventilator for the purpose of obtaining his heart and kidneys. The issue of consent was moot because the statute period before disposing of unclaimed bodies. Mr. Tucker had been in the hospital for just 23 hours, and there is no record indicating whether his heart ever ceased beating or was restarted when ventilation was resumed.
Why they say “no”

Neal Garrison, MD, FACS, of the University of Louisville, KY, was the first to advocate decoupling discussions of being brain dead and organ donation. He and his colleagues found that raising the two issues together, ostensibly to create some good out of a bad situation, resulted in only 18 percent of 62 families consenting to donation; whereas, proposing donation after the family had time to assimilate B-D’s implications resulted in a significantly greater, 57 percent (53/93), consent conversion rate. Subsequent experience has repeatedly validated this observation.

Some surgeons’ personal perspectives may taint their ability to be convincing organ donation advocates. A New York University and Albert Einstein College of Medicine survey of 30 surgical attendings, 41 surgical residents, and 35 medical students revealed 61 percent overall willingness to be organ donors, with proportionally more older and experienced respondents expressing refusal. Among all responders, only 49 percent had declared themselves as organ donors on their driver’s licenses. Both institutions have busy transplant centers, and 13 percent of those who would not permit removal of their own organs indicated that their refusal stemmed from observing or being involved in a procurement procedure.

Families’ concerns about whole organ donation include a basic core that should be anticipated and discussed at points in the conversation when a family seems less forthcoming. Ambiguity about brain death is the basis for many of their issues. They worry that consenting might result in withholding a treatment that could conceivably give the patient a slim chance at recovery, that the patient will feel additional pain from diminished medication or as part of the procurement procedure, and that they cannot be with the patient at the time of death. Families also worry about additional hospital charges, problems with preparation of the body for viewing, and religious concerns about delaying burial.

The dead donor rule

The dead donor principle states that vital organs should be taken only from dead patients and that retrieval of vital organs for transplantation should not lead to death. B-D became compatible when it was codified by the Uniform Determination of Death Act (UDDA), drafted in 1980 by the National Conference of Commissioners on Uniform State Laws. The UDDA states that: “An individual who has sustained either (1) irreversible cessation of circulatory and respiratory functions, or (2) irreversible cessation of all functions of the entire brain, including the brain stem, is dead. A determination of death must be made in accordance with accepted medical standards.” It was quickly endorsed by the American Bar and Medical Associations, and adopted by 45 states. The others relied on precedent-setting court cases but also cited the UDDA. Iterative improvements in donor management, ex vivo preservation, immunosuppression, and diagnosing acute rejection, along with a computer-based United Network for Organ Sharing (UNOS) had now advanced whole organ transplantation to a predictable and widely applicable therapy. Burgeoning demand and an ever-widening gap between society’s need and organ availability now obliged ethicists, who had previously focused on protecting donor sanctity, to also ponder means whereby an ethically defensible goal could be achieved with the least discomfort.
Are these data sufficiently compelling to warrant the government shifting its stance from facilitating organ donation to legislating presumed consent? A citizen wishing to avoid becoming a potential donor would then have to opt out by registering refusal in a government-maintained database. Austria, Belgium, Singapore, and Spain, among others, have this system. In Austria, where the law was implemented in 1982, a pre-enactment seven-year baseline average of 4.6 donors per million of population per year (DMY) rose to 27.2 DMY by the fifth “opt-out” year.

Mandated consent is a halfway step requiring only that all adults consider organ donation and enter their decisions into an electronic database. The New Jersey Hero Act, passed on July 22, 2008, requires that starting in 2013 all New Jersey drivers indicate whether they are willing to be a donor, or acknowledge being adequately informed without consenting to be a donor. Interim measures ensure having an informed citizenry well before then. Since 2009, New Jersey grades 9–12 public schools and colleges must include information about organ and tissue donation in their core curricula, and all New Jersey medical and nursing schools must include organ donation and recovery as a condition for graduation. As of this year, physicians licensed before the act are encouraged to complete an online, credit-based course, and previously licensed nurses are required to take an online, one credit-hour course to be relicensed.

Time to take the gloves off?

Although often initially viewed as contentiously intrusive, the U.S. government’s role in advancing organ donor management has been remarkably enlightened, beginning with its 1984 establishment of not-for-profit Organ Procurement Organizations (OPOs) and The Organ Procurement and Transplantation Network (OPTN). The U.S. Department of Health and Human Services’ Health Resources and Services Administration (HRSA) underwrites OPTN’s cost and contracts with not-for-profit UNOS to direct its programs. OPTN lists 112,447 persons waiting for organs in the U.S. as of December 2, 2011 (see Figure 1, page 17); 80.3 percent are waiting for a solitary kidney. Based on the last two years, this need will be only partially fulfilled by 8,000 deceased donors, providing a mean 2.75 organs transplanted per donor (OTPD), along with 6,600 living donors, yielding 28,600 organs for all of 2011. Fewer than 17,000 (<60 percent) of these will be kidneys. Deceased donors peaked at 8,085 in 2007, and for the past decade, at least 7,000 wait-listed people have died annually.

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B-D’s discomforting hegemony

B-D’s broad acceptance is pragmatic, especially valued for the recovering of thoracic organs and, despite some discomforting facts, served as the source of virtually all deceased donor organs throughout

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**Ethnicity of organ donors and U.S. population**

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Population %</th>
<th>Percent of recovered donors</th>
<th>Proportional donation rates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Deceased</td>
<td>Living</td>
</tr>
<tr>
<td>White</td>
<td>72.4</td>
<td>66.6</td>
<td>69.6</td>
</tr>
<tr>
<td>African American</td>
<td>12.6</td>
<td>16.6</td>
<td>11.7</td>
</tr>
<tr>
<td>Hispanic</td>
<td>16.3</td>
<td>12.9</td>
<td>14.2</td>
</tr>
<tr>
<td>Asian</td>
<td>4.8</td>
<td>2.3</td>
<td>3.4</td>
</tr>
</tbody>
</table>

Figure 1. UNOS waiting list, December 2, 2011

112,447 patients

Viable areas with neurologic functions unrelated to clinical B-D criteria remain, such as those regulating hypothalamic hormone secretion. Patients with irreversible coma look disconcertingly normal, as if they have adjusted to the ventilator and are asleep. Mechanical ventilation and nutritional support can allow such individuals to metabolize enteric feedings, excrete waste, and survive for months, for example, to give birth to near-term babies by cesarean section.

Robert Truog, MD, an anesthesiologist-ethicist at Boston Children’s Hospital, and Franklin Miller, MD, of the NIH’s Bioethics Department, concluded that “…although it may be perfectly ethical to remove vital organs for transplantation from patients who satisfy the diagnostic criteria of B-D, the reason that it is ethical cannot be that we are convinced that they are really dead.” They viewed valid consenting for withdrawal of life support, or for organ donation, as being separate but similarly proper ethical bases for their respective actions. James Bernat and his Dartmouth colleagues diffused these concerns by separating detectable but “random and purposeless cellular physiologic activity” from the brain’s irreplaceable systemic integrated functioning, but some countries and the world’s three monotheistic religions have wrestled with reservations about B-D’s parity with circulatory demise for years.

The Danish Council on Ethics actually abrogated the dead donor rule in 1988, agreeing to the recovery of organs once brain function had ceased “during the death process” but reasserting that the time of death was when the heart later stopped. The council then promoted unprecedented public debate by widely distributing its deliberations. Public opinion was 80 percent in favor of the council’s minority recommendation of declaring death to have happened when B-D criteria were satisfied, which led the Danish Parliament to endorse the public’s sentiment in 1990.

Japan had difficulty overcoming repercussions from the Jura Wada case, delaying passage of an Organ Transplant law until 1997. The prevailing attitude toward B-D remained tentative, so its qualification for organ recovery was statutorily differentiated from cardiac death. B-D donation required advanced written consent by the potential donor, and family members could override the donor’s intention, resulting in just 86 B-D donors over 12 years. The law was revised in 2009 to accept family consenting for B-D donation if the potential donor had not intentionally opted out. Despite retention of the family veto, 16 B-D donor recoveries occurred within the first three months under the new law.

Judaism is generally supportive of B-D, but had to subordinate the principle of “Ain dochin nefesh mipnei nefesh—that one life may not be set aside to
assure another life applies with full force even where the life to be terminated is of short duration and seems to be lacking meaning or purpose" and to reinterpret a responsibility into an empowerment. “...God has imposed on man the awesome responsibility of defining the moment of death...after which the needs of the dead...must be subordinated to those of the currently living."

“In Islam, the killing of a terminally ill person, whether through voluntary active euthanasia or physician-assisted suicide, is judged an act of disobedience against God.” However, intent and consideration for a patient's well-being can create a situation in which the act of disobedience is acceptable: Jordan's Council of Islamic Jurisprudence (majma’ al-fiqh al-islami) incorporated “complete cessation of all functions of the brain, when expert physicians ascertain that the cessation is irreversible and the brain is in the state of degeneration” into the Shari'a guidelines to determine death. The council’s amendment concludes with: “God knows the best!”

The Catholic Church is unique in having a succession of single, infallible, earthly leaders to limit wavering, yet its publicly aired views typify the ruffling effect of inherent contradiction. Lucetta Scaraffia, professor of contemporary history at Rome’s La Sapienza University, authored the front page article of the September 3, 2008, L’Osservatore Romano, recounting the Pontifical Academy of Science’s 2005 dissention with the Vatican’s original 1985 posture endorsing irreversible coma, reinforced by John Paul II in 1989 and again in 2000. On November 7, 2008, Benedict XVI, speaking to Rome's international congress on A Gift for Life: Considerations on Organ Donation, left some doubt as to his position by saying: “Over recent years, science has made further progress in ascertaining the death of a patient. It is good, then, that the achieved results receive the consensus of the entire scientific community in favor of looking for solutions that give everyone certainty...and where total certainty has not been reached, the principle of caution should prevail.”

Donation after cardiac death (DCD)

Nonbeating heart donors were the primary source of cadaveric renal allografts for almost 20 years and the source of the heart for Christiaan Barnard’s second, and the world’s first successful, heart transplant. Heart-beating, B-D criteria sourced organs are associated with better outcomes but comprise only a fraction of inhospital deaths. Controlled DCD began with the University of Pittsburgh (PA) Medical Center’s 1992 “Policy for the Management of Terminally Ill Patients Who May Become Organ Donors After Removal of Life Support.” These patients are ventilator- and often pressor-dependent. The patient and family do not wish to continue supportive care and would readily consent to its withdrawal. Their potential for organ donation depends on a separate consent to donate and the likelihood that support withdrawal will shortly result in cessation of effective circulation. Cessation within an hour is in the best interests of all parties and is somewhat predictable based on the PaO2/FIO2 ratio, pressor requirements before withdrawal, and respiratory parameters 10 minutes after withdrawal.

The potential donor’s physicians discontinue the support, provide comfort care, administer heparin, and in most instances, insert femoral cannulae under local anesthesia to be used for in-situ cooling. As originally described, they pronounce the patient dead after no pulse can be appreciated for a two-minute interval thought to be sufficient to preclude cardiac autoresuscitation. The transplant team is then called to assume management of the decedent. This has to be a tightly protocoted sequence of compassionate care and hand off that considers the patient, the family, and the quality of the organs that will transplanted.

Health care professionals and families were discomforted by the imprecision of basing the end of a life on two minutes without feeling a pulse. In 1997, the Institute of Medicine suggested that “accepted medical detection standards include electrocardiographic changes consistent with absent heart function, [along with] zero pulse pressure [as monitored] through an arterial catheter,” and also suggested that five, rather than two, minutes be adopted as an arbitrary, but reasonable, standard. Now almost all OPOs endorse five minutes. Electrocardiographic silence is not required, because the criterion determining death is the absence of effective circulation.

“Irreversible”—the elephant in the room

Irreversibility is not an absolute phenomenon. Irreversible is a conditional adjective that needs constraints specifying the situation surrounding the noun that is being labeled. Its unconstrained
use introduces ambiguity into Harvard’s definition of profound coma and the UDDA’s stipulation of cessation of circulatory and respiratory functions and of all functions of the entire brain, including the brain stem, as the two legitimate routes to being declared dead. The controlled DCD process shines a bright light on the elephant. Two or five minutes without effective circulation from ventricular fibrillation or stand still is typically reversible in an operating room. It is irreversible in DCD because the caregivers have determined with the family’s consent that the patient should die. Busy procurement coordinators say that they have experienced a resumption of a shallow pressure tracing when they began measures to curtail warm ischemia, which they address by asking the donor’s physicians to return for another five-minute countdown.

Public acceptance of DCD is surprisingly good, as judged by the proportional increase of DCD donors (see Figure 2, this page). Registration to be a donor is not a consent to withdraw life support. Rarely is a suitable potential DCD donor able to give valid consent for withdrawing his own life support, making DCD essentially a family affair, affirming Truog-Miller’s consent-based ethicality.

Mitigation of brain injury’s systemic effects

Brain death is associated with vascular instability and a leaky blood-brain barrier that unleashes a barrage of inflammatory cytokines. Novitzky and his colleagues at Cape Town’s Groote Schuur Hospital countered this with an intravenous “cocktail” of 2μg of triiodothyronine, 100mg of cortisol, and 10–30 IU of insulin given as often as hourly to 26 potential B-D donors from the time of consent until recovery of the heart.28 They observed significant improvements in donor mean arterial pressure (MAP) and base deficit, as well as a related halving of the dopamine required.

Methylprednisolone has been prospectively studied in 100 B-D criteria liver donors randomized to receive or not receive a 250 mg bolus of methylprednisolone at the time of consent and subsequent infusion of 100 mg/h until organ recovery.29 Methylprednisolone resulted in significant downregulation of inflammatory signaling factors, less ischemia/reperfusion injury, as evidenced by lower AST and ALT levels over the first 10 post-transplantation days, and lower total serum bilirubin levels at 10 days and out to six months.

T4 or its synthetic analog, L-thyroxine, act synergistically with vasopressors in brain injured patients, increasing their efficacy at lower doses to the point of sometimes being able to discontinue them.30 The same study has shown that despite T4’s selective use in more unstable donors, its use was associated with a significantly higher 3.9 OTPD rate versus 3.2 from donors not requiring T4.

B-D’s sympathicomimetic inflammatory milieu increases both hepatic gluconeogenesis and peripheral insulin resistance while impairing its release from the pancreas. Free-water loss from depressed or absent vasopressin secretion requires substantial dextrose water infusion to combat hypernatremia and doubles the imperative for closely monitored intravenous insulin administration to prevent glucosuria compounding diabetes insipidus’ free water clearance. A study is in progress using a computer-based insulin delivery system to target donor glucose levels between 100 and 140mg/dL.31 The baseline delivery protocol has been sufficient for nearly 75 percent of organ donors. The others have shown remarkable insulin resistance, frequently requiring 30–40U boluses and infusion rates up to 40–50U/h.

Protocol controlled donor management

HRSA launched an Organ Donation Breakthrough Collaborative in 2003 to study retrieval processes at high-performing institutions and to disseminate best practices to what eventually became
950 of the nation’s largest hospitals. In 2004, the collaborative set a 75 percent consent conversion rate as a national goal, and in 2005, they added achieving a yield rate of 3.75 OTPD and a secondary goal that DCDs should comprise at least 10 percent of an institution’s deceased donors.32

UNOS Region 11 (Kentucky, Tennessee, Virginia, North Carolina, and South Carolina) developed a Donor Management Goal (DMG) panel of clinical variables aimed at meeting HRSA’s target for organs transplanted per donor.33 Among 467 donors, 82 percent of recovered organs were transplanted yielding an overall 3.34 OTPD. When all eight DMGs were achieved, the transplant yield was 3.45 OTPD versus 2.59 when they were not. Limited pressor use, followed by PaO2 and CVP were the primary predictors that a donor’s recovered organs would be transplanted.

The Los Angeles County Hospital and the University of Southern California Medical Center manage potential donors according to a protocol first introduced in 1998 that requires floating a catheter into the pulmonary artery to monitor aggressive fluid resuscitation. If volume replacement does not yield a MAP ≥70mmHg (true in most instances), they begin a vasopressor, moving up to a maximum 10μg/kg/minute, and then turn to their 50 percent dextrose, 2g methylprednisolone, 20U insulin, 20μg T4 bolused cocktail to be followed by continuous infusion of T4 at 10μg/h. The protocol stresses vigilance and quick intervening to treat expected 50 percent incidences of diabetes insipidus and thrombocytopenic coagulopathy with desmopressin, fresh-frozen plasma, cryoprecipitate, and platelets. Protocol adoption was associated with an 87 percent drop in potential donors lost from hemodynamic instability.34 The protocol not only saves lost organs, but also lost hospital revenue because the Centers for Medicare & Medicaid Services pays all otherwise uncovered hospital charges back to when B-D was declared.

Normothermic ex vivo perfusion and repair
Cold perfusion has been the mainstay of organ preservation but is known to damage mitochondria through Adenosine-5’-triphosphate (ATP) depletion and alter plasma membrane lipids, cell structure, and microtubules, resulting in time-related cell lysis. Normothermic perfusion avoids these cellular debilities and offers opportunities for ex vivo functional assessment, quelling inflammation, and restorative conditioning. Although animal studies have shown that these benefits are applicable to all organs and a single clinical study of normothermic perfusion of hearts has begun enrollment, clinical work has focused on the lung.35 Lungs do not tolerate DCD associated ischemia and are prone to injury from B-D related inflammation, aspiration, and barotrauma, resulting in less than 20 percent of donated lungs being transplanted.

In 2007, Stig Steen of Sweden’s Lund University reported the first clinical transplantation of an ex vivo reconditioned lung. The contused lung was recovered from a young B-D accident victim whose final PaO2 was 67mmHg with an FiO2 of 0.7 (P:F ratio of 95.7). The reconditioning began with a slow <20mmHg pulmonary artery perfusion of deoxygenated blood diluted in proprietary Steen solution* to a 15 percent hematocrit at 25˚C, gradually warming the perfusate to 37˚C and ventilating to maintain end-expiratory pressure at 5cmH2O.13 Mean pulmonary artery pressures decreased from 12 to 7mmHg and pulmonary venous P:F stabilized at 500. The lung was implanted in a 70-year-old man, raising his pretransplant FEV1 from 20 percent of predicted to 74 percent and allowing him to be quite active for 11 months until he died of immunosuppression related sepsis.36

Cypel and colleagues in Toronto, ON, have shown that as few as four hours of normothermic ex vivo lung perfusion (EVLP) significantly improved P:F ratios to a median of 443 in 20 of 23 lungs with pre-perfusion <300 P:F ratios37 (see Figure 3, page 21). The outcomes of transplanting these 20 reconditioned lungs, including nine from DCD donors, were compared with those of 116 contemporaneous normal-criteria lung recipients. The incidence of 72-hour primary graft dysfunction (P:F <300) was 15 percent in the EVLP conditioned lungs versus 30 in the control group. Bronchial dilatation was needed for 5 percent and 4 percent, and hospital stays were 23 and 27 days, respectively. Two DCD donor EVLP recipients died of non-graft causes within 30 days, nearly doubling the 5.2 percent 30-day mortality accruing from six control group deaths. At one year, 80 percent of EVLP recipients and 84 percent of control recipients were alive with their grafts.

Sadaria and her Denver, CO, and Nashville, TN, colleagues assessed oxygenation, histology, and cytokine...
expression in seven transplant-un-
suitable human lungs over 12 hours
of normothermic EVLP.38 P:F ratios
improved significantly during the
first two hours, and all lungs met
transplant oxygenation criteria by
12 hours. Biopsies were obtained at
one, six, and 12 hours for histology
and cytokine concentrations. The
histologic sections were all normal.
Several pro-inflammatory cytokines
were progressively upregulated, in-
cluding MCP-1 (monocyte chemo-
tactic protein -1), which has been
clinically associated with primary
graft dysfunction. Interleukin-10,
a notable anti-inflammatory cyto-
kine, was never detected.39

The latter finding was particu-
larly interesting because the Toronto
group has transfected transplant-
unsuitable human lungs undergo-
ing normothermic EVLP with an
airway-delivered adenoviral vector
encoding human Interleukin-10.

A similar EVLP only control group developed ac-
ceptable P:F ratios; whereas, IL-10 transfected lungs
achieved significantly higher P:F ratios, lower pulmo-
nary vascular resistance, and a favorable shift from
pro-inflammatory to anti-inflammatory cytokine ex-
pression. The authors have yet to report transplantation
of an IL-10 transfected human lung, but have shown
that ex vivo IL-10 gene therapy significantly inhibited
swine IL-6 and IL-1b release from pig lung tissue after
four hours as an allotransplant.40

Ex vivo organ reconditioning is a rudimentary
example of regenerative medicine’s potential to per-
mit in-situ repair or replacement with autologous,
induced pluripotent stem cells.41 The genome of these
reprogrammed cells will be edited to promote in vitro
growth of a specified single stem cell type, which will
home to injured or diseased isogenous tissue when
injected into an artery that serves the targeted organ.

Epilogue

Optimal donor management, ex vivo organ con-
ditioning, opt-out legislation, and a cultural shift
whereby organ donation becomes regarded as an
obligation stemming from the gift of life at birth
and an expansion of individual sanctity, which it
is, should double the number of deceased U.S.
donors and achieve HSRA’s goal of 3.75 OTPD.41
This unprecedented ratio of 51.8 donors per mil-
lion of population (312 million as of August 29,
2011) could yield 60,000 organs, but no more than
32,000 kidneys, a shortfall that would require an
unrealistic nearly nine-fold increase in live donors
for fulfillment. An implantable artificial kidney may
be on the horizon, but early intervention in causes
leading to end-stage renal disease is currently the
only realistic solution and will always be the most
cost-effective strategy.42

Editor’s note

This article is an abridged and updated revision of “Sanctity
and the Societal Value of Organ Donation,” published in the
Alumni News of the New York-Presbyterian Hospital/Columbia
University Department of Surgery, Vol. 13, No 1, Summer 2010,
which can be accessed at http://www.columbiasurgery.org/news/
john/jjss_su10.pdf.

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1. Nobelprize.org. The official website of the Nobel Prize. Available at: http://nobelprize.org/nobel_prizes/medicine/
Dr. Marvin is chief of the division of transplantation at Jewish Hospital and associate professor of surgery, in the department of surgery, University of Louisville, KY.

Dr. Wohlauer is a fifth-year surgical resident in the department of surgery, University of Colorado, School of Medicine, Denver, CO.


Nonbeating heart organ donation was reintroduced in most developed nations in the early 1990s to expand the potential donor pool to include futile care withdrawals for patients with irreversible brain injury but persisting brain stem function and unsuccessful in- and out-of-hospital cardiac arrest resuscitations. The favored form of donation after cardiac death (DCD) is controlled withdrawal of intensive care until the onset of circulatory arrest. In this situation, the transplant team’s awareness of organ warm ischemia vulnerability and their obligation not to deliberately transplant a severely damaged organ are pitted against the shortest ethically sustainable “no-touch” time between circulatory arrest and the start of organ perfusion.

This discomforting dilemma is a poor exit strategy for the imbalance of organ supply and demand. The Belgian experience with DCD kidney retrieval showed that it did not substantially increase the total donor pool and, rather, resulted in a proportional shift from brain-dead to DCD donors by not allowing a potential donor to progress to brain-death determining criteria.1

Different European approaches

Opt-in and opt-out are diametrically valid concepts within the Eurotransplant region, which encompasses Belgium, the Netherlands, Luxembourg, Germany, Austria, Slovenia, and Croatia. Austria and Belgium have implemented an opt-out approach as national endorsements of transplantation’s societal value which still allow individuals to decline becoming a donor. This system is sometimes portrayed as encouraging the transplant community to prey unethically upon severely brain-damaged trauma victims; however, the reality is far different. When a patient is declared brain-dead, the decision whether organ donation will be considered is left to the patient’s relatives, and their choice is always respected. Although Austrian law would allow organ retrieval without involvement of the donor’s relatives, the negative publicity of even a single case where the family’s wishes were ignored would far outweigh the benefit of the retrieved organs. Organ procurement organizations in opt-in countries probe a potential donor’s thoughts about donation by asking the relatives: this method is more similar than different from the Austrian opt-out system.

The Eurotransplant report for 2010 lists 22.6 donors per million inhabitants in Austria compared with only 15.4 donors per million in Germany, where the culture and health care system are similar to ours.2 It is important to recognize that this huge difference in organ availability also affects the quality of the available organs. Our public perception of organ donation as a natural part of Austrian citizenship, rather than as private gifts to anonymous persons, has a positive influence on family members’ decisions and has a substantial effect on our higher donation rates. In an opt-in system, healthy persons harbor a concept of their bodily integrity being violated, without its balancing societal value, and simply turn their minds away from this unsavory issue.
Organs from brain-dead patients

In almost all societies, the moment of death and the treatment of the earthly remains are handled with dignity and silence. The loss of central physiologic regulation as brain stem function ceases goes unnoticed and does not break the outward silence. In reality, however, a violent cytokine storm is being unleashed that causes profound hemodynamic instability and, if untreated, eventual cardiac arrest. Fortunately, this is amenable to pharmacologic intervention. Many centers treat this expectantly with a preset cocktail of steroids, insulin, and thyroid hormone, as experimental studies have demonstrated tremendous upregulation of pro-inflammatory cytokines in deceased donors in comparison with living donors. These cytokines aggravate the organ’s subsequent ischemia-reperfusion injury, which can be successfully mitigated by administering steroids.3,4

We have routinely administered 1g of methylprednisolone prior to cold organ perfusion during the retrieval procedure, and have now changed donor preconditioning to repeated steroid pulses from the time death is declared until organ retrieval.

Hypothermic machine perfusion rather than static cold storage was once empiric, but now has a firm scientific basis for kidneys.5 In Austria, our compact geography usually equates to brief cold ischemia times, so static cold storage has been the standard. We now use hypothermic machine perfusion for anticipated longer cold ischemia times when the donor hospital and transplant center are unusually far apart and for grafts that were subjected to prolonged warm ischemia, typically in DCD situations, improving both early organ function and prolonged survival.

Our transplant professionals deal every day with the tension between preserving the dignity and sanctity of the deceased donor and the life-extending value of each successfully transplanted organ. In that process, we are always mindful of our obligation to use maximum diligence and every available tool to obtain the best possible organ quality and function in the recipient.

References


CPT 2012 brings with it new codes and code changes

by Linda Barney, MD, FACS; Mark Savarise, MD, FACS; and Jenny Jackson, MPH

The Current Procedural Terminology (CPT)* 2012 manual comprises several new codes and code changes pertaining to general surgery and its closely related specialties. This article summarizes these modifications.

New modifier

The Affordable Care Act (ACA) requires all health care plans to begin covering immunizations and preventive services without any cost sharing. Modifier 33 has been added to CPT 2012 to identify preventive services. This modifier allows providers to identify that the service was preventive under applicable laws and that patient cost sharing does not apply.

Evaluation and management

The new and established patient definitions in the evaluation and management (E/M) guidelines have been revised to add additional granularity to the terms “specialties” and “subspecialties.” The term “exact subspecialty” was added to specify that the professional services would be provided by a physician of the exact same specialty and subspecialty, who belongs to the same group practice, within the past three years. This revision clarifies that although the physician may be of the same specialty, differences between the subspecialty may require a significant new patient work-up and should therefore be considered a new patient visit rather than an established patient visit.

Debridement

As a point of clarification, in 2011 the debridement guidelines stated that add-on code 11045, Debridement, subcutaneous tissue (includes epidermis and dermis, if performed; each additional 20 sq cm, *All specific references to CPT (Current Procedural Terminology) terminology and phraseology are © 2012 American Medical Association. All rights reserved.
or part thereof, should be reported with modifier 59, if multiple wounds are debrided on the same day. However, add-on codes do not require the use of a modifier. The 2012 revised guidelines now indicate that coders should use modifier 59 with either 11042, Debridement, subcutaneous tissue (includes epidermis and dermis, if performed); first 20 sq cm or less) or 11044, Debridement, bone (includes epidermis, dermis, subcutaneous tissue, muscle and/or fascia, if performed); first 20 sq cm or less, as appropriate.

Skin replacement surgery
Comprehensive changes have been made to the skin replacement surgery subsection. The changes include deletion of 24 codes, revision of six codes, and the creation of eight new codes (15271–15278). This article gives only a brief overview of the changes; a more detailed skin replacement surgery article will be published in February.

Reference to the phrase “skin substitutes” has been removed as a subheading in the skin replacement surgery section; the codes in this section are now in a new section in the manual, referred to as “skin substitute grafts.” However, some codes remain in the skin replacement surgery section, including surgical preparation; topical placement of an autograft; tissue-cultured autograft; and skin substitute homograft, allograft, and xenograft. The guidelines instruct that the graft is anchored using the provider’s choice of fixation, and when services are performed in the office, routine dressing supplies are not reported separately.

Other flaps and grafts
A new add-on code 15777, Implantation of biologic implant (eg, acellular dermal matrix) for soft tissue reinforcement (eg, breast, trunk), has been established. For bilateral breast procedures, report 15777 with modifier 50. For implantation of synthetic mesh or other prosthesis for open incisional or ventral hernia repair or closure of a necrotizing soft tissue infection wound, report 49568 in conjunction with 49560–49566 or 11004–11006, as appropriate. Code 15777 is not to be used for the topical application of skin substitute graft to a wound surface, which should be reported with new codes 15271–15278.

Hands and fingers
Two new codes are available to report the treatment of Dupuytren’s contracture. Report code 20527 for the injection of an enzyme (for example, collagenase) into the palmar fascial cord (ie, Dupuytren’s cord). Code 26341 is reported for the manipulation of the palmar fascial cord performed on the next day and follow-up care within 10 days (for example, wound check). Fabrication and application of a custom orthotic is separately reportable.

Lungs and pleura
Comprehensive changes were made to the lungs and pleura section of CPT, including a new section added to identify video-assisted thoracoscopic surgery (VATS).

The guidelines provide specific instructions when the services of intraoperative pathology are used. In these circumstances, if a more extensive procedure is required due to the results of the consultation, then only the most extensive procedure code is reported. The new guidelines prohibit use of smaller procedure codes, such as biopsies, in addition to more extensive lung procedure codes such as lobectomies, unless the procedures were performed on different lobes, or the contralateral lung. In these situations it would
be appropriate to append the 59 modifier (distinct procedural service).

Code 32095—previously used to report biopsy procedures of the lungs or pleura thoracotomy—has been deleted. Three new codes are available to report incisional (thoracotomy) biopsy procedures: 32096, Thoracotomy, with diagnostic biopsy(ies) of lung infiltrate(s) (eg, wedge, incisional), unilateral; 32097, Thoracotomy, with diagnostic biopsy(ies) of lung nodule(s) or mass(es) (eg, wedge, incisional), unilateral; and 32098, Thoracotomy, with biopsy(ies) of pleura.

Therapeutic wedge resection procedures are now reported with 32505, Thoracotomy; with therapeutic wedge resection (eg, mass, nodule), initial.

Two new add-on codes for open wedge resection have been created: 32506, Therapeutic wedge resection (eg, mass or nodule), each additional resection, ipsilateral (List separately in addition to code for primary procedure), and 32507, Diagnostic wedge resection followed by anatomic lung resection (List separately in addition to code for primary procedure).

In CPT 2012, the term "video-assisted thoracoscopic surgery" (VATS) replaces "thoracoscopy." CPT code 32602, Thoracoscopy, diagnostic (separate procedure); lungs and pleural space, with biopsy, has been deleted. Three new codes have been created to report lung or pleural space biopsy procedures: 32607, Thoracoscopy; with diagnostic biopsy(ies) of lung infiltrate(s) (eg, wedge, incisional, unilateral); 32608, Thoracoscopy; with diagnostic biopsy(ies) of lung nodule(s) or mass(es) (eg, wedge, incisional), unilateral; and 32609, Thoracoscopy; with biopsy(ies) of pleura. Codes 32607 and 32608 should not be reported more than once per lung.

Code 32666 identifies an initial therapeutic wedge resection using VATS. If performed bilaterally, modifier 50 may be appended to the code.

Add-on code 32667 is used to report additional thoracoscopic therapeutic wedge resections. Add-on code 32668 is used to report diagnostic wedge resection that is followed by anatomic lung resection. Code 32668 can only be reported in conjunction with CPT codes 32440, 32442, 32445, 32480, 32482, 32484, 32486, 32488, 32503, 32504, 32505, 32663, 32666, 32667, 32669, 32670, and 32671. For procedures on the right lung, mediastinal lymph nodes include the paratracheal, subcarinal, paraesophageal, and those in the inferior pulmonary ligament. For procedures on the left lung, mediastinal lymph nodes include the subcarinal, paraesophageal, and those in the aortopulmonary window, and inferior pulmonary ligament.

A surgeon plans to perform a VATS wedge biopsy of two suspicious lesions in the right lung: one in the upper lobe and one in the lower lobe. His plan is to proceed with a therapeutic operation if the frozen section biopsy of either lesion proves to be malignant. The upper lobe lesion is a non-small cell carcinoma on frozen section of the wedge biopsy. The lower lobe lesion is a benign granuloma. The surgeon proceeds to perform a VATS upper lobectomy and mediastinal lymphadenectomy. Reportable codes include the following:

32663, VATS lobectomy +32668, VATS diagnostic wedge resection +32667, VATS additional wedge resection +32674, VATS mediastinal and regional lymphadenectomy

Note: Code 32663 is the primary code. The other codes are add-on codes and do not require modifiers.

**IVC filter and ligation of the vena cava**

Codes 37620, Interruption, partial or complete, of inferior vena cava by suture, ligation, plication, clip, extravascular, intravascular (umbrella device), and 75940, Percutaneous placement of IVC filter, radiological supervision and interpretation, have been deleted for 2012. Three new bundled codes were established to report insertion, repositioning, and removal of an inferior vena cava (IVC) filter: 37191, Insertion of intravascular vena cava filter, endovascular approach including vascular access, vessel selection, and radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance (ultrasound and fluoroscopy), when performed; 37192, Repositioning of intravascular vena cava filter, endovascular approach including vascular access, vessel selection, and radiological supervision continued on page 32
<table>
<thead>
<tr>
<th>CPT Code</th>
<th>Descriptor</th>
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<th>2012 wRVU</th>
<th>% chg from 2011</th>
</tr>
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<tbody>
<tr>
<td>11042</td>
<td>Debridement, subcutaneous tissue (includes epidermis and dermis, if performed); first 20 sq cm or less</td>
<td>0.80</td>
<td>1.01</td>
<td>26%</td>
</tr>
<tr>
<td>11043</td>
<td>Debridement, muscle and/or fascia (includes epidermis, dermis, and subcutaneous tissue, if performed); first 20 sq cm or less</td>
<td>2.00</td>
<td>2.70</td>
<td>35%</td>
</tr>
<tr>
<td>11044</td>
<td>Debridement, bone (includes epidermis, dermis, subcutaneous tissue, muscle and/or fascia, if performed); first 20 sq cm or less</td>
<td>3.60</td>
<td>4.10</td>
<td>14%</td>
</tr>
<tr>
<td>11045</td>
<td>Debridement, subcutaneous tissue (includes epidermis and dermis, if performed); each additional 20 sq cm, or part thereof (List separately in addition to code for primary procedure)</td>
<td>0.33</td>
<td>0.50</td>
<td>52%</td>
</tr>
<tr>
<td>11046</td>
<td>Debridement, muscle and/or fascia (includes epidermis, dermis, and subcutaneous tissue, if performed); each additional 20 sq cm, or part thereof (List separately in addition to code for primary procedure)</td>
<td>0.70</td>
<td>1.03</td>
<td>47%</td>
</tr>
<tr>
<td>11047</td>
<td>Debridement, bone (includes epidermis, dermis, subcutaneous tissue, muscle and/or fascia, if performed); each additional 20 sq cm, or part thereof (List separately in addition to code for primary procedure)</td>
<td>1.20</td>
<td>1.80</td>
<td>50%</td>
</tr>
<tr>
<td>12031</td>
<td>Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities (excluding hands and feet); 2.5 cm or less</td>
<td>2.20</td>
<td>2.00</td>
<td>-9%</td>
</tr>
<tr>
<td>12035</td>
<td>Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities (excluding hands and feet); 12.6 cm to 20.0 cm</td>
<td>3.47</td>
<td>3.50</td>
<td>1%</td>
</tr>
<tr>
<td>12036</td>
<td>Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities (excluding hands and feet); 20.1 cm to 30.0 cm</td>
<td>4.09</td>
<td>4.23</td>
<td>3%</td>
</tr>
<tr>
<td>12037</td>
<td>Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities (excluding hands and feet); over 30.0 cm</td>
<td>4.71</td>
<td>5.00</td>
<td>6%</td>
</tr>
<tr>
<td>12041</td>
<td>Repair, intermediate, wounds of neck, hands, feet and/or external genitalia; 2.5 cm or less</td>
<td>2.42</td>
<td>2.10</td>
<td>-13%</td>
</tr>
<tr>
<td>12045</td>
<td>Repair, intermediate, wounds of neck, hands, feet and/or external genitalia; 12.6 cm to 20.0 cm</td>
<td>3.68</td>
<td>3.75</td>
<td>2%</td>
</tr>
<tr>
<td>12047</td>
<td>Repair, intermediate, wounds of neck, hands, feet and/or external genitalia; over 30.0 cm</td>
<td>4.69</td>
<td>4.95</td>
<td>6%</td>
</tr>
<tr>
<td>12051</td>
<td>Repair, intermediate, wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 2.5 cm or less</td>
<td>2.52</td>
<td>2.33</td>
<td>-8%</td>
</tr>
<tr>
<td>12055</td>
<td>Repair, intermediate, wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 12.6 cm to 20.0 cm</td>
<td>4.47</td>
<td>4.50</td>
<td>1%</td>
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<tr>
<td>28820</td>
<td>Amputation, toe; metatarsophalangeal joint</td>
<td>5.00</td>
<td>5.82</td>
<td>16%</td>
</tr>
<tr>
<td>28825</td>
<td>Amputation, toe; interphalangeal joint</td>
<td>6.01</td>
<td>5.37</td>
<td>-11%</td>
</tr>
<tr>
<td>35800</td>
<td>Exploration for postoperative hemorrhage, thrombosis or infection; neck</td>
<td>8.07</td>
<td>12.00</td>
<td>49%</td>
</tr>
<tr>
<td>35840</td>
<td>Exploration for postoperative hemorrhage, thrombosis or infection; abdomen</td>
<td>10.96</td>
<td>20.75</td>
<td>89%</td>
</tr>
<tr>
<td>35860</td>
<td>Exploration for postoperative hemorrhage, thrombosis or infection; extremity</td>
<td>6.80</td>
<td>15.25</td>
<td>124%</td>
</tr>
<tr>
<td>36819</td>
<td>Arteriovenous anastomosis, open; by upper arm basilic vein transposition</td>
<td>14.47</td>
<td>13.29</td>
<td>-8%</td>
</tr>
<tr>
<td>36825</td>
<td>Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate procedure); autogenous graft</td>
<td>15.13</td>
<td>14.17</td>
<td>-6%</td>
</tr>
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<tr>
<th>CPT Code</th>
<th>Descriptor</th>
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<th>2012 wRVU</th>
<th>% chg from 2011</th>
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<tbody>
<tr>
<td>37140</td>
<td>Venous anastomosis, open; portocaval</td>
<td>25.23</td>
<td>40.00</td>
<td>59%</td>
</tr>
<tr>
<td>37145</td>
<td>Venous anastomosis, open; renoportal</td>
<td>26.24</td>
<td>37.00</td>
<td>41%</td>
</tr>
<tr>
<td>37160</td>
<td>Venous anastomosis, open; caval-mesenteric</td>
<td>23.24</td>
<td>38.00</td>
<td>64%</td>
</tr>
<tr>
<td>37180</td>
<td>Venous anastomosis, open; splenorenal, proximal</td>
<td>26.24</td>
<td>36.50</td>
<td>39%</td>
</tr>
<tr>
<td>37181</td>
<td>Venous anastomosis, open; splenorenal, distal (selective decompression of esophagogastric varices, any technique)</td>
<td>28.37</td>
<td>40.00</td>
<td>41%</td>
</tr>
<tr>
<td>42415</td>
<td>Excision of parotid tumor or parotid gland; lateral lobe, with dissection and preservation of facial nerve</td>
<td>18.12</td>
<td>17.16</td>
<td>-5%</td>
</tr>
<tr>
<td>42420</td>
<td>Excision of parotid tumor or parotid gland; total, with dissection and preservation of facial nerve</td>
<td>21.00</td>
<td>19.53</td>
<td>-7%</td>
</tr>
<tr>
<td>42440</td>
<td>Excision of submandibular (submaxillary) gland</td>
<td>7.13</td>
<td>6.14</td>
<td>-14%</td>
</tr>
<tr>
<td>43415</td>
<td>Suture of esophageal wound or injury; transthoracic or transabdominal approach</td>
<td>28.91</td>
<td>44.88</td>
<td>55%</td>
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<tr>
<td>47563</td>
<td>Laparoscopy, surgical; cholecystectomy with cholangiography</td>
<td>12.11</td>
<td>11.47</td>
<td>-5%</td>
</tr>
<tr>
<td>47564</td>
<td>Laparoscopy, surgical; cholecystectomy with exploration of common duct</td>
<td>14.24</td>
<td>18.00</td>
<td>26%</td>
</tr>
<tr>
<td>49507</td>
<td>Repair initial inguinal hernia, age 5 years or older; incarcerated or strangulated</td>
<td>10.05</td>
<td>9.09</td>
<td>-10%</td>
</tr>
<tr>
<td>49521</td>
<td>Repair recurrent inguinal hernia, any age; incarcerated or strangulated</td>
<td>12.44</td>
<td>11.48</td>
<td>-8%</td>
</tr>
<tr>
<td>49587</td>
<td>Repair umbilical hernia, age 5 years or older; incarcerated or strangulated</td>
<td>8.04</td>
<td>7.08</td>
<td>-12%</td>
</tr>
<tr>
<td>49652</td>
<td>Laparoscopy, surgical, repair, ventral, umbilical, spigelian or epigastric hernia (includes mesh insertion, when performed); reducible</td>
<td>12.88</td>
<td>11.92</td>
<td>-7%</td>
</tr>
<tr>
<td>49653</td>
<td>Laparoscopy, surgical, repair, ventral, umbilical, spigelian or epigastric hernia (includes mesh insertion, when performed); incarcerated or strangulated</td>
<td>16.21</td>
<td>14.94</td>
<td>-8%</td>
</tr>
<tr>
<td>49654</td>
<td>Laparoscopy, surgical, repair, incisional hernia (includes mesh insertion, when performed); reducible</td>
<td>15.03</td>
<td>13.76</td>
<td>-8%</td>
</tr>
<tr>
<td>49655</td>
<td>Laparoscopy, surgical, repair, incisional hernia (includes mesh insertion, when performed); incarcerated or strangulated</td>
<td>18.11</td>
<td>16.84</td>
<td>-7%</td>
</tr>
<tr>
<td>60220</td>
<td>Total thyroid lobectomy, unilateral; with or without isthmusectomy</td>
<td>12.37</td>
<td>11.19</td>
<td>-10%</td>
</tr>
<tr>
<td>60240</td>
<td>Thyroidectomy, total or complete</td>
<td>16.22</td>
<td>15.04</td>
<td>-7%</td>
</tr>
<tr>
<td>60500</td>
<td>Parathyroidectomy or exploration of parathyroid(s);</td>
<td>16.78</td>
<td>15.60</td>
<td>-7%</td>
</tr>
<tr>
<td>99218</td>
<td>Initial observation care, per day, for the E/M of a patient, which requires these three key components: a detailed or comprehensive history; a detailed or comprehensive examination; and medical decision making that is straightforward or of low complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient’s and/or family’s needs. Usually, the problem(s) requiring admission to “observation status” are of low severity. Physicians typically spend 30 minutes at the bedside and on the patient’s hospital floor or unit.</td>
<td>1.28</td>
<td>1.92</td>
<td>50%</td>
</tr>
<tr>
<td>CPT Code</td>
<td>Descriptor</td>
<td>2011 wRVU</td>
<td>2012 wRVU</td>
<td>% chg from 2011</td>
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</tr>
<tr>
<td>99219</td>
<td>Initial observation care, per day, for the E/M of a patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of moderate complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the problem(s) requiring admission to “observation status” are of moderate severity. Physicians typically spend 50 minutes at the bedside and on the patient's hospital floor or unit.</td>
<td>2.14</td>
<td>2.60</td>
<td>21%</td>
</tr>
<tr>
<td>99220</td>
<td>Initial observation care, per day, for the E/M of a patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the problem(s) requiring admission to “observation status” are of high severity. Physicians typically spend 70 minutes at the bedside and on the patient's hospital floor or unit.</td>
<td>2.99</td>
<td>3.56</td>
<td>19</td>
</tr>
<tr>
<td>99224</td>
<td>Subsequent observation care, per day, for the E/M of a patient, which requires at least two of these three key components: problem-focused interval history; problem-focused examination; medical decision making that is straightforward or of low complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is stable, recovering, or improving. Physicians typically spend 15 minutes at the bedside and on the patient's hospital floor or unit.</td>
<td>0.54</td>
<td>0.76</td>
<td>41</td>
</tr>
<tr>
<td>99225</td>
<td>Subsequent observation care, per day, for the E/M of a patient, which requires at least two of these three key components: an expanded problem-focused interval history; an expanded problem-focused examination; medical decision making of moderate complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is responding inadequately to therapy or has developed a minor complication. Physicians typically spend 25 minutes at the bedside and on the patient's hospital floor or unit.</td>
<td>0.96</td>
<td>1.39</td>
<td>45</td>
</tr>
<tr>
<td>99226</td>
<td>Subsequent observation care, per day, for the E/M of a patient, which requires at least two of these three key components: a detailed interval history; a detailed examination; medical decision making of high complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Physicians typically spend 35 minutes at the bedside and on the patient's hospital floor or unit.</td>
<td>1.44</td>
<td>2.00</td>
<td>39</td>
</tr>
<tr>
<td>99235</td>
<td>Observation or inpatient hospital care for the E/M of a patient including admission and discharge on the same date, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of moderate complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually the presenting problem(s) requiring admission are of moderate severity.</td>
<td>3.41</td>
<td>3.24</td>
<td>-5</td>
</tr>
<tr>
<td>99236</td>
<td>Observation or inpatient hospital care for the E/M of a patient, including admission and discharge on the same date, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually the presenting problem(s) requiring admission are of high severity.</td>
<td>4.26</td>
<td>4.20</td>
<td>-1</td>
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</table>
and interpretation, intraprocedural roadmapping, and imaging guidance (ultrasound and fluoroscopy), when performed; and 37193, Retrieval (removal) of intravascular vena cava filter, endovascular approach including vascular access, vessel selection, and radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance (ultrasound and fluoroscopy), when performed.

New code 37619, Ligation of inferior vena cava, has been established to report the open surgical procedure performed in trauma patients or other acute open ligation indications.

Paracentesis and peritoneal lavage

In 2012, codes 49080, Peritoneocentesis, abdominal paracentesis, or peritoneal lavage (diagnostic or therapeutic); initial, and 49081, Peritoneocentesis, abdominal paracentesis, or peritoneal lavage (diagnostic or therapeutic); subsequent, have been deleted and replaced with new codes that indicate whether it was done with or without imaging guidance: 49082, Abdominal paracentesis (diagnostic or therapeutic; without imaging guidance), and 49083, Abdominal paracentesis (diagnostic or therapeutic); with imaging guidance.

Additionally, a new code was created to report peritoneal lavage, 49084, Peritoneal lavage, including imaging guidance, when performed.

Medicare physician fee schedule

In addition to coding changes for 2012, the final rule for the Medicare physician fee schedule makes many changes to the physician work relative value units (wRVUs). The changes in wRVUs from 2011 values come after review of procedures and services that the Centers for Medicare & Medicaid Services (CMS) identified as “potentially misvalued,” and for procedures and services identified by specialties as undervalued and reviewed through the five-year review process. The American College of Surgeons was involved in the American Medical Association/Specialty Society Relative Value Scale Update Committee (RUC) survey and review of 95 codes. Although some of these codes decreased in value by as much as 13 percent, other codes increased by as much as 124 percent.

The table on pages 29–31 presents 42 general surgery codes and nine observation service codes with wRVUs that CMS is changing in 2012. As more hospitals assign patients to outpatient status for facility fee reimbursement instead of inpatient status, it is important to note that CMS agreed to value observation (outpatient) E/M codes equal to the corresponding inpatient E/M codes.

If you have additional coding questions, contact the ACS Coding Hotline at 800-227-7911 between 7:00 am and 4:00 pm Mountain time, excluding holidays.

Editor’s note

Accurate coding is the responsibility of the provider. This summary is only a resource to assist in the billing process.

Dr. Barney is associate professor and associate program director for general surgery, department of surgery, Wright State University Boonshoft School of Medicine, and member, Wright State Surgeons, Miami Valley Hospital, Dayton, OH. She is the ACS advisor at the American Medical Association CPT Editorial Panel meetings.

Dr. Savarise is a general surgeon in private practice in Sandpoint, ID. He serves on the Advisory Council for General Surgery, and is the ACS alternate advisor at the American Medical Association CPT Editorial Panel.

Ms. Jackson is Practice Affairs Associate, Division of Advocacy and Health Policy, Washington, DC.
At the 2011 Clinical Congress in San Francisco, CA, a wide selection of presentations covering subjects from education to practice to clinical considerations—in addition to poster presentations, papers sessions, and special-interest meetings—were offered. The meeting was attended by 15,089 participants, including 9,512 physicians; the remaining attendees included exhibitors, spouses, guests, and convention personnel.

Convocation
Patricia J. Numann, MD, FACS—a general surgeon and Lloyd S. Rogers Professor of Surgery Emeritus, Distinguished Teaching Professor Emeritus at the State University of New York (SUNY) Upstate Medical University, Syracuse—was installed as the 92nd President of the American College of Surgeons (ACS) during Convocation ceremonies that denoted the official opening of the Clinical Congress (see photo, page 34).

Another officer installed during the Convocation was Robert R. Bahnsen, MD, FACS, Columbus, OH, as Second Vice-President. A urologic surgeon, he is professor and chairman of the department of urology, and The Dave Longaberger Chair in Urology at the Ohio State
University College of Medicine, Columbus, OH. A Fellow of the College since 1990, Dr. Bahnson has served on the Board of Governors (2004–2010), as a member of the Governors’ Committee on Physician Competency and Health (2006–2010), as Vice-Chair of the Program Committee (2008–2010), and as Chair of the Advisory Council for Urology (2007–2011).

Honorary Fellowship was conferred on the following six prominent surgeons: Kenneth D. Boffard, MB, BCh, FACS, FRCS; Ara Darzi, MB, BCh, FACS, FRCS; Eilis McGovern, MD, DCh, FRCSI; Alberto Montori, MD, FACS; Cornelis J.H. van de Velde, MD, PhD, FRCS; and Yupei Zhao, MD, FACS.

**Named Lectures**

As was the case last year, the Martin Memorial Lecture and the American Urological Association Lecture were combined for presentation during the Opening Ceremony of the Clinical Congress. C. David Naylor, MD, D.Phil, FRCPC, FACP, delivered his lecture, Too Big to Fail? Health Care Reform in the U.S. and Canada, immediately following the Opening Ceremony on Monday morning. Also on Monday, The Problem of Physician Payment Reform: A Surgical Solution was presented as the John H. Gibbon, Jr., Lecture by John E. May-\(\text{er, MD, FACS}\), and Edward R. Laws MD, FACS, presented a lecture titled The Virtuoso Surgeon: Past, Present, and Future as the Charles G. Drake History of Surgery Lecture. The Excelsior Surgical Society Edward D. Churchill Lecture, convened Tuesday with Donald D. Trunkey, MD, FACS, presenting Changes in Combat Casualty Care in the Last 20 Years.

Other Named Lectures that convened Tuesday were the Scudder Oration on Trauma, during which Demetrios Demetriades, MD, FACs, presented

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**Where to find more information**

These highlights include news items that have been discussed in more detail in previous issues of the Bulletin. Following is a list of where to find these articles.

**October 2011**

Dr. McGrath’s Distinguished Service Award, page 28

Full description of the humanitarian achievements of Surgical Volunteerism Award recipients, page 30

**November 2011**

Biography of Dr. Numann, page 40

Citations for Honorary Fellows presented at the Convocation, page 42

**December 2011**

Dr. Numann’s Presidential Address, page 24

Dr. Eastman, Dr. Burns, and Dr. Daly were chosen as Officers-Elect, page 51

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**Pictured above, left:** Distinguished Service Award recipient Dr. McGrath (left) with Dr. Britt.

**Center:** Dr. Numann presenting her Presidential Address during Convocation ceremonies.

**Right:** Volunteerism Award recipients Dr. Carter (second from left) and Dr. Tefera (second from right) with Jack Watters, MD, vice-president of external medical affairs, Pfizer, Inc (far left) and Timothy C. Flynn, MD, FACS, Chair of the Board of Governors.
Thoracic Aortic Injuries: Crossing the Rubicon; and the Olga M. Jonasson Lecture, Effective Advocacy, presented by ACS President Dr. Numann. Wednesday’s Named Lectures included the Ethics and Philosophy Lecture, Ethical Foundations of Health Care Reform: Implications for Policy and Law presented by Robert M. Sade, MD, FACS; Translational Cancer Research: Playing to Win in a Team Sport, the Commission on Cancer Oncology Lecture presented by Monica M. Bertagnolli, MD, FACS; the I.S. Ravdin Lecture in Basic Sciences, where Robert D. Howe, PhD, delivered Cathbots: Ultrasound Guidance for Robotic Beating Heart Surgery; The Herand Abcarian Lecture, Improving the Quality of Cancer Surgery in a Single Payor System: The Cancer Care Ontario Experience, was offered by Robin S. McLeod, MD, FACS, FRCSC; and Surgical Training and Surgical Practice: Are We Getting the Formula Right?, the Distinguished Lecture of the International Society of Surgery, was presented by Eilis McGovern, MD, FRCSI, FRCS(Ed), DCh.

College governance

At the Annual Business Meeting of Members on Wednesday, where Dr. Numann presided, Carlos A. Pellegrini, MD, FACS, presented the Report of the Chair of the Board of Regents; Timothy C. Flynn, MD, FACS, presented the Report of the Chair of the Board of Governors; and David B. Hoyt, MD, FACS, presented the Report of the Executive Director of the College. Hilary A. Sanfey, MB, BCh, FACS, presented the Report of the Chair of the Nominating Committee of the Board of Governors, during which the elected Regents and Board of Governors Officers were announced; and Jeffrey S. Upperman, MD, FACS, presented the Report of the Chair of the Nominating Committee of the Fellows and announced the nomination and election of Governors and Officers.

New Officers-Elect

At the Annual Business Meeting of Members, new Officers-Elect were elected. A. Brent Eastman, MD, FACS, was elected President-Elect and will begin his tenure as the 93rd ACS President at the 2012 Clinical Congress in Chicago, IL. Dr. Eastman is a general, vascular, and trauma surgeon from San Diego, CA.

R. Phillip Burns, MD, FACS—a general surgeon and professor of surgery at the University of Tennessee College of Medicine, Chattanooga—was named First Vice-President-Elect. Named as Second Vice-President-Elect was John M. Daly, MD, FACS, a general surgeon and dean emeritus, Temple University School of Medicine, Philadelphia, PA.

Awards, honors, celebrations

A number of ACS Members were recognized during the Clinical Congress.

The 2011 Distinguished Service Award, the College’s highest honor, was presented to Mary
H. McGrath, MD, MPH, FACS (see photo, page 34). The ACS Board of Regents recognized Dr. McGrath with this award for her “steadfast commitment to the initiatives and principles embodied by the American College of Surgeons,” her numerous contributions to the College through service, her work as a clinical and academic surgeon, and her dedication to improving the quality of surgical patient care.

The 2011 ACS/Pfizer Surgical Volunteerism and Surgical Humanitarian Award winners were honored at a general session on Monday, sponsored by the College’s Operation Giving Back program. Louis L. Carter, Jr., MD, FACS, was presented with the humanitarianism award, and Girma Tefera, MD, FACS, received the volunteerism award (see photo, page 34).

Also Monday, Thomas R. Russell, MD, FACS, and Nona Chiampi Russell, MD, PhD, were presented with the Fellows Leadership Society’s Distinguished Philanthropist Award. The Doctors Russell have been generous and loyal benefactors of the College as evidenced by more than 100 philanthropic gifts since 1990 (see photo, page 35).

At the annual Trauma Dinner Monday night, the 2011 Meritorious Achievement Award was given in honor of Steven N. Parks, MD, FACS, who passed away August 21, 2010. Dr. Parks was the former State Chair of the Northern California Committee on Trauma (COT), former Chief of Region 9, former COT member, and former Chair of the Advanced Trauma Life Support program. Accepting the award from Raul Coimbra, MD, PhD, FACS, Vice-Chair of the COT and Chair of the Regional Committees on Trauma, were Dr. Parks’ wife, Mrs. Patty Parks, daughter Nancy Parks, MD, and son Ben Parks (see photo, this page).
The 2012 Owen H. Wangensteen Surgical Forum was dedicated to Eric W. Fonkalsrud, MD, FACS (see photo, page 36). Residents honored with the Surgical Forum Excellence in Research Awards included Sonal Arora, MD, PhD; Michelle L. Babicky, MD; Evie Carchman, MD; Jerry S. Chen, MD; Melissa H. Coleman, MD; Jason P. Glotzbach, MD; Caroline C. Jadlowiec, MD; Aaron W. James, MD; Eric Kubat, MD; Elise H. Lawson, MD, MSHS, Masayuki Nagahashi, MD, PhD; Mathew D. Sorensen, MD; Allison L. Speer, MD; Richard C. Webb, MD; and Daniel Wu, MD.

The Committee on Cancer Liaison recognized three Commission on Cancer State Chairs for outstanding performance and significant contributions to the Liaison Program in 2011. Honored were J. David Beatty, MD, FACS, Washington State Chair, Swedish Cancer Institute in Seattle, WA; Jarrod Kaufman, MD, FACS, New Jersey State Chair, Advanced Surgical Associates of New Jersey, and Central State Healthcare System, Freehold, NJ; and Barry Landry, MD, FACS, Louisiana State Chair, Thibodaux Surgical Specialists and Thibodaux Re-
gional Medical Center, Thibodaux, LA (see photo, page 36).

Afaq Z. Khan, MBBS, FACS, a general surgeon from Hays, KS, received the 2011 Nizar N. Oweida Scholarship at the Rural Surgeons meeting (see photo, page 36).

Tippi C. MacKenzie, MD, FACS, a pediatric surgeon at University of California, San Francisco, Benioff Children's Hospital and its Fetal Treatment Center, was presented with the Joan L. and Julius H. Jacobson II Promising Investigator Award (see photo, page 37).

Neutrophil-Lymphocyte Ratio Is Associated with Increased Risk of Pathological Upstaging after Radical Cystectomy for Clinical T2 Urothelial Carcinoma was named this year's Best Scientific Exhibit at the 2011 Clinical Congress meeting. This poster was authored by Tracy M. Downs, MD; Aaron M. Potretzke, MD; E. Jason Abel, MD; Wei Huang, MD; Jeremy Cetnar, MD, MPH; and David F. Jarrard, MD, of the University of Wisconsin School of Medicine and Public Health, Madison, WI (see photo, page 37). More than 300 poster presentations were displayed at the meeting, with nine posters awarded the Poster of Exception Merit designation.

The ninth annual ACS Resident Award for Exemplary Teaching—which is sponsored by the Division of Education to recognize excellence in teaching by a resident, and to highlight the importance of teaching in residents’ daily lives—was presented to Aaron R. Jensen, MD, MÉD. Dr. Jensen completed his general surgery residency at the University of Washington in Seattle, and is currently a fellow in pediatric surgical critical care at the Children's Hospital Los Angeles. Dr. Jensen was selected by an independent review panel of the Committee on Resident Education (see photo, page 37).

The International Guest Scholar program welcomed its 2011 guest scholars and exchange fellows, including the following: Peter J. Anderson, MB, ChB, PhD, FRACS, FRCS (Eng), Adelaide, Australia; Somprakes Basu, MB, BS, Varanasi, India, International Education Scholar; Carlos Carcamo, MD, FACS, Valdivia, Chile; Pramod Devkota, MB, BS, MS, Kathmandu, Nepal; Timothy W. Eglinton, MB, ChB, FRACS, Christchurch, New Zealand; Marcus Fokou, MD, FWACS, Yaounde, Cameroon, Doctor Louis Argenta Scholar; Pablo Santiago Frioni, MD, Montevideo, Uruguay; Amit Goyal, MD, MS, Derby, United Kingdom, International Education Scholar; Beata Hemmelova, MD, Brno, Czech Republic, Abdol Ismaili Scholar; Jens Hoeppner, MD, Freiburg im Breisgau, Germany; Rajeev Kumar, MB, BS, New Delhi, India; Pradeep Harkison Narsavia, MB, ChB, Cape Town, South Africa; Kehinde Sunday Oluwadiya, MBBS, FMCS (Orthop), Osogbo, Nigeria; Rauf Oqtay Shabazov, MD, Baku, Azerbaijan; and Suguru Yamada, MD, PhD, Nagoya City, Aichi, Japan (see photo, this page), was unable to attend.

Medical students Melina Deban, McGill University Faculty of Medicine (see photo, page 39); Chris-
topher S. Graffeo, New York University School of Medicine (see photo, this page); and Kassi Kronfeld, Oregon Health & Science University (photo not available) were awarded first-place honors for their posters and oral presentations during the Medical Student Program offered during the Clinical Congress by the Division of Education. Ms. Deban’s poster titled Creating a Surgical Care Report Card: The Association between Adherence to Process-Based Quality Indicators and Postoperative Complications was awarded first-place in the Clinical and Educational Research category. Mr. Graffeo’s poster titled The Dichotomous Role of Dendritic Cells in Modulating Pancreatitis tied for first place in the Basic Science Research category. Mr. Kronfeld’s poster titled Brainstem Modulation of Cerebral Blood Flow After Experimental Subarachnoid Hemorrhage. Their posters and oral presentations were selected from 40 posters featured at the Medical Student Program, which spanned three days, featured approximately 25 speakers, and included more than 300 medical student participants.

The ACS Committee on Video-based Education sponsored a session to highlight videos authored by prominent international surgeons. At the conclusion of the session, panel members voted on the best video presented at the meeting. Committee Chair Tonia M. Young-Fadok, MD, FACS, and Pascal R. Fuchshuber, MD, FACS, session coordinators, presented the Certificate of Merit Award for the most outstanding video, titled Laparoscopic Right Hepatectomy and the Management of Vascular Lesions, authored by Brice Gayet, MD, PhD, and presented by Adrian M. Nedelcu, MD, of Paris, France.

Additionally, Barbara L. Bass, MD, FACS, Houston, TX, was honored for her eight years of exceptional leadership as Chair of the Program Committee at its annual meeting (see photo, page 40). Thomas V. Whalen, MD, MMM, FACS, Vice-Chair, Board of Regents was recognized for his outstanding leadership as Course Director for the Surgery Resident Program, offered each year by the Division of Education at the Clinical Congress to help prepare residents for the transition to practice (see photo, page 40).

Board of Regents/Board of Governors

The Board of Governors has elected James K. Elsey, MD, FACS, Lawrenceville, GA; Gerald M. Fried, MD, FACS, Montreal, QC; B. J. Hancock, MD, FACS, FRCSC, Winnipeg, MB; and Lenworth M. Jacobs, Jr., MD, FACS, Hartford, CT, to the ACS Board of Regents.

Dr. Elsey is a general and vascular surgeon in private practice in Atlanta, GA. He is affiliated with Gwinnett Medical Center, Lawrenceville, GA, and is a visiting professor of surgery at Emory University School of Medicine, Atlanta. A Fellow of the College since 1989, Dr. Elsey has served as a member (2004–2010) and Secretary (2008–2010) of the Board of Governors; as Chair of the Board of Governors’ Committee to Study the Fiscal Affairs of the College (2008–2010); and as Secretary (2003–2008) and President (2008–2010) of the ACS Georgia Chapter.

Dr. Fried, a general surgeon, is Adair Family Pro-
Top left: Dr. Bass (center), outgoing Chair of the Program Committee, with committee members, left to right: Craig S. Derkay, MD, FACS; Katie M. Anthony; Amy B. Reed, MD, FACS; Deborah A. Nagle, MD, FACS; Fabrizio Michelassi, MD, FACS; Dr. Sachdeva; David R. Jones, MD, FACS; Dr. Bass; David M. Mahvi, MD, FACS; Valerie W. Rusch, MD, FACS; William D. Spotnitz, MD, MBA, FACS; Henri R. Ford, MD, FACS; and Quan-Yang Duh, MD, FACS.

Top right: Departing Surgery Resident Program Course Director Dr. Whalen (right) with Dr. Sachdeva.

Bottom: The ACS Foundation Board met during Clinical Congress. Front row, left to right: Jon A. van Heerden, MD, MBHB, FACS, FRCS; Charles M. Balch, MD, FACS; William F. Sasser, MD, FACS; Amilu Stewart, MD, FACS, Secretary; Andrew L. Warshaw, MD, FACS, Treasurer; LaMar S. McGinnis, Jr., MD, FACS; Christopher J. Daly, MD, FACS; Gay Vincent, ACS Chief Financial Officer; and Norman M. Kenyon, MD, FACS.

Top row: David B. Hoyt, MD, FACS, ACS Executive Director and Foundation President; Thomas R. Russell, MD, FACS, Chair; Richard A. Lynn, MD, FACS; Richard B. Reiling, MD, FACS, Vice-Chair; Kenneth W. Sharp, MD, FACS; Martin H. Wojcik, CFRE, Foundation Executive Director; and David Korajczyk, Director of Corporate and Foundation Relations.
Dr. Jacobs, a general surgeon, is professor of surgery and chairman of the department of traumatology and emergency medicine at the University of Connecticut, and director of the trauma program at Hartford (CT) Hospital. A Fellow since 1978, Dr. Jacobs has served as COT State Provincial Chair (1998–2004); as Vice-Chair of the Executive Committee of the Board of Governors (2008–2009); as a member (2003–2006) and Chair (2007–2009) of the Board of Governors’ Committee on Chapter Activities; and as a member of the Accreditation Review Committee (2009 to present).

Elected to additional three-year terms on the Board of Regents were Mark A. Malangoni, MD, FACS, Philadelphia, PA; and Valerie W. Rusch, MD, FACS, New York, NY.

J. David Richardson, MD, FACS, a general, thoracic, and vascular surgeon from Louisville, KY, was elected Chair of the Board of Regents. Dr. Richardson is professor of surgery and vice-chair of the department of surgery at the University of Louisville School of Medicine (see article, page 52).

Martin B. Camins, MD, FACS, was elected Vice-Chair of the Board of Regents. Dr. Camins is a neurological surgeon in New York, NY.

The Board of Governors elected Lena M. Napo­litano, MD, FACS, Ann Arbor, MI, as Chair of its Executive Committee; Gary L. Timmerman, MD, FACS, Sioux Falls, SD, as Vice-Chair; and William G. Cioffi, Jr., MD, FACS, Providence, RI, as Secretary. Also elected to the Board of Governors’ Executive Committee were James Clinton Denny, III, MD, FACS, Knoxville, TN; and Fabrizio Michelassi, MD, FACS, New York, NY.

Clinical Congress 2012: Chicago, IL
It’s never too early to start planning for the 98th Annual Clinical Congress, scheduled for September 30–October 4, 2012, in Chicago, IL. Be sure to visit http://www.facs.org in the coming months for more details regarding the educational program, registration, housing, and transportation.

Above top: Recipients of the Distinguished Service Award gathered. Front row, left to right (all MD, FACS): F. Dean Griffen; Josef E. Fischer; Amilu Stewart; Dr. McGinnis; Murray F. Brennan; and Frank Padberg. Back row: Paul E. Collicott; Dr. Flynn, luncheon host; Dr. McGrath; Dr. Numann; Richard B. Reiling; and Dr. Hoyt.
ACS Officers, Regents, and Board of Governors’ Executive Committee

Officers/Officers-Elect

Patricia J. Numann
President
General surgery
Professor emeritus,
State University of New York
Syracuse, NY

Robert R. Bahnson
First Vice-President
Urology
Professor and chair, department of urology, and The Dave Longaberger Chair in Urology, The Ohio State University College of Medicine, Columbus Columbus, OH

Courtney M. Townsend, Jr.
Secretary
General surgery
John Woods Harris
Distinguished Professor, department of surgery, The University of Texas Medical Branch Galveston, TX

Andrew L. Warshaw
Treasurer
General surgery
W. Gerald Austen Professor of Surgery, Harvard Medical School; and surgeon-in-chief and chairman, department of surgery, Massachusetts General Hospital Boston, MA

A. Brent Eastman
President-Elect
General surgery
Corporate senior vice-president, chief medical officer, Scripps Health; N. Paul Whittier Chair of Trauma, Scripps Memorial Hospital, La Jolla, CA; and clinical professor of surgery–trauma, University of California, San Diego San Diego, CA

R. Phillip Burns
First Vice-President-Elect
General surgery
Chairman and professor of surgery, department of surgery, University of Tennessee College of Medicine, Chattanooga Chattanooga, TN

John M. Daly
Second Vice-President-Elect
General surgery
Dean emeritus, Temple University School of Medicine Philadelphia, PA
ACS Officers and Regents

Board of Regents

J. David Richardson  
**Chair**  
*Vascular surgery*  
Professor of surgery; vice-chairman, department of surgery; and chief of surgery service and director, emergency surgical services, University of Louisville Hospital  
*Louisville, KY*

Martin B. Camins  
**Vice-Chair**  
*Neurological surgery*  
Clinical professor of neurological surgery, Mount Sinai Hospital and Medical School  
*New York, NY*

H. Randolph Bailey  
*Colon and rectal surgery*  
Clinical professor and chief, division of colon and rectal surgery, University of Texas Health Science Center  
*Houston, TX*

Bruce D. Browner  
*Orthopaedic surgery*  
Gray-Gossling Professor and chairman emeritus, and residency program director, department of orthopaedic surgery, University of Connecticut Health Center,  
*Farmington, CT; and director of orthopaedics, Hartford Hospital  
Hartford, CT*

Margaret M. Dunn  
*General surgery*  
Professor of surgery and executive associate dean, Wright State University Boonshoft School of Medicine; and chief executive officer, Wright State Physicians  
*Dayton, OH*

James K. Elsey  
*General surgery*  
Private practice, Atlanta, GA; visiting professor of surgery, Emory University School of Medicine, Atlanta  
*Atlanta, GA*

Julie A. Freischlag  
*Vascular surgery*  
William Stewart Halsted Professor and surgeon-in-chief, The Johns Hopkins Hospital  
*Baltimore, MD*

Gerald M. Fried  
*General surgery*  
Adair Family Professor and chairman, department of surgery, McGill University; and surgeon-in-chief, McGill University Health Centre Hospitals  
*Montreal, QC*
## ACS Officers and Regents

### Board of Regents

<table>
<thead>
<tr>
<th>Name</th>
<th>Specialty</th>
<th>University/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Barrett G. Haik</strong></td>
<td>Ophthalmic surgery</td>
<td>Chair, department of ophthalmology, University of Tennessee Health Science Center, College of Medicine, Memphis, TN</td>
</tr>
<tr>
<td><strong>B.J. Hancock</strong></td>
<td>Pediatric surgery</td>
<td>Associate professor, departments of surgery and pediatrics and child health, University of Manitoba; and pediatric surgeon and pediatric interventionist, Children’s Hospital of Winnipeg, Winnipeg, MB</td>
</tr>
<tr>
<td><strong>Lenworth M. Jacobs, Jr.</strong></td>
<td>General surgery</td>
<td>Professor of surgery and chairman, department of traumatology and emergency medicine, University of Connecticut; and director, trauma program, Hartford (CT) Hospital, Hartford, CT</td>
</tr>
<tr>
<td><strong>Mark A. Malangoni</strong></td>
<td>General surgery</td>
<td>Associate executive director, American Board of Surgery, Philadelphia, PA</td>
</tr>
<tr>
<td><strong>Raymond F. Morgan</strong></td>
<td>Plastic surgery</td>
<td>Milton T. Edgerton Professor and chair, department of plastic surgery, University of Virginia Health Sciences Center, Charlottesville, VA</td>
</tr>
<tr>
<td><strong>Leigh A. Neumayer</strong></td>
<td>General surgery</td>
<td>Professor of surgery, University of Utah; Jon and Karen Huntsman Presidential Professor of Cancer Research, Huntsman Cancer Institute; and co-director, Integrated Breast Program, Huntsman Cancer Hospital, Salt Lake City, UT</td>
</tr>
<tr>
<td><strong>Karl C. Podratz</strong></td>
<td>Gynecology (oncology)</td>
<td>Joseph I. and Barbara Ashkins Professor of Surgery, and professor of obstetrics and gynecology, Mayo Clinic, Rochester, MN</td>
</tr>
<tr>
<td><strong>Valerie W. Rusch</strong></td>
<td>Thoracic surgery</td>
<td>Chief, thoracic service, Memorial Sloan-Kettering Cancer Center; and professor of surgery, Cornell University Medical College, New York, NY</td>
</tr>
</tbody>
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ACS Officers and Regents

Board of Regents/Board of Governors’ Executive Committee

Marshall Z. Schwartz
Pediatric surgery
Professor of surgery and pediatrics, Drexel University College of Medicine; Temple University School of Medicine; and surgeon-in-chief, chief of pediatric surgery, and director, Pediatric Surgery Research Laboratory, St. Christopher’s Hospital for Children Philadelphia
Philadelphia, PA

Howard M. Snyder III
Urology
Associate director of pediatric urology, The Children’s Hospital of Philadelphia; and professor of urology, University of Pennsylvania School of Medicine
Philadelphia, PA

Mark C. Weissler
Otolaryngology
Joseph P. Riddle Distinguished Professor of Otolaryngology, professor of otolaryngology–head and neck surgery, and professor and chief of head and neck oncology, University of North Carolina Neurosciences Hospital
Chapel Hill, NC

Thomas V. Whalen
Pediatric surgery
Chair, department of surgery, Lehigh Valley Health Network
Allentown, PA

Michael J. Zinner
General surgery
Moseley Professor of Surgery, Harvard Medical School; clinical director, Dana-Farber/BWH Cancer Center; and surgeon-in-chief, Brigham and Women’s Hospital
Boston, MA

Lena M. Napolitano
Chair, Board of Governors
General surgery
Division chief, acute care surgery; associate chair for critical care; and professor of surgery, University of Michigan Health Systems
Ann Arbor, MI

Gary L. Timmerman
Vice-Chair, Board of Governors
General surgery
Chair of surgery, Sanford School of Medicine, University of South Dakota, Sioux Falls, SD

William G. Cioffi, Jr.
Secretary, Board of Governors
General surgery
J. Murray Beardsley Professor and chairman, Alpert Medical School of Brown University; and surgeon-in-chief, Rhode Island Hospital and The Miriam Hospital
Providence, RI
mid federal efforts to restructure health care, and possible threats to graduate medical education funding, it is important to understand the demographic and practice characteristics of the surgical health care workforce—whether it is growing or contracting—and whether supply will be adequate to meet future demand. In the coming months, the American College of Surgeons Health Policy Research Institute (ACS HPRI) will be producing a series of policy briefs illustrating workforce trends for 12 surgical specialties (see Table 1, this page). The aim of these brief reports is to provide decision makers with important data on the workforce that can be used to inform health policy. This article focuses on trends in the urologic surgical workforce since 1981.

Key findings

There has been a decrease in the supply of urologic surgeons relative to population growth, a slight increase in female urologic surgeons, an aging urology workforce (especially in rural areas), and an increase in group practice. In 2009, 9,775 urologic surgeons were actively practicing in the U.S. (not including residents in training) (see Table 2, this page). The supply of urologic surgeons per capita in the U.S. has declined more than all surgical specialties except for general surgery and thoracic surgery (see Table 1). During the period 1981–2009, urologic surgeons per 100,000 population declined by 1.3 percent. Until 1991, the supply of urologic surgeons grew faster than the population. In 1991, that trend reversed, and since then, the decline has accelerated. After 2006, the number of urologic surgeons fell below the 1981 ratio to 3.18 urologic surgeons per 100,000 population.

To examine geographic variation in the urologic surgeon supply, surgeon and population data were analyzed for all counties in the U.S. from 2004 to 2009. In 2009, urologic surgeons practiced in 39 percent of U.S. counties (1,209); representing an increase from 2004 of 20 counties. From 2004 to 2009, 24 percent of counties (750) lost urologists relative to population (see Figure 1, page 47). Of these counties, 89 lost all urologic surgeons. During the same period, 18 percent of counties (548) gained urologic surgeons relative to population. Of the counties that gained urologic surgeons, 109 had no urologists in 2004 and gained at least one urologist by 2009. Just more than 58 percent of counties (1,809) had no urologists in 2004 and 2009. For the period 1981 to 2009, the urban concentration of urologic surgeons has remained stable, with seven urban urologic surgeons for every one urologic surgeon in rural areas.
Age and gender

With an average age of 52.5 years, urologists are among the oldest surgical specialists, second only to thoracic surgeons (53.6 years). In 2009, the average age for all surgical specialists was 50.9, and 14 percent were 65 and older. More than 18 percent of urologic surgeons were 65 and older. This represents more than a 10 percent increase in urologic surgeons 65 and older since 1981, when these physicians were just 7.69 percent of the urology workforce.

Urology is a male-dominated specialty. Women have been entering the surgical workforce with increasing frequency since 1981, although at different rates in different specialties. Since 1981, the number of female urologic surgeons has grown from 34 to 512, increasing their share of the total urology workforce by nearly 5 percent (see Figure 2, page 48). Still, men continue to make up a strong majority of urologic surgeons representing 94.8 percent of the workforce.

Since 1981, the age gap between male and female urologists has increased by more than four years to an average difference of 10.3 years in 2009 (with males being older). In 2009, female urologists were 42.7 years old on average, and males were 53 years old. For all surgeons, males are slightly younger at 52.5 years old, while females are older at 44.5 years of age on average. As seen in Figure 2, more female urologists have recently entered the urology workforce.
Training in urologic surgery

According to the Accreditation Council for Graduate Medical Education’s (ACGME’s) data, from 1994 to 2001, the number of urology residents and accredited programs declined by 2.3 percent and 2.4 percent, respectively. However, since 2001, urology residents have increased by 7 percent despite another 2 percent decline in the number of programs through 2009. At the end of training, urology residents achieving American Board of Medical Specialties (ABMS) certifications declined by 19.7 percent from 2000 to 2009. Annual trend data are available from the 2010 ABMS Certificate Statistics booklet.

The proportion of urologic surgeons trained in the U.S. has increased. In 1981, 79 percent of urologists were U.S. medical graduates (USMGs). By 2009, this percentage had increased to 83.3 percent. There has been a shift in the average age of USMGs versus international medical graduate (IMG) urologic surgeons. USMG urologists were nearly three years older than IMG urologists in 1981. By 2009, this trend had reversed, and the average age of USMGs is now more than eight years younger than IMGs.

Group practice growing—but not in rural areas

Following the trends for all practicing surgeons, urologic surgeons are increasingly likely to be employed in a group practice (see Figure 3, this page). The percent of the urologic workforce in group practice increased from 42 percent in 2001 to 60 percent in 2009. As the number employed in group practices increased, the percentage of surgeons employed in solo
practice sharply declined between 2001 and 2009. In 2001, slightly more than one in four (26 percent) urologic surgeons were in solo practice compared with one in five (20 percent) in 2009. The percentage of surgeons employed by health maintenance organizations, nonhospital government, and other entities (defined in Figure 3, as “other setting”) also declined substantially between 2001 and 2009.

Urban urologic surgeons have chosen to practice in groups more often between 2001 and 2009, while group practice among rural practitioners has actually declined slightly (less than 1 percent), and solo practice has increased by nearly 2 percent. Overall, urologists in group practice are almost nine years younger than urologists in solo practice. In general, urologic surgeons practicing in rural areas (average age 54.7) were 2.2 years older than those in urban areas, a trend that has reversed since 1981 (see Figure 4, page 48).

Policy implications
Research has demonstrated an association between a higher density of urologists and lower mortality from prostate, bladder, and kidney cancer at the county level. The relative concentration of urologic surgeons in urban areas and an aging workforce is associated with urology-related health outcomes. Despite small recent gains in the number of residents in the urology training pipeline, ABMS certifications have decreased significantly since the 1970s. As overall supply contracts, rural areas are likely to lose even more urologic surgeons because they are, on average, 2.2 years closer to retirement age than urologic surgeons in urban areas. Consequently, rural patients may have decreased access to screening, medical treatment, and surgical treatment for urologic conditions.

While the growth in group practice for urban urologic surgeons provides benefits for call coverage, quality of life, and subspecialization, this trend is moving in the opposite direction in rural communities. Older, rural urologists are more often in solo practice and less often in group practice. As older urologists in rural areas retire, this maldistribution of access will continue to rise.

Urologist supply per capita is at its lowest point in 30 years. Removing the cap on Medicare GME funds, which remain at 1996 levels, would help all medical and surgical specialties (including urology) to increase their training output. Further cuts to GME funds could create more access problems as even fewer surgeons could be trained.

References

Data and methodology
Physicians were identified as surgeons and classified into surgical groups using a combination of American Medical Association (AMA) primary and secondary self-reported specialties and ABMS certifications. This analysis only included active, nonresident, nonfederal surgeons. “Active surgeons” are defined as individuals under the age of 80 who report working in administration, direct patient care, medical research, medical teaching, other non-patient care activities, or who have an “unclassified” activity status. Physicians were excluded from the analysis if they reported being retired, semi-retired, temporarily not in practice, or not active for other reasons. “Urban-rural” was defined as a county’s metropolitan statistical area status as defined by the U.S. Office of Management and Budget.
Last year, the American College of Surgeons (ACS) implemented a new program to encourage ACS chapters to host lobby day programs at their state capitols. Endorsed by the Board of Governors and more than 27 chapters, the Board of Regents approved the proposal, which provides $50,000 over two years in grants for state chapters to organize lobby days during the 2011 and 2012 legislative sessions. Chapters were eligible to receive up to $5,000, and required to match that grant with one dollar for every two dollars received. For the 2011 legislative grant program, 10 chapters applied and received funding. In the August 2011 “Advocacy advisor” article titled “ACS State Chapter Lobby Day Program,” seven chapter lobby day programs were addressed: Connecticut, Georgia, Northern California, Indiana, Virginia, Florida, and New York.* As a follow up to that article, this wrap-up provides an overview for the remaining three 2011 chapter lobby day grant participants: Ohio, Alabama, and Massachusetts.

Ohio Chapter lobby day (May 25, 2011)

Some of the highlights of the Ohio lobby day included state representative Barbara Sears (R) leading a discussion on the state budget as well as important upcoming legislative activities that were aimed at addressing significant budget reforms. Mr. Aaron Crooks, the legislative liaison from the Office of Ohio Health Plans, a state Medicaid agency, was also present to discuss budget reform issues. Mr. Crooks encouraged chapter members to stay active in their communication with Medicaid agencies so that the state can more fully comprehend the problems facing providers.

These presentations were followed by meetings with legislators during which prominent issues, such as S.B. 129—a bill that would offer liability protection for emergency care workers—were discussed. Another important bill addressed during the meeting was S.B. 121, a bill to establish standards for physician designation by health care insurers. Physician designation is defined in the bill as a means to grade, star, tier, or make any other rating to characterize or represent assessment or measurement of a physician’s cost efficiency, quality of care, or clinical performance.

After an afternoon of successful meetings with legislators, the chapter hosted a legislative reception that was attended by a number of representatives and senators, as well as four Ohio Supreme Court Justices: Justice Terrence O’Donnell, Justice Judith Ann Lanzinger, Justice Robert Cupp, and Justice Yvette McGee Brown.

Alabama Chapter lobby day (May 31, 2011)

Mark Jackson, the director of legislative affairs for the Medical Association of the State of Alabama, led the group in meeting with legislators. Chapter members who attended the meeting met senators and representatives on the General Assembly floor and were able to observe the session as well. During the Alabama Chapter lobby day, surgeons discussed many prevalent issues that affect their ability to deliver surgical care in Alabama.

Chapter members used the ACS website (www.facs.org/fellows_info/bulletin/2011/fraher0511.pdf), where research from the Institute of Healthcare Policy and Research is posted. This research became an integral resource for this chapter in preparing for their meetings with legislators.

The chapter focused on an overarching problem in Alabama, which is a shortage of practicing surgeons in the state. According to the most recent data available, Alabama has a population of approximately 4.7 million people and approximately 1,960 surgeons, of which only 425 are classified as general surgeons. For a population of its size, it is an accepted premise that a healthy surgeon-to-population ratio is 6/100,000. Therefore, Alabama ideally needs to recruit 2,800 additional surgeons in order to meet that preferred ratio of surgeons to

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patients. Many counties in Alabama are currently without a practicing surgeon.

The Alabama Chapter acknowledged that this shortage of surgeons is exacerbated by other legislative issues that affect surgical care. Resolving some of these other issues could aid in recruiting additional surgeons. For instance, improving the surgical and community infrastructure, reforming medical liability, addressing scope-of-practice issues, offering reciprocity for volunteer emergency health care providers, addressing the legislative mandate to create a statewide trauma system, and providing reimbursement to hospitals that provide care to underinsured and uninsured patients are some of the legislative issues that can affect surgeon shortages. The surgeons of the Alabama Chapter voiced these concerns regarding patient access to surgical care in both rural and urban portions of the state, as well as the need to address and resolve these issues through legislative means.

Massachusetts Chapter lobby day (June 21, 2011)

Members and staff of the ACS Massachusetts chapter joined in the pediatric residents and fellows residency lobby day at the statehouse. The event brought out a total of 75 people with a number of prominent speakers that included John Auerbach, Commissioner of the Massachusetts Department of Public Health; State Representative Ruth Balser (D); and John Straus, MD, vice-president of medical affairs for the Massachusetts Behavioral Health Partnership. Alex Calcagno of the Massachusetts Medical Society led a participatory workshop titled How to be an Effective Lobbyist, and attorney Ed Brennan led a question-and-answer segment on legislation and lobbying. Peter Masiakos, MD, FACS, Chair of the Massachusetts Chapter Legislative Advocacy Committee, spoke on the proposed Primary Seat Belt Law, S.B. 1211/ H.B. 2401, which would allow law enforcement to pull over vehicles and give citations to drivers who are not wearing a seat belt (see related article in the February 2011 Bulletin). As the law currently stands, law enforcement can only pull over vehicles for other driving citations, and then issue a ticket for not wearing seat belts as a secondary offense. Moving the seat belt citation from a secondary offense to a primary offense would result in greater usage of seat belts and overall improved public safety in Massachusetts.

2012 chapter lobby days

Based on the number of chapters applying for and receiving state lobby day grants, and the excellent lobby day programs hosted by these chapters, it is clear that the first year of this two-year program was a resounding success. Looking ahead this year, the ACS State Affairs team was thrilled to receive a total of 16 grant applications. This increase in chapter applications (six additional applications compared to the program’s first year) is an example of how advocacy efforts are growing within the ACS chapters. The state chapters participating in the 2012 Lobby Day include the following: Alabama, Connecticut, Florida, Georgia, Illinois, Indiana, Kansas, Maine, Massachusetts, Michigan, North Carolina, Northern California, Ohio, Oregon, Tennessee, and Virginia.

The State Affairs staff are excited to collaborate with the 2012 recipients on their lobby day programming, as we anticipate another important and decisive year in state level policy and legislation. For more information on the legislation discussed in this article or the state lobby days described, contact Charlotte Grill at cgrill@facs.org.

Ms. Grill is State Affairs Associate, Division of Advocacy and Health Policy, Chicago IL.

J. David Richardson, MD, FACS, elected Chair of ACS Board of Regents

J. David Richardson, MD, FACS, a general, thoracic, and vascular surgeon from Louisville, KY, was elected Chair of the American College of Surgeons (ACS) Board of Regents during the College’s 97th Annual Clinical Congress in San Francisco, CA. Dr. Richardson is a professor of surgery and vice-chair of the department of surgery at the University of Louisville School of Medicine.

The College’s 22-member Board of Regents, which reflects the diverse experiences and interests of its members, formulates policy and is ultimately responsible for managing the affairs of the College. Dr. Richardson will also chair the Regents’ Finance and Executive Committees.

A 1970 graduate of the University of Kentucky College of Medicine, Lexington, Dr. Richardson completed a surgery internship and worked as a junior assistant resident at the University of Kentucky. He completed a general surgery residency and a thoracic surgery residency at the University of Texas Medical School, San Antonio. He then returned to Kentucky and rose through the academic ranks at the University of Louisville School of Medicine, holding the positions of assistant professor of surgery, associate professor of surgery, professor of surgery, vice-chair of the department of surgery, and chief of the division of general surgery.

He has held his current positions of professor of surgery and vice-chair of the department of surgery at the University of Louisville School of Medicine since 1982 and 1985, respectively. He has also been chief of surgery service and director of emergency medical services at the University of Louisville Hospital since 2005.

A Fellow of the College since 1980, Dr. Richardson began serving on the Board of Regents in 2003 and served as a member of the Board of Regents Executive Committee from 2010 to 2011. He has also served on a number of College committees, as Chair of the Research and Optimal Patient Care Committee (2004–2011), and as Vice-Chair of the Health Policy and Advocacy Group (2011). He has been an active member of the ACS Committee on Trauma (COT), and served as Chair of the Emergency Services-Prehospital Subcommittee (1992–1999) and as a member of the COT’s Executive Committee (1992), Membership Committee (1993), Verification/Consultation Committee (1993), and as Chair (1985–1987) and Vice-Chair (1981–1985) of the Kentucky Committee on Trauma. He was an ACS Governor-at-Large representing the state of Kentucky (1989–1990) and served as President (1989) and Secretary-Treasurer (1987) of the College’s Kentucky Chapter.

Dr. Richardson’s contributions to the surgical profession include leadership roles as director (1987) and chairman (1998–1999) of the American Board of Surgery; president of the American Association for Surgery of Trauma (1999); president of the Kentucky Surgical Society (1987); president of the Kentucky Vascular Surgery Society (1989); and president of the South-eastern Surgical Congress (1999). He has also served on the Association of American Medical Colleges’ Medical College Admission Test Content Review Committee (1988), the Accreditation Council for Graduate Medical Education’s Residency Review Committee (2000–2007), and on the board of directors of the American Board of Emergency Medicine (1994).

A prolific scholar and author, Dr. Richardson has published 342 articles in peer-reviewed publications, 46 book chapters, and two books of surgical literature. He has also served as editor of the journal The American Surgeon since 2005. Dr. Richardson received the School of Medicine...
Call for nominations for the ACS Board of Regents

The 2012 Nominating Committee of the Board of Governors has the task of selecting six nominees for pending vacancies on the Board of Regents, to be filled during the 2012 Clinical Congress in Chicago, IL. The following guidelines are used by the Nominating Committee when reviewing the names of candidates for potential nomination to the Board of Regents:

• Nominees must be loyal members of the College who have demonstrated outstanding integrity and medical statesmanship along with an unquestioned devotion to the highest principles of surgical practice.
• Nominees must have demonstrated leadership qualities that might be reflected by service and active participation on ACS committees or in other components of the College.
• The Nominating Committee recognizes the importance of achieving representation of all who practice surgery.
• Geography, surgical specialty balance, and academic or community practice are other factors taken into consideration.
• The College encourages consideration of women and other underrepresented minorities.
• Individuals who are no longer in active surgical practice should not be nominated for election or reelection to the Board of Regents.

The surgical specialties that should be given priority consideration for the six seats are the following:
• Colon and rectal surgery
• General surgery
• Gynecology and obstetrics
• Neurological surgery
• Orthopaedic surgery
• Pediatric surgery

Nominations should include a paragraph or two on the potential contributions each candidate can offer in terms of what he or she can do for the members of the College. Submit nominations to officerandbnominations@facs. org by Wednesday, February 29, 2012.

If you have any questions, contact Patricia Sprecksel, Staff Liaison for the Nominating Committee of the Board of Governors, at ppsprecksel@facs.org or by calling 312-202-5360.

For informational purposes only, the current members of the Board of Regents who will be considered for re-election are Julie Freischlag, MD, FACS; Raymond Morgan, MD, FACS; Leigh Neumayer, MD, FACS; Marshall Schwartz, MD, FACS; and Mark Weissler, MD, FACS.

More than 500 of you responded to a readership survey that the Bulletin conducted last fall. Your responses were extremely helpful in determining what sorts of changes the Division of Integrated Communications should implement to ensure that the Bulletin is providing members of the American College Surgeons (ACS) with timely, user-friendly, relevant information. In the months ahead, we will be incrementally implementing these modifications.

To help ensure that the Bulletin continues to serve as a valuable resource to all ACS members, the Bulletin staff invites you to share any story ideas you may have. We are particularly interested in developing and publishing articles on practice trends and innovations, socioeconomic issues, and other nonclinical topics. We also would like to profile more Fellows who are not necessarily well-known, but who are making a positive difference for their patients.

To share your story ideas, please contact Diane S. Schneidman, Editor, by e-mail at dschneidman@facs.org, or by phone at 312-202-5327. Thank you for your loyal readership. I look forward to hearing from you.

A message from the Editor
Call for nominations for ACS Officers-Elect

The 2012 Nominating Committee of the Fellows has the task of selecting nominees for the three Officer-Elect positions of the American College of Surgeons (ACS): President-Elect, First Vice-President-Elect, and Second Vice-President-Elect. The following guidelines are used by the Nominating Committee when reviewing the names of potential candidates for nomination as Officers of the College:

• Nominees must be loyal members of the College who have demonstrated outstanding integrity and medical statesmanship along with an unquestioned devotion to the highest principles of surgical practice.
• Nominees must have demonstrated leadership qualities that might be reflected by service and active participation on ACS committees or in other components of the College.
• The Nominating Committee recognizes the importance of achieving representation of all who practice surgery.
• The College encourages consideration of women and other underrepresented minorities.

Nominations should include a paragraph or two on the potential contributions each candidate can offer in terms of what he or she can do for the members of the College. Submit nominations to officerandbnominations@facs.org by Wednesday, February 29, 2012.

If you have any questions, contact Patricia Sprecksel, Staff Liaison for the Nominating Committee of the Fellows, at psprecksel@facs.org or by calling 312-202-5360.
Nominations sought for 2012 volunteerism and humanitarian awards

The American College of Surgeons (ACS), in association with Pfizer, Inc, is accepting nominations for the 2012 Surgical Volunteerism Award(s) and Surgical Humanitarian Award.

The ACS/Pfizer Surgical Volunteerism Award—offered in four potential categories each year—is given in recognition of those surgeons who are committed to giving back to society by making significant contributions to surgical care through organized volunteer activities. The awards for domestic, international, and military outreach are intended for ACS Fellows in active surgical practice whose volunteerism activities go above and beyond the usual professional commitments, or retired Fellows who have been involved in volunteerism during their active practice and into retirement. ACS members who have been involved in significant surgical volunteer activities during their postgraduate surgical training are eligible for the resident award. Surgeons of all specialties are eligible for each of these awards.

For the purposes of these awards, “volunteerism” is defined as professional work in which one's time or talents are donated for charitable clinical, educational, or other worthwhile activities related to surgery. Volunteerism in this case does not refer to uncompensated care provided as a matter of necessity in most practices. Instead, volunteerism should be characterized by the prospective, planned surgical care to underserved patients with no anticipation of reimbursement or economic gain.

The ACS/Pfizer Surgical Humanitarian Award is given in recognition of those ACS Fellows who have dedicated their careers to ensuring the provision of surgical care to underserved populations without expectation of commensurate reimbursement. This award is intended for a surgeon who has dedicated a significant portion of his or her surgical career to full-time or near full-time humanitarian efforts rather than routine surgical practice. This effort may reflect a career devoted to missionary surgery, the founding and ongoing operations of a charitable organization dedicated to providing surgical care to the underserved, or a retirement characterized by surgical volunteer outreach. Having received compensation for this work does not preclude a nominee from consideration, and, in fact, may be expected, based on the extent of the professional obligation.

Nominations will be evaluated by the Socioeconomic Issues Committee of the ACS Board of Governors, with final approval of award winners by the Executive Committee of the Board of Governors.

Potential nominees should make note of the following:

• Self-nominations are permissible but require at least one outside letter of support.
• Renomination of previous nominees is encouraged but requires an updated application.
• Supplemental materials should be kept to a minimum and will not be returned.

The nomination forms will be available for download from the “Announcements” section of the Operation Giving Back website during January and February at http://www.operationgivingback.org. Nomination forms can also be requested by mail, if preferred. Contact Akiyo Kodera, Operation Giving Back Program Coordinator, with such requests or any questions (akodera@facs.org).

Completed nomination forms should be addressed to the attention of Selwyn M. Vickers, MD, FACS, Chair, Board of Governors’ Socioeconomic Issues Committee, and may be submitted electronically, or by mail c/o Akiyo Kodera, American College of Surgeons, 633 N. Saint Clair St., Chicago, IL 60611; 312-202-5458; fax 312-202-5021; akodera@facs.org, or ogb@facs.org. All nominations must be received by Friday, February 24, 2012.
98% of attendees this year say they would recommend the workshops to a colleague and 97% would attend a future ACS/KZA workshop! Come see why, can you afford not to?

Optimize legitimate collections and reduce your audit risk. Break the cycle of downcoding, delays, and denials.

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RN, MA, CCS-P, CPC, consultant with more than three decades of nursing and administrative experience, including leadership positions on several National Boards

**BETSY NICOLETTI**
MS, CPC, author, speaker and consultant with over two decades engaged in coding education, billing and accounts receivable management

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Gary Collins, MD, HealthPartners - Regions, Minneapolis, Minnesota

**“Very informative – I always go back to my practice and improve on what we have done.”**
Hope Day, Business Office Manager, Utah County Surgical Associates, Provo, Utah

**“Always worth the money.”**
Carolyn Messere, MD, Integrative Surgery PA, Miami Beach, Florida

**“I attend this course annually and I always learn something new to bring back to my office and physicians.”**
Mary Ann Cross, General Manager, California Bariatric & General Surgery Associates, Arcadia, California

Are the ACS/KZA Coding Workshops worth it? Surgeons say, “YES!”
College seeks nominations for Jacobson Promising Investigator Award

The American College of Surgeons (ACS) is accepting nominations for the eighth Joan L. and Julius H. Jacobson II Promising Investigator Award to be conferred in 2012. This award has been established to recognize outstanding surgeons engaged in research, advancing the art and science of surgery, and demonstrating early promise of significant contribution to the practice of surgery and the safety of surgical patients. The award, funded through a generous endowment established by the donors, is in the amount of $15,000. The ACS Surgical Research Committee will administer the award.

Award criteria
• Candidate must be board-certified in a surgical specialty and must have completed surgical training in the last six years.
• Candidate must be a Fellow or an Associate Fellow of the American College of Surgeons.
• Candidate must hold a faculty appointment at a research-based academic medical center. Candidate holding a military service position is also eligible.
• Candidate must have received peer-reviewed funding such as a K-series award from the National Institutes of Health (NIH), Veterans Affairs, National Science Foundation, or U.S. Department of Defense merit review to support their research effort.
• Nomination documentation must include a letter of recommendation from the nominee’s department chair. Three additional letters of recommendation will be accepted.
• Only one application per surgical department will be accepted.
• Nomination documentation must include an NIH-formatted biographical sketch and copies of the candidate’s three most significant publications.
• Nominee must submit a one-page essay to the committee explaining why he or she should be considered for the award and discussing the importance of the research that he or she has conducted/is conducting.

Special consideration will be given to surgeons who are at the “tipping point” of their research careers with a track record indicative of early promise and potential (such as a degree program in research or K-award). Surgeon-scientists who are well-established (such as recipients of NIH R01 grants) are ineligible.

Nomination procedures
To be considered for the award in 2012, submissions must be dated no later than March 9, 2012. You may send your award criteria documentation and nomination materials electronically to jacobsonpia@facs.org or on a CD-ROM and mail it to Rhoby Tio, American College of Surgeons, 633 N. Saint Clair St., Chicago, IL 60611-3211.

Please note that your essay and biographical sketch must be submitted in a Word document. Applicants are encouraged to verify that all necessary materials have been received before the deadline. For additional information, contact Ms. Tio at jacobsonpia@facs.org or 312-202-5319.
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Webcasts will be available for viewing from December 15, 2011, until December 31, 2012.

www.acs-resource.org

American College of Surgeons
Inspiring Quality: Highest Standards, Better Outcomes
New standard for surgical accountability measures

As of January 1, Joint Commission-accredited hospitals are now required to meet a new performance improvement standard that establishes an 85 percent composite compliance target rate for performance on all of the hospital's selected accountability measures. The accountability measures include the following: surgical care, heart attack, heart failure, pneumonia, and children's asthma care core measure sets. Most hospitals choose the surgical care measure set as one of their reported core measure sets.

The new requirement is intended to help further improve performance on these selected core measures of patient care. This standard does not apply to the critical access hospital program. Accountability measures are core process performance measures that have strong scientific evidence to produce the greatest positive impact on patient outcomes when hospitals demonstrate high rates of compliance. The required 85 percent target rate is based on research of past performance data that show increasing levels of compliance with the surgical care and other accountability measures.

For example, in 2002, hospitals achieved 81.8 percent composite performance on 957,000 opportunities to perform care processes related to accountability measures and, in 2010, hospitals achieved 96.6 percent composite performance on 12.3 million opportunities—a nine-year improvement of 14.8 percentage points. By the end of 2010, 98 percent of hospitals met an 80 percent compliance rate, 96 percent met an 85 percent rate, and 92 percent met a 90 percent target.

Although all of the hospitals that reported data in 2010 achieved a 90 percent or better performance on most individual process of care measures, and a surgical care composite rate of 96.4 percent, The Joint Commission's 2011 annual report on quality and safety, titled Improving America's Hospitals, contended that more improvement is needed on the accountability measures. The report identified multiple opportunities for further improvement. For example, hospitals finished 2010 with relatively low performance on the following two measures that were originally introduced in 2005:

• Providing fibrinolytic therapy within 30 minutes of arrival to heart attack patients; only 60.5 percent of hospitals achieved 90 percent compliance or better
• Providing antibiotics to immunocompetent intensive care unit pneumonia patients; only 77.2 percent of hospitals achieved 90 percent compliance or better

After January 1, an organization that is not in compliance with the target composite rate of 85 percent at the time of its full survey will receive a "Requirement for Improvement" (RFI) in its accreditation report. Hospitals that receive an RFI based on the new standard will be given an appropriate amount of time to submit a plan for improvement, and to reach the 85 percent composite compliance target rate. The Joint Commission plans to continue seeking new methods to inspire and assist hospitals in providing safe and effective care of the highest quality, in addition to the new accountability measure standard.

The current surgical care accountability measures that will be included in the 2012 annual report’s 2011 top performer’s list are as follows:

• Prophylactic antibiotic received within one hour before surgical incision
• Prophylactic antibiotic selection for surgical patients
• Prophylactic antibiotics discontinued within 24 hours after surgery end time
• Cardiac surgery patients with controlled 6:00 am postoperative blood glucose
• Surgery patients with appropriate hair removal
• Surgery patients on beta-blocker therapy prior to arrival who received a beta-blocker during the perioperative period
• Surgery patients with recommended venous thromboembolism prophylaxis ordered
• Surgery patients who received appropriate venous thromboembolism prophylaxis within 24 hours before surgery, to 24 hours after surgery

For more information on the new accountability measure standard visit the following links on TJC website:

• http://www.jointcommission.org/assets/1/18/jconline_June_29_1111.PDF
Oral presentations

- Surgical Forum*
  Program Coordinator: Kathryn L. Matousek, 312-202-5336, kmatousek@facs.org
  (15 Excellence in Research Awards were given in 2011)
  *Accepted Surgical Forum abstracts will be published in the September Supplement of the Journal of the American College of Surgeons (JACS)

- Scientific Papers*
  Program Coordinator: Kay Anthony, 312-202-5325, kanthony@facs.org

Poster presentations

- Scientific Exhibits (Posters)
  Program Coordinator: Carla Manosalvas, 312-202-5385, cmanosalvas@facs.org

Video presentations

- Video-Based Education
  Program Coordinator: GayLynn Dykman, 312-202-5262, gdykman@facs.org

Submission information

- Abstracts are to be submitted online only.
- Submission period begins after November 1, 2011.
- Deadline: 5:00 pm (CST), March 1, 2012.
- Late submissions are not permitted.
- Abstract specifications and requirements for each individual program will be posted on the ACS website at www.facs.org/education/. Review the information carefully prior to submission.
- Duplicate submissions (submitting the same abstract to more than one program) are not allowed.

*Accepted authors are encouraged to submit full manuscripts to JACS.
Fellows in Archives photo identified

The photo above was published in the September 2011 issue of the Bulletin, along with a request for help in identifying the individuals pictured. Susan Rishworth, Archivist at the American College of Surgeons, received responses from the following Fellows: Ronald Jones, MD, FACS; C. John Snyder, MD, FACS; Penfield Faber, MD, FACS; Fred Gau, MD, FACS; Raphael E. Pollock, MD, FACS; Herbert Robb, MD, FACS; Bruce Bacon, MD, FACS; LaMar McGinnis, Jr., MD, FACS; and Charles E. Schoenhals, MD, FACS.

According to these respondents, the photo is of a meeting of the Executive Committee, Committee on Cancer, and was taken in 1959. Pictured from left to right are: James B. Mason (staff); Murray M. Copeland, MD, FACS; Harry Nelson, Sr., MD, FACS; Danley P. Slaughter, MD, FACS, Committee Chair; R. Lee Clark, MD, FACS; Howard Errol Snyder, MD, FACS; Ian McDonald, MD, FACS; and Charles Eckert, MD, FACS.

International women in surgery symposium set for spring 2012

The Third Annual International Women in Surgery Career Symposium will take place May 31 through June 2, 2012, and will be hosted by Johns Hopkins University in Baltimore, MD. American College of Surgeons President Patricia J. Numann, MD, FACS, Lloyd S. Rogers Professor of Surgery Emeritus at the State University of New York Upstate Medical University in Syracuse, will deliver the keynote address.

The symposium will promote personal and professional growth in women surgeons and provide interactions with surgical leaders and pioneers who have advanced the roles of women in surgery. Sharon B. Ross, MD, will serve as chair for the symposium, and Julie A. Freischlag, MD, FACS, will be the co-chair.

Read this month’s Bulletin online at www.facs.org/fellows_info/bulletin/bullet.html
Save the Dates!
September 30–October 4, 2012

Join us in Chicago for an educational opportunity you don’t want to miss!

Go to www.facs.org in the coming months for details about the educational program, registration, housing, and transportation.
The 2011 Annual Report of the National Trauma Data Bank® (NTDB) is an updated analysis of the largest aggregation of U.S. and Canadian trauma registry data ever assembled. In total, the NTDB now contains more than 5 million records. The 2011 Annual Report is based on 722,824 records—submitted by 697 facilities—from the single admission year of 2010. These facilities include 219 Level I trauma centers, 239 Level II trauma centers, and 192 Level III or IV trauma centers.

For the third year, the report features an expanded section on facility information. This section includes the usual information on hospital characteristics, such as bed size and trauma level, as well as registry inclusion criteria for participating hospitals. A few of the inclusion criteria that are highlighted include minimum length of stay, hip fractures, and death on arrival. This information allows the reader to consider differences in case mix across hospitals while reading the report.

The mission of the American College of Surgeons (ACS) Committee on Trauma (COT) is to develop and implement meaningful programs for trauma care. In keeping with this mission, the NTDB is committed to being the principal national repository for trauma center registry data. The purpose of this report is to inform the medical community, the public, and decision makers about a wide variety of issues that characterize the current state of care for injured persons in our country. It has implications in many areas, including epidemiology, injury control, research, education, acute care, and resource allocation.

Each year the requirements for data submission quality have increased. This data quality improvement effort started in earnest with the introduction of the National Trauma Data Standard back in 2007—the thought being that it was better to have fewer records of...
better quality than more records of poorer quality. This perspective works to counteract the so-called garbage in–garbage out concept.

Additionally, starting with the 2008 Annual Report, records from only the most recent admission year were included, in contrast to previous reports that featured the data from the previous five years. Thus, the 2008 report contained only records of patients that were admitted in 2007, and so on. There was significant concern surrounding the accrual of records when the more stringent data quality requirements were put into effect. That concern is unfounded based upon the continual rise in record submissions each year. There has been more than an eightfold increase over the past eight years in record submissions for the most recent admission year data.

Many dedicated members of the COT, as well as at trauma centers around the country, have contributed to the early development of the NTDB and its rapid growth in recent years. Building on these achievements, the goals in the coming years include improving data quality, updating analytic methods, and enabling more useful interhospital comparisons. These efforts will be reflected in future NTDB reports, which are submitted to participating hospitals, as well as in the Annual Reports.

Throughout the year, we will be highlighting these data through brief reports that will be published monthly in the Bulletin. The NTDB Annual Report 2011 is available on the ACS website as a PDF file and a PowerPoint presentation at http://www.ntdb.org. In addition, information is available on our website about how to obtain NTDB data for more detailed study. If you are interested in submitting your trauma center’s data contact Melanie L. Neal, Manager, NTDB, at mneal@facs.org.

Dr. Fantus is director, trauma services, and chief, section of surgical critical care, Advocate Illinois Masonic Medical Center, and clinical professor of surgery, University of Illinois College of Medicine, Chicago, IL. He is Past-Chair of the ad hoc Trauma Registry Advisory Committee of the Committee on Trauma.

Dr. Nance is Templeton Professor of Surgery and director, pediatric trauma program, Children’s Hospital of Philadelphia, PA.

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