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Letters to the Editor should be sent with the writer’s name, address, e-mail address, and daytime telephone number via e-mail to dschneidman@facs.org, or via mail to Diane S. Schneidman, Editor-in-Chief, Bulletin, American College of Surgeons, 633 N. Saint Clair St., Chicago, IL 60611. Letters may be edited for length or clarity. Permission to publish letters is assumed unless the author indicates otherwise.

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Director

David P. Winchester, MD, FACS

Medical Director, Cancer

Michael F. Rotondo, MD, FACS

Medical Director, Trauma
Author bios*

*Titles and locations current at the time articles were submitted for publication.

DR. ANDREONE (a) is a cardiac and thoracic surgeon, Sioux Falls, SD, and a member of the American College of Surgeons (ACS) Board of Governors (B/G) Survey Workgroup.

DR. BLITZER (b) is a general surgery resident, department of surgery, MedStar Union Memorial Hospital, Baltimore, MD.

DR. BOUGHEY (c) is professor of surgery and vice-chair, research, department of surgery, Mayo Clinic, Rochester, MN. She is Chair, ACS Clinical Research Program (CRP) Education Committee.

DR. BROWNSTEIN (d) is assistant professor of surgery, University of North Carolina, Chapel Hill.

MS. CITRON (e) is a research fellow, Program in Global Surgery and Social Change, Harvard Medical School, Boston, MA.

DR. DALY (f) is dean emeritus and the Harry C. Donahoo Professor of Surgery, Lewis Katz School of Medicine and the Fox Chase Cancer Center, Philadelphia, PA.

MR. DUTTON (g) is a fourth-year medical student, Rutgers Robert Wood Johnson Medical School, Piscataway Township, NJ.

DR. FANTUS (h) is vice-chairman, department of surgery; medical director, trauma services; and chief, section of surgical critical care, Advocate Illinois Masonic Medical Center. He is clinical professor of surgery, University of Illinois College of Medicine, Chicago, and Past-Chair, ad hoc Trauma Registry Advisory Committee, ACS Committee on Trauma.

DR. FIELDS (i) is associate professor of hepatobiliary, pancreatic, gastrointestinal, and oncologic surgery, Barnes-Jewish Hospital, Alvin J. Siteman Cancer Center, St. Louis, MO.

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Author bios continued

DR. FOIANINI (j) is Director, Clínica Foianini, Santa Cruz, Bolivia, and secretary-treasurer, Panamerican Trauma Society, Richmond, VA. He is ACS Governor, Bolivia Chapter of the ACS, and Vice-Chair, ACS International Workgroup.

MR. FOX (k) is News Editor, ACS Division of Integrated Communications, Chicago, IL.

DR. GRACIAS (l) is senior vice-chancellor, clinical affairs, Rutgers Biomedical Health Sciences; president and chair, Rutgers Health Group; and professor of surgery, Rutgers Robert Wood Johnson Medical School, New Brunswick, NJ.

DR. HENEGHAN (m) is Assistant Director, Surgical Patient Education, ACS Division of Education, Chicago, IL.

DR. HOPEWOOD (n) is a general surgeon, Falmouth Hospital, Cape Cod Healthcare, Falmouth, MA, and Vice-Chair, Commission on Cancer (CoC) Liaison Committee.

DR. INGRAHAM (o) is assistant professor of surgery, University of Wisconsin-Madison.

DR. LI (p) is a first-year general surgery resident, University of Pittsburgh Medical Center, PA.

DR. MANZANO (q) is a medical research fellow, epidemiology student and researcher, Fundación Valle del Lili, Cali, Colombia.

DR. MEARA (r) is director, Program in Global Surgery and Social Change, Harvard Medical School; chair, department of plastic and oral surgery, Boston Children’s Hospital; and co-chair, The Lancet Commission on Global Surgery.

MR. MEHTA (s) is a second-year medical student and Chancellor’s Global Health Scholar, Rutgers Robert Wood Johnson Medical School.

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Author bios continued

**MS. MODEL** (t) is a second-year medical student and Chancellor’s Global Health Scholar, Rutgers Robert Wood Johnson Medical School.

**DR. MORALES** (u) is professor of surgery, University of Antioquia, and an attending acute care surgeon, Hospital Universitario San Vicente Fundación, Medellín, Colombia.

**MR. MOREAU** (v) is Manager, Domestic Chapter Services, ACS Division of Member Services, Chicago, IL.

**MS. NAGLE** (w) is an independent consultant in Chicago, IL, who assists the ACS with Current Procedural Terminology (CPT) coding education and health data analyses.

**DR. NeMoyer** (x) is a surgical resident, Rutgers Robert Wood Johnson University Hospital, and a global surgery Master of Public Health student in the School of Public Health’s dual degree global health and epidemiology program.

**MS. OLLAPALLY** (y) is the Regulatory Affairs Manager, Division of Advocacy and Health Policy, Washington, DC.

**DR. ORDOÑEZ** (z) is president, Panamerican Trauma Society, and associate professor of general surgery, trauma and intensive care, Universidad del Valle, Fundación Valle del Lili. He is chief director, trauma and acute care surgery, Universidad del Valle and Fundación Valle del Lili, Cali.

**DR. PAPPAS** (aa) is professor of surgery, Duke University, Durham, NC.

**DR. Paramo** (bb) is a surgical oncologist, Mount Sinai Medical Center Comprehensive Cancer Center, Miami Beach; associate clinical professor of surgery, Florida International University, Miami; and associate clinical professor of surgery, Nova Southeastern University, Ft. Lauderdale, FL. He is Chair, ACS B/G Survey Workgroup.

**DR. PECK** (cc) is assistant professor of surgery, associate director of performance improvement, trauma, and acute care surgery fellowship, Rutgers Robert Wood Johnson Medical School. He is a member of the ACS Young Fellows Association Education Workgroup.

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DR. PELLEGRINI (dd) is chief medical officer, UW Medicine, and vice-president for medical affairs, University of Washington, Seattle. He is a Past-President of the ACS.

DR. PINO (ee) is assistant professor of general surgery and director of emergency services, University Hospital of Universidad del Valle.

DR. PULS (ff) is a general surgeon in Alpena, MI; Immediate Past-Chair of the ACS B/G Survey Workgroup; and Vice-Chair, ACS Advisory Council for Rural Surgery.

DR. PUYANA (gg) is a member, Committee on Global Health and the Future of the United States, National Academies of Sciences, Engineering, and Medicine, Washington, DC; and professor of surgery, critical care medicine, and clinical translational science, and trauma/acute care surgeon, University of Pittsburgh, PA.

MS. REITER (hh) is a fourth-year medical student, University of North Carolina, Chapel Hill.

DR. RODAS (ii) is associate professor of surgery, division of acute care surgery, Virginia Commonwealth University School of Medicine, Richmond.

DR. RODDY (jj) is professor of surgery, Albany Medical College, and chief of vascular surgery, Ellis Hospital, Albany, NY. He is chair, Society for Vascular Surgery (SVS) Policy and Advocacy Council, and SVS advisor to the AMA CPT Editorial Panel.

DR. SALUJA (kk) is a research fellow, Program in Global Surgery and Social Change, Harvard Medical School, and a general surgery resident, Weill Cornell Medicine, New York, NY.

DR. SASSER (ll) is a thoracic surgeon, St. Louis, MO. He is a Past-Second Vice-President of the ACS.

DR. SCHROEDER (mm) is assistant professor of surgery, George Washington University, Washington, DC.

DR. SELZER (nn) is associate professor and chief, division of general surgery, Indiana University School of Medicine, and co-chief of surgery, Indiana University Health University Hospital, Indianapolis; and medical staff vice-president, Indiana University Health North Hospital, Carmel.

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Author bios continued

DR. SHELDON (oo) is a general surgeon, founder, and medical director of Kalispell Surgical Specialists in Kalispell, MT. He is the ACS representative to the CoC; committee writer, Surgical Education and Self-Assessment Program; member, CoC Quality Integration Committee; and CoC State Chair for Montana and Wyoming.

DR. STRAND (pp) is a resident in general surgery and surgical oncology research fellow, Barnes-Jewish Hospital, Alvin J. Siteman Cancer Center, St. Louis, MO.

DR. STRONG (qq) is assistant attending surgeon, department of surgery, Memorial Sloan-Kettering Cancer Center, New York, NY.

MR. SULLIVAN (rr) is a first-year medical student, Rutgers Robert Wood Johnson Medical School.

MS. TORRES (ss) is manager, Health Network, Red de Salud del Centro ESE, Santiago, Cali.

DR. TRUCHÉ (tt) is a surgical resident, Rutgers Robert Wood Johnson University Hospital.

DR. VEGA (uu) is a Paul Farmer Global Surgery Senior Research Fellow, Program in Global Surgery and Social Change, Harvard Medical School.

DR. WELSH (vv) is a general surgeon, Batesville, IN, and a member of the ACS B/G Survey Workgroup.

DR. WILLIAMS (ww) is a first-year general surgery resident, University of North Carolina.
The American College of Surgeons (ACS) was founded more than 100 years ago with the goal of improving surgical quality of care through education and the establishment of standards for hospitals and resident training. Despite the College’s efforts, however, concerns about quality and patient safety in surgery remain. In response, the College has sought to proactively address these issues and to provide all members of the surgical patient care team with the resources they need to improve outcomes.

Later this month, July 21–24, the ACS will host the inaugural Quality and Safety Conference—formerly the ACS National Surgical Quality Improvement Program (ACS NSQIP®) Annual Conference—in New York, NY. At this conference, we plan to release the first edition of Optimal Resources for Surgical Quality and Safety, a new, comprehensive resource for surgeons and other health care professionals who seek to improve patient care in their institutions.

Quality and Safety Conference
The rapid growth in ACS Quality Programs in recent years has allowed us to expand the scope of topics discussed at the annual meeting from ACS NSQIP to include content on the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program, Children’s Surgery Verification™ (CSV) Quality Improvement Program, ACS NSQIP Pediatric, and the Surgeon Specific Registry (SSR).

The theme of this year’s Quality and Safety Conference is Achieving Quality: Present and Future, and the program will offer discipline and theme-based tracks focused on the specific needs of various learner groups. The conference will offer opportunities for attendees to share knowledge pertaining to local, national, and international quality improvement initiatives in surgery and to learn how to analyze and make practical use of clinical registry data. Sessions are designed to assist hospital quality improvement professionals in analyzing, managing, and interpreting data. To enhance the learning experience of this diverse group of attendees, the program will feature breakout sessions targeted to specific attendees.

A highlight of this year’s Quality and Safety Conference will be keynote speaker Blake Haxton, a member of the 2016 U.S. Paralympic rowing team. Mr. Haxton will share the unique insights he gained while successfully recovering from
necrotizing fasciitis. Other sessions that should be of considerable interest include the following:

• How to Become an ACS Quality Improvement Facilitator

• Hot Topics in Surgical Quality and Safety

• Patient-Reported Outcomes

• What Residents Should Know about Policy, Quality Improvement, and Research

• Emotional Intelligence in Quality and Safety

• ACS Quality Programs and Registry Updates

This manual, five years in the making, is intended to be a trusted resource for surgical leaders seeking to improve patient care in their institutions, departments, and practices.

Optimal Resources for Surgical Quality and Safety

In addition, we will roll out the first edition of the ACS quality manual, *Optimal Resources for Surgical Quality and Safety*. This manual, five years in the making, is intended to be a trusted resource for surgical leaders seeking to improve patient care in their institutions, departments, and practices. It introduces key concepts in quality, safety, and reliability and explores the essential elements that all hospitals should have in place to provide patient-centered care. A brief overview of the topics covered in the manual follows.

• The domains and phases of surgical care. The manual delineates the five phases of surgical care—preoperative evaluation and preparation, immediate preoperative readiness, intraoperative, postoperative, and post-discharge—describing where each phase of care is delivered, the activities performed, and the surgeon’s responsibilities as the leader of a high-performance team.

• The Surgical Quality Officer. The manual advises that departments of surgery appoint a Surgical Quality Officer. The responsibilities of this individual are outlined, and the ideal characteristics, background, and training that this individual should possess are defined.

• Peer and case review. The range of peer and case review formats, from broad case review in morbidity and mortality conferences to the granular discovery process used to review the cases of a surgeon who has had successive negative outcomes, are discussed.

• The Surgical Quality and Safety Committee. The manual calls for all hospitals and departments of surgery to appoint a committee that is responsible for ensuring compliance with quality and safety standards and protocols and thereby setting the local infrastructure for quality improvement.

• Privileging and credentialing. The manual describes the privileging and credential processes that hospitals may use to ensure that their surgical staff are properly trained and competent.

• Patient-centered culture. The manual looks at the techniques and processes that can be used to create and foster
Some surgeons may feel overwhelmed by the increasing expectation that they not only provide excellent care but that they prove they do it as well. The College is committed to helping to ease these burdens through its Quality Programs.

an environment where doing what is best for the patient takes precedence over all else and where providers are held accountable for the care they deliver but are treated fairly and encouraged to learn from mistakes.

• **High-reliability organizations (HROs).** The manual describes the characteristics of HROs and the change management and performance improvement techniques that lead to improved quality and safety.

• **The unique qualities of the surgical disciplines.** The manual provides a brief overview of the resources, training requirements, and regulatory mandates that are specific to 20 surgical disciplines.

• **Regulatory requirements.** The rules and regulations that affect all of surgery are reviewed, including evolving Medicare payment policies, federal and state agency mandates, and standards issued by our own accrediting bodies, such as the American Board of Surgery and the specialty boards, The Joint Commission, the ACS Committee on Trauma, the Commission on Cancer, and so on.

• **Data analytics.** Because data provide the basis necessary to assess quality, two chapters focus on data collection and analysis. One chapter describes the range of databases and sophisticated risk-adjustment techniques that are available to help surgeons make evidence-based decisions. The second chapter explains how institutions can put the data to work to produce better outcomes.

• **Quality collaboratives.** To help rationalize the investment in databases and to improve quality across regions, a number of quality improvement collaboratives have been established throughout the country. These partnerships allow institutions or individuals to benchmark their performance against each other and to share their success stories.

• **Clinical practice guidelines.** Clinical practice guidelines based on the best available evidence are being promulgated with some rapidity. These guidelines offer a standard of care, but should be adjusted to meet the specific needs of each patient and the environment in which the care is delivered.

• **Education and training.** Most clinicians are only as good as their education and training. Given the proliferation of new technology and techniques, all of us must commit to lifelong learning and continuing professional development. The manual summarizes the resources that are available to help surgeons at all stages of their career assess and improve their skills and knowledge.

The last section of this manual focuses more on the “soft skills” that influence our ability to provide optimal patient care. Specifically, it includes a discussion of the surgeon’s individual responsibility to the patient, colleagues, and the next generation of surgeons. The process of surgeon improvement, problems with disruptive behavior and how to address it, and the importance of mentoring and coaching also are covered.

**An ongoing journey**

Some surgeons may feel overwhelmed by the increasing expectation that they not only provide excellent care but that they prove they do it as well. The College is committed to helping to ease these burdens through its Quality Programs, and individuals who attend the Quality and Safety Conference and who make use of resources like *Optimal Resources for Surgical Quality and Safety* will find the road to better outcomes a little less bumpy. ♦

If you have comments or suggestions about this or other issues, please send them to Dr. Hoyt at lookingforward@facs.org.
In September 2016, a photo taken by the East Liverpool, OH, Police Department went viral on social media. The photo showed two unresponsive adults sitting in the front seat of a car. Their heads were slung back and their mouths wide open. The woman in the passenger seat was slumped over to the side. In the back seat, a wide-awake four-year-old wearing a dinosaur t-shirt stared vacantly at the camera.\(^1\)

Although this photograph is seemingly unrelated to surgical practice, the image starkly underscored an opioid epidemic that is upending communities throughout the country—and surgeons can play a role in curtailing it. In Ohio, a hot spot for this scourge, drug overdose deaths have surpassed motor vehicle collisions as the leading cause of accidental death. Prescription opioid-related deaths accounted for nearly half of these.\(^2\)

Although Ohio may be an extreme example of this problem, the opioid epidemic—and particularly the role of prescription drugs—is a nationwide crisis.\(^3\) Between 2000 and 2014, opioid-related overdose deaths nearly quadrupled, and in 2014, 61 percent of drug overdose deaths involved some type of opioid.\(^4\) This increase in deaths was accompanied by a near-concurrent fourfold increase in the sale of opioid pain relievers.\(^5\)

A recent study by the U.S. Centers for Disease Control and Prevention indicates that more than 54 million people ages 12 and older have abused prescription drugs at some point in their lives, and nearly 15 million people had done so in 2014. Opioid prescriptions reached 259 million that year, which is more than enough to give every American adult their own
bottle of pills.³ Opioids account for more than one-third of the prescriptions surgeons write, and 70 percent of patients who have never used an opioid and undergo a surgical procedure fill a prescription within one week of an operation.⁴,⁷

It makes sense that surgeons would prescribe opioids with some frequency. Surgeons perform procedures that are painful. Helping to control the acute pain that our patients experience is a professional and moral imperative. Moreover, national professional organizations, including The Joint Commission, have focused on addressing the pain of postoperative patients, in part by encouraging opioid-based pain control. Nevertheless, these prescriptions carry risks, which include chronic usage, addiction, and overdose. In the midst of this public health crisis, surgeons have a major responsibility to understand and mitigate the risks associated with prescribing opioids and to consider how they can be part of a broader solution. This article summarizes some of the actions that individual surgeons can take, the role of health care systems in effecting change, and the steps the American College of Surgeons (ACS) is taking to address this crisis by assisting surgeons as they help their patients avoid drug addiction.

Individual strategies to combat the opioid epidemic
First, we must be aware of the existing resources to help curb opioid overuse. Current mechanisms for monitoring, counseling, and treating patients across the continuum of care can help minimize risk to our patients and our communities.

Preoperative management
The surgeon’s role in addressing the opioid epidemic starts during the preoperative period by setting patient expectations and assessing the potential risk for opioid misuse or addiction.⁸ A candid preoperative discussion with patients...
about the pain they can expect as a result of their procedure can help set expectations postoperatively, specifically the fact that the patient will not immediately (or perhaps ever) reach zero on the pain scale. This discussion should include information about the potential benefits of nonopioid analgesics. Additionally, this preoperative conversation is an opportunity to discuss the adverse systemic effects of opioids as well as the fact that opioids are unsuitable for treating all types of pain.

Beyond these conversations, surgeons should also check prescription drug monitoring programs (PDMPs) as part of their routine preoperative practice. These statewide registries collect information on the distribution of controlled substances and can help health care professionals determine an individual patient’s pattern of prescription drug use. PDMPs are used to track opioid prescriptions in some manner in all states except for Missouri. More than 30 states require prescribers to check the PDMP if certain conditions are met, although these conditions vary by state.9 These databases, in conjunction with risk screening tools such as the Brief Risk Inventory, will allow surgeons to better identify patients at high risk for opioid abuse and tailor their prescribing behavior accordingly.10 A review of the CDC Guidelines for Prescribing Opioids on Chronic Pain—United States 2016 provides a good resource to identify high-risk populations and those with the highest risk of abuse and mortality.11

Inpatient management

The immediate postoperative period is a critical time when the patient’s need for analgesia is greatest and a pattern of the provider’s prescribing behavior is established. For a patient in the hospital, continued management of expectations regarding pain are important. Establishing realistic expectations involves a multidisciplinary approach with physician providers (surgeons, anesthesiologists, residents, and physician delegates) and allied health care providers (pharmacists, registered nurses, and social workers) playing an important role in this process.

Although the assessment of pain as a “fifth vital sign” has gained widespread use, it must not be blindly used to determine whether and how much of an opioid should be prescribed.12 A patient with a high pain scale may benefit from a discussion with the nurse and surgeon about the nature of postoperative pain and the associated expectations and management. Additionally, surgeons are using multimodal therapies to manage pain, including applying local analgesics directly into the surgical site and maximizing the use of oral nonopioid analgesics such as nonsteroidal anti-inflammatory drugs and acetaminophen. In addition, use of epidural analgesia and long-acting nerve blocks are important tools for postoperative management. Ultimately, consultation with an inpatient pain management team may be

ACS EFFORTS, CONTINUED

Surgeon education

- Nonopioid pain management. The ACS encourages evidence-based and comprehensive training for practicing surgeons and residents in identification of high-risk patients, management of opioid-addicted patients, and discharge training and monitoring of patients. The ACS supports optional training that includes the use of nonopioid options that are beneficial to surgical patients.

- Continuing Medical Education (CME) and opioid-specific training. Increasing education and awareness surrounding the warning signs of opioid addiction and appropriate prescribing protocols will help to address the opioid epidemic. The ACS supports surgical specialty societies providing opioid and pain management CME relevant to their specialty and strongly recommends that mandated CME requirements not exceed one hour per year.

continued on next page
ACS EFFORTS, CONTINUED

Patient education

The College further maintains that patient education about the dangers of opioid abuse and overuse is paramount to solving this problem. The ACS Patient Education Committee, under the aegis of the Division of Education, is working with the College’s Advisory Councils to develop patient and caregiver education that will address the safe use of opioids and how surgeons are using other methods to improve pain control and opioid prescribing.

Patients need to know that their pain can often be managed without opioids and that they have options, such as obtaining a partial prescription fill and using supplemental nonsteroidal medications. Patients also will be informed that screening tools and prescription drug monitoring will be used to identify individuals at a higher risk of opioid-related drug events, including patients chronically using opioids. John M. Daly, MD, FACS, Co-Chair of the ACS Patient Education Committee and a co-author of this article, remarked, “It is critical that surgeons and other caregivers make their patients partners in these education processes, for it is through patient engagement that proper perioperative pain management expectations can be created.”

Patient/caregiver resources should identify pain management options and safe use of pain medication, including the signs of overdose and other adverse effects, plus appropriate storage and disposal to prevent misuse by people other than the patient, including family members.

All ACS education programs will use best evidence to develop these resources. For example, education on how the body responds to pain and the negative effects of narcotics resulted in a 90 percent decline in opioid use, with pain scores significantly lower than the group with no education.

At press time, the Board of Regents of the ACS had completed its review of and approved a policy statement on prescription opioids. The statement will be published in the August issue of the Bulletin.

warranted. Guidelines on the Management of Postoperative Pain developed by the American Pain Society and endorsed by numerous societies can help in this decision making.

Outpatient management

Upon discharge, patients assume management of their opioid use. In this setting, surgeon-prescribers can control the total amount but not the frequency of drug administration. To help control use, surgeons must be judicious in the amount of opioids they prescribe and avoid prescribing additional doses or refills “just in case” the patient feels they need more intense or extended drug therapy.

Whereas pain is subjective and can vary substantially from individual to individual, the use of specialty or procedure-specific guidelines can help inform surgeons, physician extenders, and residents regarding what constitutes appropriate prescribing behavior. For patients requiring more opioid pain relief than expected, in-person consultation allows for objective assessment of the patient, consideration of alternative explanations for the pain, and reevaluation of the PDMP before re-prescribing opioids.

Some states have established legal limits on the amount of opioids that can be prescribed, which would supersede any hospital-based guidelines. In 2016, states began limiting the length of opioid prescriptions. Connecticut, Maine, Massachusetts, New York, and Rhode Island passed laws limiting initial prescriptions to seven days. Vermont passed a law that requires the state health department to set an opioid prescribing limit through the regulatory process in consultation with the Vermont Medical Society.

Whenever patients administer their own opioids in an unmonitored setting, patients and their caregivers must be educated on safe administration and disposal. The Centers for Disease Control and Prevention and the U.S. Surgeon General have released opioid prescribing guidelines to turn the tide on addiction. While the guidelines are designed for treatment of chronic pain, and surgeons more commonly treat acute pain, several points are noteworthy. Specifically, surgeons must consider the effects of polypharmacy on their patients and continue to work with the ACS to identify best practices for patients already managing opioid addictions and those receiving methadone, as well as patients on high-risk medications such as benzodiazepines. For patients who suffer from chronic pain and who may be
receiving particularly high doses of opioids (greater than 50 morphine milligrams equivalents daily or approximately 10 tablets of 5 mg hydrocodone daily), the U.S. Surgeon General recommends offering a naloxone prescription for accidental overdose.14

Proper medication disposal can have a major effect on decreasing the opioid epidemic. Among persons ages 12 or older in 2012–2013 who used pain relievers that were not medically necessary in the past year, 53 percent obtained the drug from a friend or relative for free, and 11 percent bought the drug from a friend or relative. Another 21 percent reported that they got the drug through a prescription from one physician. An annual average of only 4 percent of these individuals obtained pain relievers from drug dealers or other strangers, and 0.1 percent bought them on the Internet.3

**Health system strategies**

Individual efforts to combat the opioid epidemic are critical and can help prevent misuse among the thousands of patients each surgeon treats annually. Still, an improvement in the broader health systems can facilitate large-scale improvements across our profession. First, while PDMPs have increased dramatically in number, they are not standardized and are poorly integrated into existing workflows. As a result, checking PDMPs is cumbersome, time-consuming, and may yield incomplete information. Integration of PDMPs into hospital electronic health records (EHRs) could greatly improve feasibility of checking patterns of patient opioid use and thereby increase utilization.

As noted earlier, each state has its own set of laws governing what type of drug use data are available, what type of prescriber can access the PDMP, and how the data are shared. An ongoing push toward standardized databases with the ability to share information across state borders is essential to ensuring surgeons have access to accurate information. Furthermore, for these registries to maintain information that is beneficial for patient care, it is essential that they not be used for law enforcement purposes.

The U.S. health care delivery system has entered a state of near constant reform, with variable, ever-changing reimbursement schema. In recent years, the trend has been toward pay-for-performance measures. Although the financial incentives for treating pain are extremely limited, some providers still are concerned that they are being paid in part based on their ability to reduce patient pain.15 Thus, as pay-for-performance measures continue to develop, policymakers must take steps to ensure that these metrics do not rely on overly proximal measures of patient

**REFERENCES**


outcomes on pain scales, and focus instead on distal outcomes, such as patient function or overall patient satisfaction.

Considering the toll of the opioid epidemic on patients, it is essential that research on opioid use, addiction, and alternatives continue. Some of this research must focus on the role that surgeons play as opioid prescribers and how our practice patterns can best be adjusted to treat patients appropriately while also addressing a broader public health crisis. Additionally, this research must include a focus on high-risk populations. Veterans, for example, may be twice as likely to die from a drug overdose than non-veterans, and a better understanding of pain management and opioid safety in this population may be particularly important.16

Signs of progress

In the midst of the opioid crisis, signs of progress are emerging. In addition to the state mandates for PDMPs described earlier, the National Association of Boards of Pharmacy established PDMP InterConnect, helping to link state PDMPs and thereby breaking down data silos and providing prescribers with integrated, comprehensive information.17 Increased awareness among physicians and researchers has led to numerous published studies that evaluate the relationship between treatment of acute pain, chronic pain, and opioid use disorder. Even simple provider education about opioid overuse and the establishment of basic prescribing guidelines has been shown to be effective in reducing the amount of opioids prescribed.18 The results of these efforts to slow the opioid epidemic will take time to yield results.

As these changes unfold, it is critical that surgeons and major prescribers of opioids be part of the solution to this growing crisis. The College is committed to responsible prescribing and a multimodal approach focused on policy, professional education, and patient/caregiver education in developing resources to address opioid abuse and overuse.

Opioid abuse will be addressed in further detail in the August Bulletin as the subject of the annual ACS Resident and Associate Society-themed issue. ♦

REFERENCES, CONTINUED

The new Chair of the American College of Surgeons (ACS) Commission on Cancer (CoC), Lawrence N. Shulman, MD, FACP—the first medical oncologist to lead the Commission—aims to continue the CoC tradition of being the standard-bearer for high-quality cancer care while using his experiences as a clinical oncologist and health care organization leader to further advance the program.

Dr. Shulman’s October 2016 election to lead the CoC, the multidisciplinary consortium of health care organizations that the ACS established in 1922 to improve the quality of oncologic care, speaks to an accomplished career in comprehensive cancer care. He currently is deputy director for clinical services, Abramson Cancer Center; director, Center for Global Cancer Medicine, University of Pennsylvania (UPenn); and professor of medicine, Hospital of the University of Pennsylvania Perelman School of Medicine, Philadelphia. In addition to being an active practice physician since graduating from Harvard Medical School, Boston, MA, in 1975, he was a key participant in several clinical innovations while he practiced for affiliated Harvard Medical School hospitals. Examples include leading the development of the Harvard Community Health Plan’s first dedicated hematology-oncology unit; leading a team to develop one of the first computerized chemotherapy order entry systems in the U.S. at Brigham and Women’s Hospital, Boston; leading the development of multidisciplinary disease-based clinical programs and quality programs at Dana-Farber Cancer Institute, Boston; and leading the development of a nationally recognized cancer care network throughout New England via the Dana-Farber/Brigham and Women’s Cancer Center.

Since joining UPenn in 2015, he has served as the lead for clinical cancer services for all the university’s hospitals, a role that parallels his responsibilities as Chair of the CoC. “At UPenn, I share responsibility for operations, quality, cost negotiations with payors, and other related activities. In several ways, my work with the Commission is a reflection of the work I do at my home institution,” Dr. Shulman said.

Dr. Shulman served on the American Society of Clinical Oncology (ASCO) Quality of Care Committee,
“At UPenn, I share responsibility for operations, quality, cost negotiations with payors, and other related activities. In several ways, my work with the Commission is a reflection of the work I do at my home institution,” Dr. Shulman said.

eventually as its chair. Partly based on this work, ASCO nominated him to be one of their two representatives on the CoC. Dr. Shulman’s work in quality for ASCO contributed to his selection as Chair of the CoC Quality Integration Committee. Due to his success in that role, he was nominated and elected as CoC Chair.

David P. Winchester, MD, FACS, Medical Director for ACS Cancer Programs, noted the significance of Dr. Shulman’s election: “Dr. Shulman was selected from a large group of surgeons and other cancer professionals as the first medical oncologist in the history of the CoC to serve in this important leadership role. Since assuming this position in October 2016, Dr. Shulman has demonstrated a broad knowledge of the workings of a complex organization dedicated to the cancer patient. His leadership crosses all disciplines related to cancer,” Dr. Winchester said.

Beyond his extensive clinical and leadership background in cancer care, Dr. Shulman’s tenure as Chair of the CoC’s Quality Integration Committee and his prominent role in developing quality cancer infrastructure in low-resource settings around the world are unique experiences that provide context for his appointment and for the importance of developing, maintaining, and advancing cancer care in the U.S. and globally.

Developing the CQIP report
In the modern health care landscape, “quality” is the unifying watchword for physicians, patients, and health care organizations. The College has a leading presence in the area of surgical quality improvement through several programs, such as the ACS National Surgical Quality Improvement Program and the Trauma Quality Improvement Program. That commitment to quality improvement also is apparent in the CoC through its National Cancer Database (NCDB) and Cancer Quality Improvement Program (CQIP).

CQIP is a product of the Quality Integration Committee, which Dr. Shulman chaired from 2013 to 2016. The period during which he presided over the committee was significant, as the first CQIP report was released in 2013 to the more than 1,500 CoC-accredited cancer centers in the U.S. The cancer data in the CQIP 2013 report were far-reaching and novel in a report of this size, providing short- and long-term quality and outcomes data, which Dr. Shulman and the CoC maintain are particularly useful when delivered directly to the centers. “There’s a tremendous amount of data that we thought needed to be codified and sent out to the programs to say, ‘You need to look at all these data and share them throughout your program and hospital,’” he said.

“We felt these data should be seen by the registrars and the cancer committees of the individual hospitals, but also by the leadership of the hospitals, including the chief executive officer, chief financial officer, chief operating officer, and so on. We put together a report that focused on a number of quality metrics, including the ones we routinely measure, and started increasing that number,” Dr. Shulman said. “We looked at 30- and 90-day surgical mortality for six complex cancer surgeries. We looked at both unadjusted and risk-adjusted survival for a number of the more common cancers and a number of other parameters, including insurance status, miles traveled to the cancer center, and the time from diagnosis to first treatment.” Disbursing these data directly to the cancer centers and to all levels of leadership allows for a level of standardized quality control that previously would have been impossible. And using these data is not only a suggestion—since the first CQIP report was released, the requirements for CoC reaccreditation have included bringing in hospital leadership to understand the data and providing evidence that the organization is actively applying the data in their treatment centers.

In developing the CQIP report, the Quality Integration Committee also worked to develop disease- and condition-specific quality metrics and collaborated with specialty organizations to be sure they harmonized with quality efforts from the CoC’s partners. “For example, when we developed bladder cancer quality metrics, we partnered with the American Urological Association; when we did melanoma metrics, we partnered with the Society for Surgical Oncology;
and so on. We didn’t want these to be done by the Commission in isolation—we wanted these to be done with our fellow organizations, to capitalize on their expertise, and to gain consensus,” Dr. Shulman said.

He also worked to develop a group of Commissioners, now known as Site-Specific Leaders, who had expertise in those disease groups so that the CoC can link with the specialty societies and act as resources for the NCDB staff when they have disease-specific questions.

Global cancer care development
Cancer care in the U.S. and other developed nations is a sophisticated, multidisciplinary process that has built upon more than a century of medical infrastructure. But cancer is a global health care issue, and despite its omnipresence in the developed world, its burdens are felt disproportionately in low-income, low-resource areas and countries, which are often ill-equipped to handle the patients it afflicts.

To address these disparities, Dr. Shulman has dedicated a significant share of his career to improving cancer care in several under-resourced countries. He entered this field by way of two well-known names in global health care—Paul Farmer, MD, PhD, Kolokotrones University Professor of Global Health and Social Medicine, Harvard Medical School, and Jim Yong Kim, MD, PhD, President of the World Bank. Drs. Farmer and Kim co-founded Partners in Health (PIH), a not-for-profit health care organization that brings modern medical interventions to low-resource settings. Both were trainees under Dr. Shulman’s supervision at Harvard Medical School in the late 1980s.

“Paul was working in Haiti primarily through the 1990s and early 2000s, and he would call me about cancer patients who would show up at his clinic,” Dr. Shulman said. “In 2008, he and [Dr.] Kim contacted me and asked if I could help to set up cancer care infrastructure in Rwanda and Haiti, and I said yes.” Dr. Shulman has been materially involved with the work as PIH’s senior oncology advisor since 2011. Through a partnership with the Dana-Farber Center for Global Cancer Medicine, of which he has been director since 2012, Dr. Shulman and PIH have been able to establish comprehensive cancer care centers in Rwanda and Haiti.

The Butaro Cancer Center of Excellence, Burera, Rwanda, which opened in 2012, has been a notable success for the Center for Global Cancer Medicine, Dr. Shulman said. It is a primary cancer treatment center for the nation, providing treatment at no cost to patients. In addition to patient care, oncologists from Dana-Farber work closely with Rwandan physicians via weekly consults, and clinicians from Dana-Farber, UPenn, and Dartmouth College’s Geisel School of Medicine, Hanover, NH, regularly make extended consulting visits.* The center provides treatment to approximately 1,500 new patients a year and, to date, has taken care of more than 5,000 patients since it opened. “I think the center has become a model for what you can do in a very resource-constrained setting, which Rwanda clearly is,” Dr. Shulman said.

The center at the Hôpital Universitaire de Mirebalais, Haiti, also has brought much-needed care to a region that historically has lacked it, but the journey was more complicated because of the 2010 earthquake that ravaged the country. “At the time the earthquake occurred, we were building a small hospital to take the place of the clinic in Cange [the site of the original PIH location], where Paul had originally worked,”

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Dr. Shulman said, “The government came to us and asked us to help build a national hospital,” he said, which turned out to be the Hôpital Universitaire de Mirebalais that opened in April 2013. As in Rwanda, Dana-Farber clinicians and staff assist with treatment, train local physicians and nurses, and lay the groundwork for cancer care.† Treatment is, again, provided free of charge.

As director of the UPenn’s Center for Global Cancer Medicine, Dr. Shulman now leads the cancer care program in Botswana, a nation in which UPenn has had a presence in other medical areas for 15 years. Dr. Shulman’s expertise in medical oncology has allowed them to expand their former human immunodeficiency virus-focused treatment to include cancer care, and his ties with PIH have opened their sites to UPenn trainees, students, and staff of all levels.

Identifying gaps, increasing value

Dr. Shulman was elected to head the Commission at a time of considerable change in U.S. health care. Aside from broader political uncertainty regarding health insurance coverage, “The challenge that is facing us as a nation is the intersection between quality and cost,” Dr. Shulman said, and attempting to increase the former without increasing the latter. His goals as Chair, and the direction of the CoC’s attention, will in part be dedicated to balancing the two sides of the health care equation to provide the greatest value to patients.

Part of understanding where the CoC should be heading involves looking into cancer care in the U.S. and seeing the areas where it is lacking—where quality could be better—and developing interventions to improve care and increase value. “There are areas where we aren’t doing as well as we could,” Dr. Shulman said.

“Rectal cancer, for instance, is one of those areas where we can see that treatment is more consistently of higher quality in Europe than in the U.S., which is an unnerving finding.” To increase the quality of cancer care in the U.S., the CoC plans to launch the National Accreditation Program for Rectal Cancer (NAPRC) this year. As the ACS National Accreditation Program for Breast Centers does for breast cancer, the NAPRC will accredit cancer centers that hold to high standards of rectal cancer treatment. As Chair, Dr. Shulman wants to identify other areas in which cancer care is of variable quality.

Another area where Dr. Shulman believes the CoC can play a more direct role in addressing quality and cost concerns is with oncology medical home accreditation. An oncology medical home is a primary oncologist or oncologic practice that acts as the focal point for coordinating the patient’s comprehensive cancer care. Having a dedicated coordinator for patients’ cancer treatments and the processes in place to better care for patients can have a positive effect on quality, efficiency, and cost of care.‡ “This Commission hasn’t been very involved in that space previously, but we did a pilot test of Oncology Medical Home accreditation visits, which is in the domain of trying to improve quality and cost effectiveness of care,” Dr. Shulman said. The CoC has performed approximately 10 pilot surveys and is now determining whether to pursue the program on a national scale.

The CoC also has been engaged in ongoing talks with national payors and insurers, such as Blue Cross Blue Shield Association, about what they can learn from the organization about measuring quality and how it relates to cost. Dr. Shulman believes that the CoC, a national leader in driving quality of cancer care, needs to stay relevant in the quality and cost space. “We have over 1,500 accredited hospitals, which covers about 70 percent of cancer patients in the U.S. There’s no other organization that’s attached in such a direct way to the performance of so much of cancer care in the country,” Dr. Shulman said. “I think we’re in a special position where we can both influence the direction of cancer care and try to help solve some of the overarching problems in U.S. health care, as well.” ♦

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Latin America Indicator Research Coalition examines prehospital care using a trauma systems application of LCoGS indicator 1.

by Gregory Peck, DO, FACS; David Blitzer, MD; Isabelle Citron, BmBCh; John Dutton; Jorge Esteban Foianini, MD, FACS; Vicente Gracias, MD, FACS; Ramiro Manzano, MD; John G. Meara, MD, DMD, MBA, FACS; Dhaval Mehta; Zina Model; Carlos Morales, MD; Rachel NeMoyer, MD; Carlos Ordoñez, MD, FACS; Luis Fernando Pino, MD; Juan Carlos Puyana, MD, FACS; Edgar Rodas, MD, FACS; Mary E. Schroeder, MD, FACS; Tom Sullivan, MBS; Mierlandi Torres, MBA; Paul Truché, MD; and Martha Paola Vega, MD
The April 2017 issue of the Bulletin featured an article titled “Using global surgical indicators to improve trauma care in Latin America,” which introduced the relationship between The Lancet Commission on Global Surgery (LCoGS) core surgical indicators 1–6 and specific components of trauma program and systems development in Latin America (see Table 1, page 25). In this article, the authors elaborate on the specific link between LCoGS indicator 1 (LCoGS I-1) and prehospital care in Colombia by members of the newly established Latin America Indicator Research Coalition. This body comprises an indicator working group, research partnerships in the Americas, and the individuals participating in and leading this endeavor, all stemming from a 2016 Panamerican Trauma Society’s (PTS) Trauma Systems Committee initiative.

Indicator 1
The burden of surgical disease worldwide is a public health crisis. Recent literature has consistently demonstrated the devastating results of a lack of capacity to provide surgical care—particularly in low- and middle-income countries (LMICs). In recognition of this problem, the LCoGS in 2015 proposed six indicators for use in shaping policy and strategies to address the access and preparedness (indicators 1 and 2), delivery (indicators 3 and 4), and impact (indicators 5 and 6) of surgical care (see Table 2, page 25). The same year, the World Health Assembly (WHA) passed resolution WHA 68.15, Strengthening Emergency and Essential Surgical Care and Anesthesia as a Component of Universal Health Coverage.

The LCoGS I-1 measures the proportion of the population that can access, within two hours, a facility that is capable of providing the bellwether procedures: cesarean delivery, laparotomy, and treatment of open fracture. Ideally, this indicator should be tied to a regional surgery and trauma system infrastructure. The optimal management of trauma is defined as “care rendered within an inclusive trauma system unaffected by geographical location of injury or geographical location of care.” Consequently, prehospital care, transportation, and communication among regional entities are fundamental to effectively address emergent and essential surgical conditions. The target of LCoGS I-1 is to provide at least 80 percent of the world’s population with timely access to surgical services by 2030 (see Table 2). Achieving this objective will require solutions that, at the very least, include means of measuring the relevant aspects of regional access to emergent and essential surgical care and strategies for effective delivery when hemorrhage from trauma requires timely access, such as the “golden hour.”

Prehospital care and LCoGS I-1
Measuring regional access to timely surgical care is challenging. As yet, there is no consensus on a gold standard for measuring The Lancet surgical indicators. One way to address this void is by considering the component parts that contribute to each of the indicators. LCoGS I-1 is a measure of surgical system preparedness and, by extension, access to temporizing and resuscitative treatment before the patient arrives at the hospital (prehospital care). Prehospital care is integral to any trauma system, and in many cases dictates the patient’s chances for survival. In fact, as many as 50 to 70 percent of trauma deaths occur before the patient reaches the hospital due to a patient’s inability to seek (delay 1), reach (delay 2), or receive (delay 3) timely surgical care within a surgical system (see Figure 1, page 26). Delay 2, the delay in reaching care, is closely associated with prehospital care—and often the most significant contributor to LCoGS I-1. Accordingly, prehospital data may be used to assess a region’s baseline needs for emergency care and surgical system preparedness.

continued on page 26
### Table 1.
**LCoGS Core Indicators and Associated Trauma Program/System Element**

<table>
<thead>
<tr>
<th>Category</th>
<th>LCoGS indicator</th>
<th>Description</th>
<th>Proposed trauma program/system element focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparedness</td>
<td>1</td>
<td>The geographic accessibility of surgical facilities</td>
<td>Prehospital system and integration with hospital registry</td>
</tr>
<tr>
<td></td>
<td>2*</td>
<td>The density of specialist surgical providers</td>
<td>Acute care surgeon/fellowships; trauma program manager</td>
</tr>
<tr>
<td>Delivery</td>
<td>3*</td>
<td>The number of surgical procedures provided per 100,000 population</td>
<td>Trauma and emergent/essential hospital/societal registries</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>30-day perioperative mortality rates</td>
<td>Trauma and emergent/essential hospital/societal registries, formal trauma performance improvement and patient safety, and trauma morbidity/mortality review process</td>
</tr>
<tr>
<td>Impact</td>
<td>5*</td>
<td>The risk of impoverishing expenditure when surgery is required</td>
<td>Future work—ministries of health/education/finance and trauma/acute care surgery divisional business administration</td>
</tr>
<tr>
<td></td>
<td>6*</td>
<td>The risk of catastrophic expenditure when surgery is required</td>
<td>Future work—ministries of health/education/finance and trauma/acute care surgery divisional business administration</td>
</tr>
</tbody>
</table>

*World development indicators

### Table 2.
**Core Indicators for Monitoring of Universal Access to Safe, Affordable Surgical and Anesthesia Care When Needed**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Definition</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to timely essential surgery</td>
<td>Proportion of the population that can access, within 2 hours, a facility that can do cesarean delivery, laparotomy, and treatment of open fracture (the bellwether procedures)</td>
<td>A minimum of 80% coverage of essential surgical and anesthesia services per country by 2030</td>
</tr>
<tr>
<td>Specialist surgical workforce density</td>
<td>Number of specialist surgical, anesthetic, and obstetric physicians who are working, per 100,000 population</td>
<td>100% of countries with at least 20 surgical, anesthetic, and obstetric physicians per 100,000 population by 2030</td>
</tr>
<tr>
<td>Surgical volume</td>
<td>Procedures done in an operating theater, per 100,000 population per year</td>
<td>80% of countries by 2020 and 100% of countries by 2030 tracking surgical volume; a minimum of 5,000 procedures per 100,000 population by 2030</td>
</tr>
<tr>
<td>Perioperative mortality</td>
<td>All-cause death rate before discharge in patients who have undergone a procedure in an operating theatre, divided by the total number of procedures, presented as a percentage</td>
<td>80% of countries by 2020 and 100% of countries by 2030 tracking perioperative mortality; in 2020, assess global data and set national targets for 2030</td>
</tr>
<tr>
<td>Protection against impoverishing expenditure</td>
<td>Proportion of households protected against impoverishment from direct out-of-pocket payments for surgical and anesthesia care</td>
<td>100% protection against impoverishment from out-of-pocket payments for surgical and anesthesia care by 2030</td>
</tr>
<tr>
<td>Protection against catastrophic expenditure</td>
<td>Proportion of households protected against catastrophic expenditure from direct out-of-pocket payments for surgical and anesthesia care</td>
<td>100% protection against catastrophic expenditure from out-of-pocket payments for surgical and anesthesia care by 2030</td>
</tr>
</tbody>
</table>

These indicators provide the most information when used and interpreted together; no single indicator provides an adequate representation of surgical and anesthesia care when analysed independently.

Prehospital care in Latin America
High-quality prehospital care can be particularly challenging in resource-poor areas such as LMICs, where fragmented emergency medical services (EMS) and lack of multisectoral coordination limit access to care. In Latin America, 11 percent of overall mortality is due to trauma and ranks first among all global regions for the highest number of deaths from road traffic accidents, with 19.2 road fatalities per 100,000 inhabitants. Modern prehospital systems in many high-income countries (HICs) were born of the need to address high-speed motor-vehicle collisions; however, organizational, political, clinical, financial, and workforce limitations often preclude implementation of this inclusive prehospital system in Latin America. Furthermore, national oversight and prospective research in prehospital practice is scarce among all Latin American countries.

Prehospital care in Colombia
Like other Latin American and resource-constrained countries, Colombia’s prehospital system design varies, ranging from nationally planned, to locally funded, to hospital-based. In 2011, the Colombian national government passed Act 1438, which reformed the General System of Social Security in Health (Sistema General de Seguridad Social en Salud) and established the legal framework for Article 67 to organize the nation’s emergency medical system. However, the statute omitted any provisions pertaining to the distribution and coordination of ambulance services. Although some Colombian cities have developed urban prehospital care, people in remote areas of the country lack access to timely care. Historically, and specific to Colombia, 50 years of guerrilla warfare and the geographical context of the country split by the Andes Mountains has made some rural areas totally inaccessible, and created tremendous transportation and road access challenges that still exist today.

At present, the prehospital system comprises two informal divisions: the private sector, which is composed of privately run hospitals, ambulance companies, and insurance companies (Empresas...
Table 3. Prehospital Care Grassroots Challenges and Targets

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Professional, public, and private EMS agencies collect their own data variables with differing data management software</td>
<td>Establish standard clinical data collection for multisectoral agencies at the hospital level for any trauma patient (prehospital data forms completed in ER by medical students who are participating in quality improvement projects); ultimately this form will reflect standard data sets such as the PTS prehospital data tier and have a mechanism for all EMS agencies to enter into the EHR before arriving at the hospital.</td>
</tr>
<tr>
<td>2. Data, if collected by prehospital agencies, do not penetrate hospital registries</td>
<td>Design process to integrate prehospital and hospital data. (A specific process for the predetermined prehospital data contained in the forms needs to be included into inpatient EHR.)</td>
</tr>
<tr>
<td>3. The full continuum of care and, therefore, outcomes of trauma care are not assessed without proper prehospital data penetration of registry consistently (that is, through a PTS registry)</td>
<td>Create process for prehospital data to penetrate the PTS prehospital data tier (established in 2017). (First step is a multi-institutional Redcap database for simple data registry [see data collection form figure], then after process learned, scale up to collect all the PTS trauma prehospital tier data.)</td>
</tr>
<tr>
<td>4. Nonexistent prospective prehospital research and/or performance improvement for prehospital care and national outcomes</td>
<td>Leverage current LCoGS preparedness to deconstruct current EMS agency and hospital exclusivity for prospective research and performance improvement (use as national motivator).</td>
</tr>
<tr>
<td>5. No workforce for hospital or registry data entry</td>
<td>Funding for the education and training of trauma registrars by way of collaboration with the ACS Committee on Trauma, LCoGS, and Trauma Center Association of America.</td>
</tr>
</tbody>
</table>

Promotoras de Salud) subject to government regulation; and the public sector, which is decentralized and government-run. In several cities, including Cali, Colombia, local governments or private companies administer the prehospital system and ambulances. Some affluent patients can purchase private emergency services that may have contracts with private hospitals, indiscriminate of level of care capability. There is no clear regulation on who coordinates the prehospital system.

These and other barriers to accessing ambulance services and centralizing prehospital care lead to disparities in access to surgical and trauma care. In 2011, two co-authors of this article, Carlos Ordoñez, MD, FACS, and Luis Fernando Pino, MD, as well as Marisol Badiel, MD, and Monica Morales, MD, submitted a proposal to the Colombian government requesting support for creation of a center of excellence for adequate trauma preparedness for the southwest region of Colombia, an area burdened by its geographic location and narco-trafficking. Although initially the proposal was rejected, Andres Rubiano, MD, representing the Prehospital Care Association of Colombia as the former president of this professional society, was instrumental in advocating for national support at the Colombian Ministry of Health. The PTS and other stakeholders continue to advocate for Latin American prehospital care expansion at the grassroots level in this region.

Collecting LCoGS I-1 in Latin America

Providers in many Latin American countries find themselves in a predicament similar to the one in Colombia. Hospitals and trauma programs that are best equipped to deliver care are working in an exclusive system. Significant reductions in current prehospital mortality will not be achieved unless issues such as the absence of an effective EMS workforce, resources, and national standards in prehospital care and data collection are systemically addressed. Stakeholders at the hospital, EMS, and national levels are collaborating to improve and take responsibility for performance improvement and/or quality assurance in the prehospital care of the trauma victim. A needs assessment conducted by Rutgers University and Universidad Del Valle (HUV) led to an early focus on the prehospital system in Cali and was based on a Research and Innovation Fellowship Program funded by the U.S. Agency for International Development. A team composed of medical students,
EMS professionals and agencies, hospitals, and acute care surgery stakeholders from the U.S. and Colombia identified specific challenges at the grassroots level (see Table 3, page 27). Each organization’s institutional review board (known as ethics committees in Cali and Medellin) has participated in this approval process in order to strengthen local buy-in and expand multidisciplinary trauma teams to include epidemiologic and public health professionals, including Robinson Pacheco, PhD, from Fundación Valle del Lilli (FUV) Research Center, and Andrés Fandiño Losada, MD, PhD, MSc, from the HUV School of Public Health. Moreover, Drs. Rodrigo Guerrero and Maria Isabel Gutierrez at the Center for Investigation on Violence at HUV (also known as CISALVA), created injury surveillance schemes and a culture of data collection in Colombia during the last 20 years, establishing a foundation for multidisciplinary collaboration that is key to the multisectoral participation in Colombia today.

These and other local champions in trauma care have initiated process improvement targets (see Table 3) to advance prehospital care practices and LCoGS I-1 data collection. Prehospital data collection, an underfilled fourth data tier in the PTS registry, was reinvigorated in 2016 in Colombia after it became apparent there was a diminishing data acquisition effort from its inauguration time in 2011 (see Table 4, page 29). No process or workforce (outside of medical students in research rotations) existed for prehospital data collection or entry into the hospital electronic health record (EHR) and/or the PTS registry. A short standardized prehospital data collection tool (see Figure 2, page 30) was implemented in the emergency departments (EDs) at FUV and HUV in 2016, serving as a handover document to promote ED triage and prehospital-to-hospital data integration. This simplified prehospital data collection tool is designed as a preliminary step in developing processes for prehospital data to integrate with PTS registry, and to teach ancillary staff at the grassroots level data acquisition, entry, and management.

The feasibility of this data collection process was demonstrated in 2016 at the HUV ED. Intentions to expand these activities and to include other facilities including the Universidad de Antioquia, San Vicente Hospital (UOA) will take place this year. This is an important step in the transition to durable PTS registry prehospital tier data collection (see Table 4). This simplified process of data collection, prehospital to hospital integration, and PTS registry data management allows investigators to evaluate the full continuum of care, and consider time from injury to definitive surgical intervention as a complete measure of timely, emergent, and essential care. It is the first tool that will prospectively broaden measurement applications of two-hour access in definitive emergent/essential care facilities in Colombia. As a result, Colombian trauma stakeholders can leverage these data and data collection processes for LCoGS I-1 2030 targets and national inclusive trauma and surgical system planning. Additionally, a goal for implementation this year is to quantify the workforce required to perform quality improvement and data collection tasks in order to assess and support sustainability of this initiative, because no trauma and surgery program registrars exist in Colombia. Promoting the value of these positions as opportunities to increase health care employment and infrastructure further adds value to prehospital data utilization and maintenance of data collection registries such as the PTS registry in Latin America. We have achieved a fourth-year no-cost extension to the 2014 United States Agency for International Development–Research and Innovation Fellowship program (also known as USAID-RIF) grant that supports travel of the participating team members, but in-country progress durability will be dependent on multi-institutional collaboration to scale pursuit and securing of necessary funding for study protocol.
TABLE 4.

PTS PREHOSPITAL TIER DATA POINTS

The prehospital tier is one of four total tiers in a 250 data element PTS registry—an evolution of a 2005 Virginia Commonwealth University International Trauma System Development Program test set in Ecuador

- Transport agency
- Transport origin
- Transport record number
- Prehospital notification date and time
- At scene arrival date and time
- At scene departure date and time
- Destination hospital arrival date and time
- Destination hospital
- Delay reason
- Prehospital form/report given
- Nearest town/hospital to the injury site
- Exirication time
- Procedure type
- Transport duration
- At scene heart rate
- At scene arterial pressure (systolic)
- At scene arterial pressure (diastolic)
- At scene respiratory rate
- At scene respiratory rate qualifier
- At scene temperature
- At scene oxygen saturation
- Transport heart rate
- Transport arterial pressure (systolic)
- Transport arterial pressure (diastolic)
- Transport respiratory rate
- Transport respiratory rate qualifier
- Transport temperature
- Transport oxygen saturation
- Loss of consciousness
- Loss of consciousness duration
- Glasgow Coma Scale (GCS) Ocular
- GCS Verbal
- GCS Motor
- GCS Total
- Transportation mode

advancement and broadening of the Americas’ participation in this type of collaborative work.

A call to action

LCoGS I-1, at its core, reflects the confluence of multiple factors involved in the development of trauma systems in Latin America. It is a measurement of the first step in caring for the surgical patient—emergency access to health care providers equipped to resuscitate and prevent further injury; and transportation to the appropriate facilities. Achieving adequate surgical capacity by 2030 will require simultaneous action across all six *Lancet* indicators in order to promote a functioning surgical system as a whole. The role that trauma and the prehospital community can play in strengthening the interdependent surgical system is particularly acute when addressing timely access to surgery, LCoGS I-1. In other words, while the sum is greater than its parts, we are working to scale up the latter.

This article highlights early approaches to prehospital quality improvement and indicator research, focusing on LCoGS I-1. The efficacy of using prehospital measurements is particularly informative regarding regional access to care, or preparedness within a surgical system. Additionally, this method—assessing prehospital capacity to evaluate LCoGS I-1—is generalizable to multiple regions in Latin America.

In December 2016, the PTS executive committee approved the formation of an indicator working group to assess LCoGS indicators in Latin America. Shortly thereafter, workgroup chairs sought to organize and direct an inter-institutional conglom erate formed by emergent and essential surgery (acute care surgery) research partnerships between North, Central, and South America. Boston Children’s Hospital, MA; Columbia University, New York, NY; George Washington University, Washington, DC; Harvard Medical School, Boston; University of Maryland Shock Trauma, Baltimore; Massachusetts General Hospital, Boston; University of Miami, FL; Northwestern University, Chicago, IL; Rutgers University, New Brunswick, New Jersey; Virginia

*continued on page 31*
FIGURE 2.

PREHOSPITAL DATA COLLECTION FORM

Attention Prehospital Care Providers:

La Fundación Valle del Lili’s department of surgery and Rutgers University in New Jersey, U.S., are developing an analysis of prehospital care needs in the city. The objective is to design a collaborative instrument for the creation of a regional prehospital data collection (prehospital registry). This will be within the framework of the emergency medical system. To do so, we ask for your valuable contribution by filling out the following information in the most precise manner possible. The information will be used solely for the design of improvement strategies and will not be provided for any other objective without authorization.

This form contains specific variables pertaining to the critical path of care of patients in the prehospital field. Please fill out the requested fields with the patient care data.

General information

1. Identification number: ____________________________ 2. Time: ____________________________
3. Ambulance company: ____________________________ 4. Date of transport: _____/_____/_____
5. Type of ambulance:  □ Basic  □ Advanced
6. What is the type of transfer?
   □ Primary (From the event to the hospital emergency room)
   □ Secondary (interinstitutional transfer, interconsultations or test)
   If secondary transport: Name of hospital that requested the transfer ____________________________
7. Address of patient pickup: ____________________________
8. Site of origin of the patient:
   □ Street  □ Other hospital  □ Medical office
   □ House  □ Business  □ Other location

Information about patient

14. Mechanism of injury:
   □ Injured by firearm  □ Transit accident  □ Falls from height
   □ Injured by sharp weapon  □ Other cause of trauma  □ Medical emergency (non-traumatic)

Information regarding transport

15. How much time passed from ambulance dispatch to arrival at the site of accident or the hospital that requested the transfer? __________ minutes
16. How much time passed from the transfer from the site of emergency or the hospital that requested the transfer to the receiving hospital? __________ minutes
Commonwealth University, Richmond, and others, along with their respective partnerships in Bolivia, Brazil, Colombia, Cuba, Ecuador, Guatemala, Mexico, and Peru have demonstrated early commitment to the conglomerate. Within these academic partnerships, along with developments occurring in all of the Latin American countries, surgery research fellows are poised to conduct indicator research that links to trauma systems development in several countries simultaneously to stimulate sustainable, standardized data acquisition by Latin American providers in Latin America. These activities, and earnest pursuit for funding, will be carried out under the aegis of the Latin America Indicator Research Coalition.

The Coalition urges members of the American College of Surgeons to engage in similar efforts to link prehospital capacity with LCoGS I-1 and to do so by learning more about the Latin America Indicator Research Coalition at the XXX Panamerican Congress of Trauma, Critical Care, and Emergency Surgery, November 29–December 1, in Mexico City, Mexico. While also promoting the relationships necessary for surgeons in the Americas to reach LCoGS 2030 targets, the data gathered within this domain are intended to provide a foundation for comprehensive work in all six indicators, insight to guide national surgical planning efforts, and universal, emergent, and essential health care to fulfill the recommendation in WHA resolution 68.15 in Latin America.

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Profiles in surgical research:

Julie A. Freischlag, MD, FACS, FRCSEd(Hon)

by Angela M. Ingraham, MD, MS

Editor’s note: The Bulletin is collaborating with the American College of Surgeons (ACS) Surgical Research Committee to present a series titled “Profiles in surgical research.” These interviews are published periodically and highlight prominent surgeon-scientist members of the ACS.

Julie A. Freischlag, MD, FACS, FRCSEd(Hon), professor of surgery and chief executive officer (CEO), Wake Forest Baptist Medical Center, Winston-Salem, NC, is a vascular surgeon, a prolific surgical-scientist, and an internationally renowned surgical leader. Dr. Freischlag was previously vice-chancellor, human health sciences; dean, University of California (UC) Davis School of Medicine; and the William Stewart Halsted Professor and chair, department of surgery, Johns Hopkins University School of Medicine, Baltimore, MD.

She is past-president of both the Society for Vascular Surgery and the Association of Veterans Affairs (VA) Surgeons, and she served as an ACS Regent for nine years and Chair of the ACS Board of Regents for two years. Dr. Freischlag was elected to the National Academy of Medicine in 2015. She has authored or co-authored more than 250 articles, and currently serves on the editorial boards of the Journal of the American College of Surgeons, Annals of Vascular Surgery, and the British Journal of Surgery.

Angela M. Ingraham, MD, MS, an assistant professor of surgery at the University of Wisconsin and the liaison between the ACS Surgical Research Committee and the Resident and Associate Society, interviewed Dr. Freischlag in March 2017. A summary of their discussion follows.
Can you start by describing your overall path to medicine and research?

I’ve always wondered where my interests came from because nobody in my family was in medicine or science. My mother was an elementary school teacher, and I went to college with plans to be a high school biology teacher. I knew my pediatrician and that was about it. When I ended up at the University of Illinois, they closed the education program because they thought there were going to be too many teachers. So, I ended up in the pre-med curriculum sort of by default.

My first research project was as a pre-med student. I was told to do some research to help boost my application to medical school. So, I spent time with a neuroscientist with whom I looked at the reproductive areas of the brains in hamsters. I remember it felt very odd looking at slides on Friday and Saturday nights while sitting across the street from a bar!

While at Rush Medical College, Chicago, IL, I did some research for a March of Dimes study on Turner syndrome patients, looking at how their brains work. I really liked it, so I chose my residency at the University of California, Los Angeles (UCLA) mainly because there was a research requirement. I wanted to do more research. When I was at UCLA, I spent two years in the research lab of Ronald W. Busuttil, MD, PhD, FACS, a vascular surgeon who is now chair of surgery there. We studied the differences between peripheral and peritoneal neutrophils in an appendicitis model. While at UCLA, I wrote my first abstract and gave my first presentations. I think I published about 12 papers with Dr. Busuttil. He was the one who really got me going on my research career.

Early in my career as a vascular surgeon, I learned the importance of neutrophils in reperfusion injuries, so I began to work with rabbit models to look for interventions to prevent those injuries. While I was a professor at the Medical College of Wisconsin, Milwaukee, I smoked rabbits to study the effect of smoking on the endothelium of different arteries. All of my neutrophil function research examined the effects of reperfusion and smoking, and it made for a really great career.

What has been a key to your success in research?

Part of my success was making the time, finding uninterrupted time, and having the right resources. I really enjoyed doing research at UCLA. I had to drive to my lab, which was in a psychiatry ward facility across the street from the VA hospital. When I was doing experiments there two days a week, I had few distractions because nobody knew where I was. When I was in Milwaukee, I spent two days a week in my research lab, where they had built a smoking chamber for me. So, I have found that what has made a huge difference in my research success has been having the right space and resources, as well as coming up with time-management strategies necessary to focus on research. I think that’s probably the biggest challenge—mapping out your time and your plan for the year.

With funding somewhat limited, what are your recommendations to young surgeon-scientists?

You have to be set up with a successful person in the lab. You no longer can come in with your own little project, put yourself in the lab, close the door, and three years later come out funded. It’s not going to happen. You need to have a research mentor and a successful lab where you’re going to become part of that project or your project matches what they do. You need to have a great team around you. You have to listen because some of the ideas you are going to have may not be fundable, and you need to hear that and adapt to what your mentor and your research team think is going to get funded. I’ve known a couple of researchers who didn’t listen. They loved their project, but it never got funded. You have to write lots of grants. It could be the same type of grant, but it has to be submitted to
multiple places because probably only one of those is going to get funded. And you have to be pretty resilient. You’re going to get rejected. You’re going to get pink slips, and it’s going to feel terrible. But if you talk to any of the most important surgeon-scientists, all of them will tell you how they also have been rejected. It’s a process, but you’ve got to learn to enjoy it along the way. You really have to be embedded into a successful team for funding to happen.

How did your research interests and activities change as you took on more leadership positions?

As I took on leadership jobs, I transitioned my research. When I became division chief at UCLA, I still had a research lab, but it was mainly run by a resident and a young faculty member. When I became chair of surgery, I transitioned to outcomes research and got very much involved with VA clinical trials. Probably some of the best work I’ve done has been looking at endovascular therapy for aneurysms and looking at outcomes from a large clinical trial where I was the national principal investigator. I appreciated the basic science translational research I did for around 10 to 15 years, and when I became a leader, I let others run that part of my life, but was still part of clinical trials.

Can you elaborate about that transition from a basic science to clinical or outcomes research focus and some of the struggles associated with the transition?

I think there are two big decision checkpoints when you try to be a surgeon-scientist. In your first five years, you should determine the following: can you get funded, can you partner with others, and do you feel like you’re making progress? We used to think everybody could get funded at three years, but when I was at Hopkins, we realized it took about five. Another important question to consider is whether you like your life being split between research and clinical work. I would tell you about half of people don’t. After five years, they find that the time management is too crazy, and they love the clinical work more.

I think the next transition point comes in about 10 years. If you’ve been funded and you’re doing well, you’re going to get opportunities to be a leader. Do you want to lead a division, a department, a cancer center, a lab? Once you decide to be an administrator and lead, your time also becomes everyone else’s. It isn’t about your lab or what you’re doing; it’s about your people. When I came back to UCLA as division chief, even though we had a small division of seven people, I realized that it was all about my young faculty. So I hired two young faculty who were really running the research lab, and I ran the research meetings. At that point, I found that I didn’t miss doing the research. I liked hearing about it and leading a division.

Can you elaborate on the time management strategies that allowed you to become so successful?

First, you have to realize that you need to have a time management strategy. Most of us come to work and just see what the heck happens—you know that’s surgery, right? We love calamity and the craziness of it all. But when you’re talking about your career, you have to set up your calendar to protect your time. Even if you ask your boss for protected time, you will tend to
not pay attention to it, and you will eat it up doing silly things because it’s hard to write a grant, and it’s hard to do research. You need to talk to your assistant, if you have one, or look at your electronic calendar and block off time.

You have to decide how you are best suited when it comes to time. I’m a morning person, so I’m not very effective between 3:00 and 6:00 pm. When I’m writing something, I tend to be creative for about an hour. I can’t write a grant for five straight hours. Learn how you can produce things and how much time you need to do things. I do a lot of work on planes. When you’re sitting on a plane, no one bothers you, and you can actually do creative work and think.

Every year, I sit down and try to decide what kind of papers I am going to write and what abstracts I am going to submit for the year. What kinds of projects do I have my team working on? You should have a strategy each year for a couple of clinical papers, a couple of research papers, the grants you need to write, and all of the corresponding deadlines. Delegate anything you can, such as filling out forms or creating presentation slides—your assistant can complete these tasks.

Finally, you have to reassess your progress. You need to have a weekly lab meeting, and you need to attend that meeting. If you’re doing research of any kind, that actually keeps you on track. People report back, you know where everything stands, and you give instructions and tasks to make sure people understand what they need to do to help you.

The other thing we typically don’t appreciate, when it comes to time management, is that you need to step away from the work. Trying to work all weekend or trying to write a grant all night and never giving yourself a day off or a break actually makes you less productive. There’s research showing that if you get no sleep and you work constantly, you are less productive than if you take some time off, get a good night’s sleep, and go forward. When you go run or exercise, think about a big idea or big image, then come back and do it. But I think stepping away is a really important way to be successful.

You’ve talked about your relationships with other co-investigators or with your team members in your lab. I’m assuming that those relationships have presented some challenges from time to time. Can you give an example where you struggled and how you handled that?

When I had my son, Taylor, in Milwaukee, I took 11 weeks of maternity leave. When I returned, I found that my name had been left off a paper, which I thought was because I was gone for a few weeks. I was just really shocked that they submitted it without my name on it. I struggled a lot because I had never had that happen before because I talk about that right up front—who’s the first author, who’s the senior, who’s in the middle, who’s presenting. I fretted for a couple months because I felt it was so unfair. It turned out when I finally talked to my boss, they simply had forgotten. My boss said, “Oh my God, you weren’t here. We forgot,” and so they added my name. That taught me that determining authorship up front is so important, and if you find that something doesn’t look right, address it as soon as possible versus having consternation about it.

I also have had some students in the lab who never show up. If you have people who don’t do their work, I would cut them off quickly. If you find after a month that they’re not doing what they’re supposed to, instead of keeping them around for months, I would say, “This isn’t working out for us, and maybe you need to find another project.” That’s been my frustration, too, in terms of giving people two or three chances.

I’ve never had anybody plagiarize. I have overseen others who have had some issues with plagiarism. Plagiarism tends to be on silly things. You give somebody a book chapter or something smaller to write. They don’t have enough time, so they go lift parts from others. I make it very clear that they can’t do that, and I make sure I read even the smaller things that I have people do. Make sure you pay attention to something that’s small as much as you do for a really important paper.
Can you touch upon mentorship and how it has influenced your career? I’m particularly interested in how you, as a senior surgeon-scientist who has mentored so many other people, use mentors and how those relationships have changed over time?

I think you can never have too many mentors. Just recently, I’ve taken a new job at Wake Forest Baptist Hospital as the president and CEO of that hospital. My previous dean at Hopkins, Ed Miller, MD, helped me negotiate that deal. He’s retired now, but he is still my mentor. Have mentors along the way who have known you since you were young. Haile T. Debas, MD, FACS, —who used to be chair at UC San Francisco and was a young faculty member when I was an intern—still mentors me and gives me career advice. He has been on the board of advisors at UC Davis Health. Stay connected with people who know you, know what you want to do and where your strengths are, and ask them questions about how you can do things or if you should do them at all.

One of the most fun things is to see many of my mentees in leadership roles. Christian deVirgilio, MD, FACS, chair of surgery at Harbor-UCLA, was my third-year medical student. I’ve had a few of my mentees turn back to me and ask what they can do for me. I have found that to be really fun because here I’ve mentored them and now they’re in a position where they could support me. That’s been great, especially if you’re running for national office or you’re up to be something important, because they can say they’ve known you over time.

I rely on a lot of people in my office who aren’t surgeons. I had a great chief of staff at UC Davis, and my administrative assistants were great. Turning to them with questions and asking them, “What do you think of this?” and having them give input can be very helpful, especially in my role as a dean, a new area in which I was not a big expert. So part of it is asking a lot of questions so others can help you get more familiar with areas outside your expertise.

How can junior faculty improve their approach to mentorship?

You can’t just assume that because you know someone they’ll be a mentor. You have to ask them up front. A mentor actually is always on your side. Sometimes you need a coach, sometimes you need people who just want you to win, who will coach you to get a successful grant, for example. You also need sponsors, people that are going to put your name in for this or that.

If you’re a mentee, you have to participate. You have to show up, you have to be able to take negative feedback when your mentor says, “You’re not doing so well; you need to do this, this, and that.”

Keep in mind, a mentor may end up not being your coach or your sponsor. They may not put your name up for stuff. Some may not want you to be as good as them. You’ll meet a few of those people, and they’re not going to be a good coach or sponsor because they really like you not being as good as them.

The best mentor is somebody who would actually want you to be better than they are, and that’s why they need to turn into a coach and sponsor at times. You can say, “OK, you’ve been a great mentor, but I really want to get into this society; can you help me do that?” So, part of it is making sure you know the rules. I would prefer my mentees end up doing even more amazing things than I. That’s what I would like them to do, but not everyone’s wired that way.

Any closing thoughts?

I think part of the process is to realize that, as you go forward, it is a journey to make success happen. The journey to a great place will include some failures along with successes. I think it is really amazing that people still want to pursue surgical research. We have to keep surgeons interested and engaged in surgical research.
Many advocacy and health policy issues affect surgical practice today. In the 2016 Governors Survey, respondents were asked to rank the various issues that could have an effect on their practice. ACS Governors are members of many different types of surgical practices. A specific issue or advocacy issue may be important to surgeons in one type of practice, but not a priority for surgeons in another type of surgical practice. And certainly, some health policy and advocacy-related matters are important to surgeons in all types of surgical practice. In this study, we seek to determine if ACS Governors in different types of surgical practice have different levels of concern regarding health policy or advocacy issues that could affect their surgical practice.

**Editor’s note:** The American College of Surgeons (ACS) Board of Governors (B/G) has conducted an annual survey of its members for more than 20 years. The purpose of the survey is to provide a means of communicating the Governors’ concerns to the College leadership. The 2016 ACS Governors Survey, conducted in August 2016, had an 84 percent (230/274) response rate.

The following article focuses on Governors’ responses to questions about the effects of advocacy and health policy on a surgical practice. This article is the last in a series of four articles that highlight key issues addressed in the 2016 ACS Governors Survey.

**Issues affecting surgical practice**

In the 2016 ACS Governors Survey, respondents were asked to select their top 10 areas of concern from a list of 25 issues. (Table 1, page 38, ranks the Governors’ issues of concern.) ACS Governors work in different types of surgical practice settings, and with this in mind, they were asked to specify their type of surgical practice (see Table 2, page 38). The three most common types of surgical practice for survey respondents were full-time academic practice (49 percent), private practice (23 percent), and full-time hospital-employed physician (15 percent).

The data regarding responses to issues of importance to ACS Governors was further analyzed to determine if the responses varied for participants working in full-time academic practice, full-time hospital-employed practice, or private practice. **continued on page 39**
### TABLE 1.
**ISSUES OF CONCERN**

<table>
<thead>
<tr>
<th>Issues of concern in order of importance</th>
<th>Number of Governors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Continuing medical education (CME)/Maintenance of Certification (MOC)</td>
<td>128</td>
</tr>
<tr>
<td>2. Funding for graduate medical education (GME)</td>
<td>119</td>
</tr>
<tr>
<td>3. Physician reimbursement/Medicare/Medicaid</td>
<td>116</td>
</tr>
<tr>
<td>4. Competency measurement for the practicing surgeon</td>
<td>113</td>
</tr>
<tr>
<td>5. Public reporting of performance measures</td>
<td>113</td>
</tr>
<tr>
<td>6. Pay for performance</td>
<td>107</td>
</tr>
<tr>
<td>7. Electronic health records</td>
<td>107</td>
</tr>
<tr>
<td>8. Readiness of a newly graduated surgical resident to assume independent practice</td>
<td>105</td>
</tr>
<tr>
<td>9. Professional liability/malpractice/tort reform</td>
<td>102</td>
</tr>
<tr>
<td>10. Long-term workforce issues for general surgery/surgical specialties</td>
<td>99</td>
</tr>
<tr>
<td>11. Maintaining an adequate work/lifestyle balance</td>
<td>96</td>
</tr>
<tr>
<td>12. Health care reform through the Affordable Care Act and its impact on your practice</td>
<td>91</td>
</tr>
<tr>
<td>13. Having enough surgeons available to take call for general surgery and the surgical specialties</td>
<td>84</td>
</tr>
<tr>
<td>14. Overspecialization of the field of surgery</td>
<td>76</td>
</tr>
<tr>
<td>15. Trauma care</td>
<td>71</td>
</tr>
<tr>
<td>16. Regionalization of surgical services</td>
<td>70</td>
</tr>
<tr>
<td>17. Advocacy efforts at the state and national level</td>
<td>70</td>
</tr>
<tr>
<td>18. Medicare Access and CHIP (Children’s Health Insurance Program) Reauthorization Act (MACRA) concerns</td>
<td>67</td>
</tr>
<tr>
<td>19. Preserving the option of private practice for surgeons</td>
<td>65</td>
</tr>
<tr>
<td>20. Relationships and contracting with hospitals/managed care organizations/accountable care organizations</td>
<td>58</td>
</tr>
<tr>
<td>21. Peer review issues</td>
<td>56</td>
</tr>
<tr>
<td>22. Credentialing for new technology/hospital privileges issues</td>
<td>54</td>
</tr>
<tr>
<td>23. Merit-based Incentive Payment System concerns</td>
<td>31</td>
</tr>
<tr>
<td>24. Physician Quality Reporting System concerns</td>
<td>27</td>
</tr>
<tr>
<td>25. Availability of surgical supplies in the hospital (staplers, mesh, suture, and so on)</td>
<td>21</td>
</tr>
</tbody>
</table>

### TABLE 2.
**ACS GOVERNORS AND SURGICAL PRACTICE SETTINGS**

<table>
<thead>
<tr>
<th>Type of surgical practice setting</th>
<th>Percent of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time academic practice</td>
<td>49%</td>
</tr>
<tr>
<td>Private practice</td>
<td>23</td>
</tr>
<tr>
<td>Full-time hospital-employed physician</td>
<td>15</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
</tr>
<tr>
<td>Governmental agency</td>
<td>2</td>
</tr>
</tbody>
</table>
TABLE 3.
TOP 10 ISSUES BASED ON PRACTICE TYPE*

<table>
<thead>
<tr>
<th>Order of importance (1 highest–10 lowest)</th>
<th>Full-time academic practice</th>
<th>Full-time hospital-employed physician</th>
<th>Private practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Funding for GME</td>
<td>Long-term workforce issues for general surgery/surgical specialties</td>
<td>Preserving the option of private practice for surgeons</td>
</tr>
<tr>
<td>2</td>
<td>CME/MOC</td>
<td>CME/MOC</td>
<td>Physician reimbursement/Medicare/Medicaid</td>
</tr>
<tr>
<td>3</td>
<td>Public reporting of performance measures</td>
<td>Having enough surgeons available to take call for general surgery and the surgical specialties</td>
<td>Electronic health records</td>
</tr>
<tr>
<td>4</td>
<td>Physician reimbursement/Medicare/Medicaid</td>
<td>Public reporting of performance measures</td>
<td>Pay for performance</td>
</tr>
<tr>
<td>5</td>
<td>Competency measurement for the practicing surgeon</td>
<td>Electronic health records</td>
<td>Professional liability/malpractice/tort reform</td>
</tr>
<tr>
<td>6</td>
<td>Readiness of a newly graduated surgical resident to assume independent practice</td>
<td>Physician reimbursement/Medicare/Medicaid</td>
<td>Competency measurement for the practicing surgeon</td>
</tr>
<tr>
<td>7</td>
<td>Maintaining an adequate work/lifestyle balance</td>
<td>Pay for performance</td>
<td>Health care reform through the Affordable Care Act, and its impact on your practice</td>
</tr>
<tr>
<td>8</td>
<td>Pay for performance</td>
<td>Funding for GME</td>
<td>CME/MOC</td>
</tr>
<tr>
<td>9</td>
<td>Long-term workforce issues for general surgery/surgical specialties</td>
<td>Readiness of a newly graduated surgical resident to assume independent practice</td>
<td>Public reporting of performance measures</td>
</tr>
<tr>
<td>10</td>
<td>Professional liability/malpractice/tort reform</td>
<td>Health care reform through the Affordable Care Act, and its impact on your practice</td>
<td>Funding for GME</td>
</tr>
</tbody>
</table>

*Each issue is color-coded to indicate where the same issue is ranked by the different practice types.

We were curious to see whether each setting had its own issues of concern and whether some of the issues were important to surgeons in all three group settings. Responses based on the type of practice are outlined in Table 3, this page.

Clearly, issues of concern are tied to practice setting. Surgeons in each practice environment have a different set of concerns than those in another setting, and notably, the top issue of concern for each practice setting group doesn’t come near the top issue of concern for the other two groups. Funding for graduate medical education (GME), the top issue of concern for surgeons in full-time academic practice, is ranked eighth by respondents in a full-time hospital-employed position, and number 10 for those in private practice. The number one issue of concern for those in a full-time hospital-employed position—long-term workforce issues for general surgery/surgical specialties—is ranked ninth by respondents working in a full-time academic practice, while that issue of concern isn’t even ranked in the top 10 by those in private practice. The top issue of concern for those in private practice—preserving the option of private practice for surgeons—isn’t ranked in the top 10 in either of the other practice setting groups.
TABLE 4.
TOP, MID-LEVEL, AND LOW-PRIORITY ISSUES FOR EACH SURGICAL PRACTICE TYPE

<table>
<thead>
<tr>
<th>Issue</th>
<th>Full-time academic practice</th>
<th>Full-time hospital-employed physician</th>
<th>Private practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>CME/MOC</td>
<td>Top</td>
<td>Top</td>
<td>Mid-level</td>
</tr>
<tr>
<td>Physician reimbursement/Medicare/Medicaid</td>
<td>Mid-level</td>
<td>Mid-level</td>
<td>Top</td>
</tr>
<tr>
<td>Funding GME</td>
<td>Top</td>
<td>Mid-level</td>
<td>Low-priority</td>
</tr>
<tr>
<td>Public reporting of performance measures</td>
<td>Top</td>
<td>Mid-level</td>
<td>Low-priority</td>
</tr>
<tr>
<td>Electronic health record</td>
<td>Low-priority</td>
<td>Mid-level</td>
<td>Top</td>
</tr>
<tr>
<td>Pay for performance</td>
<td>Mid-level</td>
<td>Mid-level</td>
<td>Mid-level</td>
</tr>
<tr>
<td>Competency measurement for the practicing surgeon</td>
<td>Mid-level</td>
<td>Low-priority</td>
<td>Mid-level</td>
</tr>
<tr>
<td>Long-term workforce issues for general surgery/surgical specialties</td>
<td>Low-priority</td>
<td>Top</td>
<td>Low-priority</td>
</tr>
<tr>
<td>Preserving the option of private practice for surgeons</td>
<td>Low-priority</td>
<td>Low-priority</td>
<td>Top</td>
</tr>
<tr>
<td>Having enough surgeons available to take call for general surgery and the surgical specialties</td>
<td>Low-priority</td>
<td>Top</td>
<td>Low-priority</td>
</tr>
<tr>
<td>Readiness of a newly graduated surgical resident to assume independent practice</td>
<td>Mid-level</td>
<td>Low-priority</td>
<td>Low-priority</td>
</tr>
<tr>
<td>Maintaining an adequate work/lifestyle balance</td>
<td>Mid-level</td>
<td>Low-priority</td>
<td>Low-priority</td>
</tr>
<tr>
<td>Professional liability/malpractice/tort reform</td>
<td>Low-priority</td>
<td>Low-priority</td>
<td>Mid-level</td>
</tr>
<tr>
<td>Health care reform through the Affordable Care Act, and its impact on your practice</td>
<td>Low-priority</td>
<td>Low-priority</td>
<td>Mid-level</td>
</tr>
</tbody>
</table>

Nonetheless, five issues ranked in the top 10 for ACS Governors in all three practice setting groups:

- Continuing medical education (CME)/Maintenance of Certification (MOC)
- Funding for GME
- Physician reimbursement/Medicare/Medicaid
- Public reporting of performance measures
- Pay for performance

It is clear that the ACS Governors' level of concern for issues that affect a surgical practice vary by type of surgical practice. For Governors in a specific type of surgical practice, some of the issues could be very important (top), moderately important (mid-level), or not very important (low-priority).

To categorize the issues outlined in Table 3 into top, mid-level, and low-priority issues, the following system was used: 14 different issues are listed in Table 3. For any specific surgical practice type, if an issue was ranked 1–3, it was assigned to the top category. Any issue ranked 4–8 was labeled mid-level, and any issue ranked 9, 10, or unranked was categorized as low-priority. Table 4, this page, shows which issues are top, mid-level, or low-priority for each of the three types of surgical practice settings.

Advocacy issues
The ACS Division of Advocacy and Health Policy, Washington, DC, is actively advocating on behalf of surgeons in many areas that affect the surgical care of patients. To determine which specific advocacy issues Governors felt were most important, survey respondents were asked to rank a list of 12 issues by order of importance. Table 5, page 41, outlines the top advocacy issues.
issues based on the overall response from survey participants.

Responses regarding importance of advocacy issues also were analyzed based on the type of practice of the respondent, and these data are shown in Table 6, this page. All three groups ranked three advocacy-related issues in the top five:

- Establishment of quality metrics
- Physician payment under fee for service with quality metrics
- Physician payment under Alternate Payment Models (APMs)

It’s clear that the use of quality metrics in determining physician payment is an important advocacy-related topic for all three groups of survey respondents.

The three groups of surgeons have apparent differences of opinion on other advocacy issues. Each group of surgeons had a different top-ranked advocacy issue. GME reform was the number one advocacy issue for those in

---

**TABLE 5.**
RANKING OF ADVOCACY ISSUES BY ACS GOVERNORS

<table>
<thead>
<tr>
<th>Advocacy issue (in order of importance)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Establishment of quality metrics</td>
</tr>
<tr>
<td>2. Physician payment under fee for service with quality metrics</td>
</tr>
<tr>
<td>3. GME reform</td>
</tr>
<tr>
<td>4. Physician payment under APMs</td>
</tr>
<tr>
<td>5. Surgical workforce, general surgery</td>
</tr>
<tr>
<td>6. Liability/tort reform</td>
</tr>
<tr>
<td>7. Trauma care</td>
</tr>
<tr>
<td>8. Public reporting of performance measures</td>
</tr>
<tr>
<td>9. Cancer care</td>
</tr>
<tr>
<td>10. Research funding</td>
</tr>
<tr>
<td>11. Electronic health record (meaningful use)</td>
</tr>
<tr>
<td>12. Surgical workforce, surgical specialties</td>
</tr>
</tbody>
</table>

---

**TABLE 6.**
ANALYSIS OF TOP FIVE ADVOCACY ISSUES BASED ON PRACTICE TYPE

<table>
<thead>
<tr>
<th>Order of importance (1 highest–5 lowest)</th>
<th>Full-time academic practice</th>
<th>Full-time hospital-employed physician</th>
<th>Private practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GME reform</td>
<td>Establishment of quality metrics</td>
<td>Physician payment under fee for service with quality metrics</td>
</tr>
<tr>
<td>2</td>
<td>Establishment of quality metrics</td>
<td>Physician payment under fee for service with quality metrics</td>
<td>Physician payment under APMs</td>
</tr>
<tr>
<td>3</td>
<td>Research funding</td>
<td>Surgical workforce—general surgery</td>
<td>Liability/tort reform</td>
</tr>
<tr>
<td>4</td>
<td>Physician payment under APMs</td>
<td>Physician payment under APMs</td>
<td>Surgical workforce—general surgery</td>
</tr>
<tr>
<td>5</td>
<td>Physician payment under fee for service with quality metrics</td>
<td>GME reform</td>
<td>Establishment of quality metrics</td>
</tr>
</tbody>
</table>
full-time academic practice, while it was ranked fifth by full-time hospital-employed physicians and was not ranked in the top five by those in private practice. The issue of establishment of quality metrics was ranked first by full-time hospital-employed physicians. For those in private practice, the issue of physician payment under fee-for-service with quality metrics was ranked number one.

Other advocacy-related issues were supported by some of the groups, but not all of them. In order to categorize the issues from Table 6 into top, mid-level, and low-priority advocacy issues for ACS Governors in the three surgical practice types evaluated in this survey, the following system was used: Seven different advocacy issues are listed in Table 6. For any specific surgical practice type, if an advocacy issue was ranked 1–2, it was labeled top. Any issue ranked 3–4 was called mid-level. Any issue ranked 5 or unranked was categorized as low-priority. Table 7, this page, shows which issues were top, mid-level, or low-priority for each of the three types of surgical practice.

## Conclusions

In this study of the 2016 ACS Governors’ Survey data, we attempted to determine whether Governors in a full-time academic practice, a full-time hospital-employed physician practice, and a private practice had different levels of concern for health policy and advocacy-related issues that could affect their surgical practice.

Based on the data presented in this article, it is evident that some of these issues are important enough that surgeons in all three types of practice ranked them as top issues. Other topic areas were found to be very important to Governors in one type of practice, but not necessarily important to Governors in the other types of surgical practice. Governors in each type of surgical practice have their own unique areas of concern.

These findings have implications for the ACS leadership and the ACS Division of Advocacy and Health Policy, who work to help and support all ACS Fellows regardless of surgical practice and will assist College leaders with prioritizing their efforts in the future.

### TABLE 7.

<table>
<thead>
<tr>
<th>Advocacy issue</th>
<th>Full-time academic practice</th>
<th>Full-time hospital-employed physician</th>
<th>Private practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishment of quality metrics</td>
<td>Top</td>
<td>Top</td>
<td>Low-priority</td>
</tr>
<tr>
<td>Physician payment under fee for service with quality metrics</td>
<td>Low-priority</td>
<td>Top</td>
<td>Top</td>
</tr>
<tr>
<td>Physician payment under APMs</td>
<td>Mid-level</td>
<td>Mid-level</td>
<td>Top</td>
</tr>
<tr>
<td>Surgical workforce—general surgery</td>
<td>Low-priority</td>
<td>Mid-level</td>
<td>Mid-level</td>
</tr>
<tr>
<td>GME reform</td>
<td>Top</td>
<td>Low-priority</td>
<td>Low-priority</td>
</tr>
<tr>
<td>Research funding</td>
<td>Mid-level</td>
<td>Low-priority</td>
<td>Low-priority</td>
</tr>
<tr>
<td>Liability/tort reform</td>
<td>Low-priority</td>
<td>Low-priority</td>
<td>Mid-level</td>
</tr>
</tbody>
</table>
The Best Surgical Education
All in One Place
Join us October 22–26 in San Diego, CA, for education, networking, and the latest surgical innovation you won’t find anywhere else.

This year’s Clinical Congress offers outstanding educational opportunities for every stage in your career—all in one place. Claim up to 47.5 Continuing Medical Education (CME) Credits, earn Self-Assessment Credit for most sessions, and meet other regulatory requirements.

Use this Program Planner to find sessions specific to your area of interest and details on all of the exciting events at Clinical Congress.

Register TODAY!
Visit facs.org/clincon2017/register
See you in October!
Dear Colleagues,

It is my sincere pleasure to invite you to attend the American College of Surgeons (ACS) Clinical Congress, to be held October 22–26 in San Diego, CA. The ACS Clinical Congress remains the premier annual surgical meeting for surgeons, surgery residents, medical students, and members of surgical teams. The hallmarks of the Clinical Congress are a broad range of outstanding hands-on and didactic learning opportunities and timely discourse on the most relevant surgical practices and research, along with unparalleled access to peers.

Courtney M. Townsend, Jr., MD, FACS, ACS President, has selected Do What’s Right for the Patient as this year’s theme. The Program Committee, under the leadership of Valerie W. Rusch, MD, FACS, and the ACS Division of Education, led by Ajit K. Sachdeva, MD, FACS, FRCSC, has developed an outstanding, cutting-edge Scientific Program to address critical education and training needs and equip surgeons with skills to achieve the best outcomes in the ever-changing environment of health care.

The Clinical Congress 2017 program addresses essential clinical and nonclinical content. An exciting series of Named Lectures will again be delivered by world-renowned experts in their respective fields. Didactic/Experiential and Surgical Skills Courses will focus on acquisition of knowledge and skills through best practices in education and training methods. More than 110 Panel Sessions on relevant topics will be offered. The Scientific Forum will include surgical research presentations and posters. New this year, all posters will be e-Posters and will be available for viewing throughout the entire Clinical Congress. Video-Based Education Sessions will showcase surgical procedures. Meet-the-Expert Sessions and Town Hall Meetings will offer a more informal learning experience.

Continuing Medical Education (CME) and Self-Assessment Credit will be available for most sessions, including CME Credit for Poster Rounds. Certificates of Verification will be provided for Skills and Didactic Courses. Also, many sessions will address specific regulatory mandates for licensure.

On behalf of the American College of Surgeons, I look forward to seeing you in San Diego.

Best regards,

Michael J. Zinner, MD, FACS
Chair, ACS Board of Regents
2017 Highlights

Convocation
Sunday, October 22, 6:00–8:00 pm | San Diego Convention Center

The Convocation ceremony confers Fellowship upon those surgeons who have successfully met ACS requirements to provide optimal care to the surgical patient. The ceremony also includes recognition of the Honorary Fellows, presentation of the Distinguished Service Award, installation of the ACS Officers, and the Presidential Address.

The first Convocation ceremony was held on November 13, 1913, at the Congress Hotel in Chicago, IL. The inaugural class of 1,059 surgeons hailed from the U.S. and Canada and included six female surgeons.

All Initiates must register for Clinical Congress if they are planning to participate in the Convocation. All Initiates will be granted Fellowship in the College during the ceremony regardless of their attendance at the event and may begin using the FACS designation upon the conclusion of the ceremony.

Family members of Initiates are not required to register for the Clinical Congress program to attend the Convocation ceremony.

Information about Convocation can be found at facs.org/member-services/initiates.

Opening Ceremony
Monday, October 23, 8:00–9:00 am | San Diego Convention Center

The Colors and Canadian and American national anthems are presented, along with a short video highlighting the new President’s theme for the year. The President presides and introduces the Honorary Fellows, the recipient of the Distinguished Philanthropist Award, Past-Presidents, College Officers and Regents, Special Invited Guests from national and international health care organizations, the Resident Research Scholars, and the International Guest Scholars. An annual overview of the College will be reported by ACS Executive Director David B. Hoyt, MD, FACS. The Martin Memorial Lecture, sponsored by the American Urological Association, follows immediately.
Annual Business Meeting of Members
Wednesday, October 25 | 4:15–5:15 pm

- Reports from the Chair of the Board of Regents, the Chair of the Board of Governors, the Executive Director, and the American College of Surgeons Professional Association political action committee (ACSPA-SurgeonsPAC) Board Chair
- Presentation of the Resident Award for Exemplary Teaching and the Joan L. and Julius H. Jacobson II Promising Investigator Award
- Reports of the Nominating Committee of the Board of Governors and the Nominating Committee of the Fellows, and introduction of the President-Elect

Surgical History Group Breakfast
Tuesday, October 24 | 7:00–8:00 am

Join your colleagues who share an interest in surgical history at the ACS Surgical History Group Breakfast. This year's guest lecturer will be David L. Nahrwold, MD, FACS, who will speak on the history of the Bulletin of the American College of Surgeons. This breakfast will provide an opportunity for you to share stories and discuss where surgery has been and how best to preserve it into the future.

Surgical History Group Poster Session
Monday–Wednesday, October 23–25 | 9:00 am–4:30 pm

The Surgical History Group Poster Session will highlight the rich history of surgery. Posters will be presented by Fellows, residents, and medical students. These posters will be on display Monday, October 23, through Wednesday, October 25. The winning poster and runner-up will be announced at the ACS Surgical History Group Breakfast.

ACS Academy of Master Surgeon Educators
Monday, October 23 | 1:15–2:15 pm

The ACS Academy of Master Surgeon Educators Special Session will provide an overview of the new ACS Academy. Establishment of the Academy by the Division of Education was approved by the Board of Regents in 2014. The mission of the Academy is “to continually advance the science of education across surgery through innovation and the promotion of the highest standard in surgical education.” This session will address the Academy’s history and current status, cover criteria for admission, highlight expected outcomes, and present future plans. This session will be moderated by L.D. Britt, MD, MPH, DSc(Hon), FACS, FCCM, FRCSEng(Hon), FRCSEd(Hon), FWACS(Hon), FRCSI(Hon), FCS(SA)(Hon), FRCSGlasg(Hon), and co-moderated by Ajit K. Sachdeva, MD, FACS, FRCS.

50th Anniversary Celebration of Schwartz's Principles of Surgery: First Edition: A Retrospective and Futuristic View
Tuesday, October 24 | 11:30 am–12:30 pm

Facts are now fallacies, dogma disproven, algorithms altered. Can the dramatic changes over the last 50 years help us foresee the possibilities and the progress in the next half century? Through this retrospective reflection on the first edition of Schwartz’s Principles of Surgery, the panel will review the most important advances in surgery in the last 50 years, and panelists will be asked to speculate on the exciting advances that loom on the horizon. Fifty years from now, what will our successors at Clinical Congress think and say about our current state of the art? Seymour Schwartz, MD, FACS, who is celebrating his 60th year on the faculty of the University of Rochester, NY, will co-moderate with David Linehan, MD, FACS, his successor as chairman of surgery.
Named Lectures

Monday, October 23

**NL01 | 9:00–9:30 am**
Martin Memorial Lecture
**Presiding Officer:** Courtney M. Townsend, Jr., MD, FACS, Galveston, TX
**Lecturer:** David R. Williams, MD, FRCS, Oakville, ON

**NL02 | 9:45–10:45 am**
John H. Gibbon, Jr., Lecture: Lung Transplantation
**Presiding Officer and Introducer:** David T. Cooke, MD, FACS, Sacramento, CA
**Lecturer:** Shaf Keshavjee, MD, MSc, FACS, FRCSC, Toronto, ON

**NL03 | 2:30–3:30 pm**
Charles G. Drake History of Surgery Lecture: The Shifting Sands of Surgical Education
**Presiding Officer and Introducer:** William C. Welch, MD, FACS, Philadelphia, PA
**Lecturer:** John R. Potts, MD, FACS, Chicago, IL

**NL04 | 4:15–5:00 pm**
I.S. Ravdin Lecture in the Basic and Surgical Sciences: Microbiome Medicine: This Changes Everything
**Presiding Officer and Introducer:** Douglas J. E. Schuerer, MD, FACS, St. Louis, MO
**Lecturer:** John C. Alverdy, MD, FACS, Chicago, IL

Tuesday, October 24

**NL05 | 8:00–9:00 am**
Herand Abcarian Lecture: The Rationale for and Reality of the New ACS Commission on Cancer National Accreditation Program for Rectal Cancer
**Presiding Officer and Introducer:** Neil H. Hyman, MD, FACS, Chicago, IL
**Lecturer:** Steven D. Wexner, MD, FACS, PhD(Hon), FRCS, FRCS(Ed), Weston, FL

**NL06 | 9:45–10:45 am**
Excelsior Surgical Society/Edward D. Churchill Lecture: Battlefield to Bedside: Bringing Precision Medicine to Surgical Care
**Presiding Officer and Introducer:** M. Timothy Nelson, MD, FACS, Albuquerque, NM
**Lecturer:** CAPT Eric A. Elster, MD, FACS, Bethesda, MD

Wednesday, October 25

**NL07 | 12:45–1:30 pm**
Scudder Oration on Trauma: Trauma: Still the Cornerstone of Acute Care Surgery
**Presiding Officer and Introducer:** Ronald M. Stewart, MD, FACS, San Antonio, TX
**Lecturer:** L.D. Britt, MD, MPH, DSc(Hon), FACS, FCCM, FRCS(Eng)(Hon), FRCS(Ed)(Hon), FWACS(Hon), FRCS(Hon), FCS(ScA)(Hon), FRCSGlasc(Hon), Norfolk, VA

**NL08 | 2:30–3:30 pm**
Olga M. Jonasson Lecture: A Quiet Pioneer Who Started a Revolution
**Presiding Officer and Introducer:** Rosemary A. Kozar, MD, PhD, FACS, Baltimore, MD
**Lecturer:** Kathryn D. Anderson, MD, FACS, Corona, CA

**NL09 | 8:00–9:00 am**
Distinguished Lecture of the International Society of Surgery: Right for the Patient, Right for the Citizen: Professionally Led Changes in Health Care
**Presiding Officer and Introducer:** Kathleen M. Casey, MD, FACS, Newport, RI
**Lecturer:** Clare Marx, CBE, DL, PRCS, London, UK

**NL10 | 9:45–10:45 am**
**Presiding Officer and Introducer:** Henri R. Ford, MD, MHA, FACS, FAAP, Los Angeles, CA
**Lecturer:** Peter A. Ubel, MD, Durham, NC

**NL11 | 12:45–1:45 pm**
Commission on Cancer Oncology Lecture: The Evolving Enigma of Regional Lymph Nodes in Surgical Oncology
**Presiding Officer and Introducer:** David P. Winchester, MD, FACS, Chicago, IL
**Lecturer:** Daniel G. Coit, MD, FACS, New York, NY
### Postgraduate Courses

<table>
<thead>
<tr>
<th>Verification Levels</th>
<th>Didactic/Experiential Courses ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level I</td>
<td>Certified of attendance</td>
</tr>
<tr>
<td>Level II</td>
<td>Verification of satisfactory completion of course objectives</td>
</tr>
<tr>
<td>Level III</td>
<td>Verification of knowledge and skills</td>
</tr>
<tr>
<td>Level IV*</td>
<td>Verification of preceptor experience</td>
</tr>
<tr>
<td>Level V*</td>
<td>Verification of satisfactory patient outcomes</td>
</tr>
<tr>
<td></td>
<td>*Not available at Clinical Congress</td>
</tr>
</tbody>
</table>

#### Didactic/Experiential Courses ($)

- **DC01** Emergency General Surgery: Annual Update
- **DC02** Management of the Complex Older Surgical Patient: Geriatric and Palliative Care
- **DC03** Surgical Education: Principles and Practice
- **DC04** Global Health Competencies for Surgeons: Cognitive and System Skills
- **DC05** Annual Update in Trauma Care
- **DC06** Basic Coding: Fast Track to Payment—Coding, Billing, and Reimbursement
- **DC07** Measure Twice, Cut Once! Optimizing Surgical Systems of Care
- **DC08** Management of Anorectal Disease
- **DC09** Breast Cancer: National and International Disparities
- **DC10** Master Coding: General Surgery Current Procedural Terminology Coding
- **DC11** General Surgery Review Course
- **DC12** Achieving Success in Critical Situations: Safety and Teamwork in the Operating Room
- **DC13** Surgical Ethics for the Practicing Surgeon
- **DC14** Fundamental Use of Surgical Energy (FUSE ™): Preparation and Refresher Course
- **DC15** Minimally Invasive Endocrine Surgery: Is It Worth It?
- **DC16** Surgical Critical Care: Annual Update
- **DC17** Maintenance of Certification (MOC) Review: Essentials for Surgical Specialties
- **DC18** Surgical Oncology for the Rural and Community Surgeon
- **DC19** From Normalized Stress to the Precipice of Burnout: Strategies to Retain Joy in the Profession

#### Surgical Courses ($)

- **SC01** Advanced Skills Training for Rural Surgeons: Laparoscopic Common Bile Duct Exploration and Closure of Complex Soft-Tissue Defects
- **SC02** Surgical Endoscopy: Essential Skills in Gastrointestinal Surgery
  - **SC02A**: Lecture only
  - **SC02B**: Lecture and Lab
- **SC03** Thyroid, Parathyroid, and Neck Ultrasound
  - **Prerequisite**: Registrants must have completed the Ultrasound for Surgeons: The Basic Course, 3rd Edition Online Course
- **SC04** Ultrasound for Pediatric Surgeons
  - **Prerequisite**: Registrants must have completed the Ultrasound for Surgeons: The Basic Course, 3rd Edition Online Course
- **SC05** Robotic Gastrointestinal Surgery: Program Planning, Approach, and Applications
- **SC06** Advanced Colonoscopy: Polypectomy and Beyond
- **SC07** Contemporary Strategies for Laparoscopic Inguinal and Ventral Hernia Repair
  - **SC07A**: Lecture only
  - **SC07B**: Lecture and Lab
- **SC08** Advanced Robotic Surgery for Specialized Gastrointestinal Operations
- **SC09** Interventional and Intraoperative Breast Ultrasound for the General Surgeon
  - **Prerequisite**: Registrants must have completed the Ultrasound for Surgeons: The Basic Course, 3rd Edition Online Course
- **SC10** Basic Endovascular Skills for Trauma (BEST ™) Workshop
- **SC11** Oncoplastic Breast Surgery for the General Surgeon
- **SC12** Ultrasound-Guided Resuscitation for Trauma and Critically III Patients
Didactic/Experiential Courses

These courses offer CME Credit and require an additional fee.

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Start Date/Time</th>
<th>Location</th>
<th>Chair</th>
<th>Co-Chair</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC01</td>
<td>Emergency General Surgery: Annual Update</td>
<td>6</td>
<td>Saturday, October 21; 8:00 am–3:30 pm</td>
<td>Mission Hills, KS</td>
<td>Fellow $580</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC02</td>
<td>Management of the Complex Older Surgical Patient: Geriatric and Palliative Care</td>
<td>6</td>
<td>Saturday, October 21; 8:30 am–4:00 pm</td>
<td>Mission Hills, KS</td>
<td>Fellow $580</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC03</td>
<td>Surgical Education: Principles and Practice</td>
<td>6</td>
<td>Saturday, October 21; 9:00 am–4:30 pm</td>
<td>Mission Hills, KS</td>
<td>Fellow $490</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC04</td>
<td>Global Health Competencies for Surgeons: Cognitive and System Skills</td>
<td>6</td>
<td>Saturday, October 21; 8:30 am–4:30 pm</td>
<td>Mission Hills, KS</td>
<td>Fellow $580</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC05</td>
<td>Annual Update in Trauma Care</td>
<td>6</td>
<td>Sunday, October 22; 8:00 am–3:30 pm</td>
<td>Mission Hills, KS</td>
<td>Fellow $580</td>
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</tr>
<tr>
<td>DC06</td>
<td>Basic Coding: Fast Track to Payment—Coding, Billing, and Reimbursement</td>
<td>6.5</td>
<td>Sunday, October 22; 8:30 am–4:30 pm</td>
<td>Mission Hills, KS</td>
<td>Fellow $550</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC07</td>
<td>Measure Twice, Cut Once! Optimizing Surgical Systems of Care</td>
<td>6</td>
<td>Sunday, October 22; 9:00 am–4:30 pm</td>
<td>Mission Hills, KS</td>
<td>Fellow $565</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC08</td>
<td>Management of Anorectal Disease</td>
<td>6</td>
<td>Sunday, October 22; 9:30 am–5:00 pm</td>
<td>Mission Hills, KS</td>
<td>Fellow $580</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC09</td>
<td>Breast Cancer: National and International Disparities</td>
<td>6</td>
<td>Monday, October 23; 9:45 am–5:15 pm</td>
<td>Mission Hills, KS</td>
<td>Fellow $580</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC10</td>
<td>Master Coding: General Surgery Current Procedural Terminology Coding</td>
<td>6.5</td>
<td>Monday, October 23; 9:45 am–5:45 pm</td>
<td>Mission Hills, KS</td>
<td>Fellow $550</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC11</td>
<td>General Surgery Review Course</td>
<td>12</td>
<td>Monday, October 23; 10:00 am–5:00 pm</td>
<td>Mission Hills, KS</td>
<td>Fellow $1,150</td>
<td></td>
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</tr>
<tr>
<td>DC12</td>
<td>Achieving Success in Critical Situations: Safety and Teamwork in the Operating Room</td>
<td>4</td>
<td>Monday, October 23; 1:00–5:15 pm</td>
<td>Mission Hills, KS</td>
<td>Fellow $375</td>
<td></td>
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<tr>
<td>DC13</td>
<td>Surgical Ethics for the Practicing Surgeon</td>
<td>4</td>
<td>Monday, October 23; 1:30–5:45 pm</td>
<td>Mission Hills, KS</td>
<td>Fellow $295</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC14</td>
<td>Fundamental Use of Surgical Energy (FUSE™): Preparation and Refresher Course</td>
<td>4</td>
<td>Tuesday, October 24; 8:30 am–12:45 pm</td>
<td>Mission Hills, KS</td>
<td>Fellow $430</td>
<td></td>
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</tr>
<tr>
<td>DC15</td>
<td>Minimally Invasive Endocrine Surgery: Is It Worth It?</td>
<td>6</td>
<td>Tuesday, October 24; 9:30 am–5:00 pm</td>
<td>Mission Hills, KS</td>
<td>Fellow $580</td>
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<td></td>
</tr>
<tr>
<td>DC16</td>
<td>Surgical Critical Care: Annual Update</td>
<td>6</td>
<td>Wednesday, October 25; 8:00 am–3:30 pm</td>
<td>Mission Hills, KS</td>
<td>Fellow $605</td>
<td></td>
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</tr>
<tr>
<td>DC17</td>
<td>Maintenance of Certification (MOC) Review: Essentials for Surgical Specialties</td>
<td>4</td>
<td>Wednesday, October 25; 10:00 am–5:00 pm</td>
<td>Mission Hills, KS</td>
<td>Fellow $440</td>
<td></td>
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<tr>
<td>DC18</td>
<td>Surgical Oncology for the Rural and Community Surgeon</td>
<td>6</td>
<td>Wednesday, October 25; 9:00 am–4:30 pm</td>
<td>Mission Hills, KS</td>
<td>Fellow $580</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC19</td>
<td>From Normalized Stress to the Precipice of Burnout: Strategies to Retain Joy in the Profession</td>
<td>4</td>
<td>Wednesday, October 25; 10:00 am–2:15 pm</td>
<td>Mission Hills, KS</td>
<td>Fellow $295</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Surgical Skills Courses
These courses offer CME Credit and require an additional fee.

**SC01** | Advanced Skills Training for Rural Surgeons: Laparoscopic Common Bile Duct Exploration and Closure of Complex Soft-Tissue Defects
8 credits; Verification Level III
Saturday, October 21; 8:00 am–5:30 pm
Chair: Amy L. Halverson, MD, FACS, Chicago, IL
Co-Chairs: Adam Deutchman, MD, FACS, Salmon, ID, and Susan E. Long, MD, FACS, Buckhannon, WV
Fellow $1,025 | Non-Fellow $1,190 | RAS $515 | Non-RAS $600

**SC02** | Surgical Endoscopy: Essential Skills in Gastrointestinal Surgery
SC02A: Lecture only, 3.75 credits; Verification Level II
Sunday, October 22; 8:00 am–12:00 noon
Fellow $370 | Non-Fellow $430 | RAS $185 | Non-RAS $215
SC02B: Lecture and Lab, 8 credits; Verification Level III
Sunday, October 22; 8:00 am–5:30 pm
Chair: Jeffrey M. Marks, MD, FACS, Cleveland, OH
Co-Chair: Eric M. Pauli, MD, FACS, Hershey, PA
Fellow $1,025 | Non-Fellow $1,190 | RAS $515 | Non-RAS $600

**SC03** | Thyroid, Parathyroid, and Neck Ultrasound
7.75 credits; Verification Level III
Sunday, October 22; 8:15 am–5:30 pm
Chair: Lisa A. Oriaff, MD, FACS, Stanford, CA
Co-Chair: Russell B. Smith, MD, FACS, Omaha, NE
Prerequisite: Registrants must have completed the Ultrasound for Surgeons: The Basic Course, 3rd Edition Online Course.
Fellow $1,425 | Non-Fellow $1,640 | RAS $710 | Non-RAS $815

**SC04** | Ultrasound for Pediatric Surgeons
6 credits; Verification Level III
Monday, October 23; 9:45 am–5:15 pm
Chair: Stefan Scholz, MD, FACS, Pittsburgh, PA
Co-Chair: Marcus Jarboe, MD, FACS, Ann Arbor, MI
Prerequisite: Registrants must have completed the Ultrasound for Surgeons: The Basic Course, 3rd Edition Online Course.
Fellow $1,025 | Non-Fellow $1,190 | RAS $515 | Non-RAS $600

**SC05** | Robotic Gastrointestinal Surgery: Program Planning, Approach, and Applications
6 credits, Verification Level II
Monday, October 23; 10:00 am–5:30 pm
Chair: Vivian E. Strong, MD, FACS, New York, NY
Co-Chair: Martin R. Weiser, MD, FACS, New York, NY
Fellow $815 | Non-Fellow $930 | RAS $430 | Non-RAS $515

**SC06** | Advanced Colonoscopy: Polypectomy and Beyond
4 credits, Verification Level III
Monday, October 23; 1:00–5:15 pm
Chair: Richard L. Whelan, MD, FACS, New York, NY
Co-Chair: I. Emre Gorgun, MD, FACS, Cleveland, OH
Fellow $1,025 | Non-Fellow $1,190 | RAS $515 | Non-RAS $600

**SC07** | Contemporary Strategies for Laparoscopic Inguinal and Ventral Hernia Repair
SC07A: Lecture only, 3.75 credits; Verification Level II
Tuesday, October 24; 8:00–11:45 am
Fellow $370 | Non-Fellow $430 | RAS $185 | Non-RAS $215
SC07B: Lecture and Lab, 7.5 credits; Verification Level III
Tuesday, October 24; 8:00 am–5:00 pm
Chair: Carla M. Pugh, MD, PhD, FACS, Madison, WI
Co-Chairs: Gina L. Adrales, MD, MPH, FACS, Baltimore, MD, and John S. Roth, MD, FACS, Lexington, KY
Fellow $1,025 | Non-Fellow $1,190 | RAS $515 | Non-RAS $600

**SC08** | Advanced Robotic Surgery for Specialized Gastrointestinal Operations
8 credits; Verification Level III
Tuesday, October 24; 8:00 am–5:30 pm
Chair: Vivian E. Strong, MD, FACS, New York, NY
Co-Chair: Martin R. Weiser, MD, FACS, New York, NY
Fellow $1,025 | Non-Fellow $1,190 | RAS $515 | Non-RAS $600

**SC09** | Interventional and Intraoperative Breast Ultrasound for the General Surgeon
6 credits, Verification Level III
Tuesday, October 24; 9:00 am–4:30 pm
Chair: Darius S. Francescatti, MD, FACS, Chicago, IL
Co-Chair: Richard E. Fine, MD, FACS, Germantown, TN
Prerequisite: Registrants must have completed the Ultrasound for Surgeons: The Basic Course, 3rd Edition Online Course.
Fellow $1,025 | Non-Fellow $1,190 | RAS $515 | Non-RAS $600

**SC10** | Basic Endovascular Skills for Trauma (BEST™) Workshop
4 credits, Verification Level III
Tuesday, October 24; 1:00–5:15 pm
Chair: Megan L. Brenner, MD, FACS, Baltimore, MD
Co-Chair: Joseph J. DuBose, MD, FACS, Davis, CA
Fellow $425 | Non-Fellow $500 | RAS $225 | Non-RAS $300

**SC11** | Oncoplastic Breast Surgery for the General Surgeon
7 credits, Verification Level III
Wednesday, October 25; 9:00 am–5:30 pm
Chair: V. Suzanne Klimberg, MD, FACS, Little Rock, AR
Co-Chair: Susan K. Boolbol, MD, FACS, New York, NY
Fellow $1,595 | Non-Fellow $1,825 | RAS $795 | Non-RAS $950

**SC12** | Ultrasound-Guided Resuscitation for Trauma and Critically Ill Patients
4 credits, Verification Level III
Wednesday, October 25; 1:00–5:15 pm
Chair: Paula Ferrada, MD, FACS, Richmond, VA
Co-Chair: Heidi L. Frankel, MD, FACS, Rancho Palos Verdes, CA
Fellow $825 | Non-Fellow $790 | RAS $325 | Non-RAS $400
Program Information

CONTINUING MEDICAL EDUCATION CREDIT INFORMATION

Accreditation
The American College of Surgeons is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

AMA PRA Category 1 Credits™
The American College of Surgeons designates this live activity for a maximum of 47.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

*A maximum of 39 credits are available for non-ticketed sessions.

CME Credit Claiming
On-site claiming of credit will be available at the MyCME booth and kiosks located throughout the San Diego Convention Center. Claims for CME Credit for this event will be accepted until December 1, 2017.

Residents and Allied Health professionals are eligible for a Certificate of Completion.

Self-Assessment Credit
Self-Assessment Credit will be available for most sessions and courses. The process for earning Self-Assessment Credit is voluntary and is not a prerequisite to claiming CME Credit.

Self-Assessment Credit counts toward American Board of Surgery Maintenance of Certification (MOC) Part 2. Participants are strongly encouraged to complete their self-assessment posttest as soon after attendance as possible. The final deadline is December 1, 2017.

Credit to Address Regulatory Mandates
Some state licensing boards or health agencies have established specific content requirements for CME Credit. State requirements might include Cultural Competence (CC), End of Life Care (EoL), Ethics (E), Palliative Care (PA), Pain Management (PM), Patient Safety (PTS), and Risk Management (RM). In an effort to help individuals meet these requirements, Clinical Congress sessions that include this content have been identified and designated as Credit to Address Regulatory Mandates. These specific content designations, where applicable, are indicated after each session title using the abbreviations listed above. When claiming CME Credit for these sessions, individuals can elect to include the Credit to Address Regulatory Mandates, and it will be documented as part of their CME Certificate and Clinical Congress Transcript. Individuals MUST check with their state or local medical board, hospital, or organization to verify that the content does meet the specific requirements.

Credit to Address ACS Accreditation/Verification Requirements
Institutions that are accredited or verified by the ACS require staff to earn credits in applicable content areas (Bariatric [MBS], Breast [BST], Cancer [C], Pediatric Surgery [PEDS], Pediatric Trauma [PT], and Trauma [T]) in order to meet compliance and site survey requirements. In an effort to help individuals meet these requirements, Clinical Congress sessions that include this content have been identified and designated as Credit to Address ACS Accreditation/Verification Requirements. These specific content designations, where applicable, are indicated after each session title using the abbreviations listed above. When claiming CME Credit for these sessions, individuals can elect to include the Credit to Address ACS Accreditation/Verification Requirements, and it will be documented as part of their CME Certificate and Clinical Congress Transcript. Individuals MUST check with their hospital or specific ACS accreditation/verification office to verify that the content does meet the specific requirements.
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- Meet-the-Expert Sessions
- Town Hall Meetings
- Panel Sessions
- Owen H. Wangensteen Scientific Forum and e-Poster presentations
- Video-Based Education Sessions

Visit the Clinical Congress website at facs.org/clincon2017

Registration

Register today at facs.org/clincon2017/register

Take advantage of the early-bird registration pricing before August 29, 2017

Housing, travel, and child care

For more information on housing, travel, and child care, visit facs.org/clincon2017
The Centers for Medicare & Medicaid Services (CMS) this month has begun collecting data on postoperative visits provided in the 10- and 90-day global period. CMS is collecting postoperative visit data in three ways: through claims-based data reporting; via a practitioner survey; and by direct observation of certain sites, including from accountable care organizations. This column focuses on the first component—claims-based data reporting.

Why does CMS require reporting of global codes data, and why should health care practitioners comply with this policy? This mandatory policy is designed so that CMS can gather enough data on postoperative visits to improve the accuracy of global code values starting in 2019. If practitioners do not report, CMS will be unable to collect accurate and complete data, and reimbursements for 10- and 90-day global services could be negatively affected in the future.

For several years, CMS has communicated its concerns about the accuracy of the values assigned to 10- and 90-day global codes. In 2014, CMS proposed to transition all 10- and 90-day global codes to 0-day, with the requirement that postoperative visits would be reported separately. The ACS successfully opposed this transition because it would have resulted in a reduction in surgeons’ reimbursement for 10- and 90-day global services.

The Medicare Access and CHIP (Children’s Health Insurance Program) Reauthorization Act (MACRA) of 2015 prevented the transition of all 10- and 90-day global codes to 0-day global codes but required CMS to collect data starting in 2017 to ensure the accuracy of the value for global codes starting in 2019. CMS has the authority to implement a 5 percent withhold in payment for global services for health care professionals who fail to report; however, the agency had not implemented the withhold at press time.

Who needs to report postoperative data under this requirement? Starting July 1, CMS now requires both physician and nonphysician health care practitioners in nine states to report data on the number of postoperative visits that they provide for select 10- and 90-day global surgical codes. Reporting is required for practitioners in groups of 10 or more located in Florida, Kentucky, Louisiana, Nevada, New Jersey, North Dakota, Ohio, Oregon, and Rhode Island. These practitioners are required to report American Medical Association Current Procedural Terminology (CPT)* code 99024, Postoperative follow-up visit, normally included in the surgical package, to indicate that an evaluation and management service was performed during a postoperative period for a reason(s) related to the original procedure, for every postoperative visit they provide within the global period of a select list of 10- or 90-day global codes. (Refer to the April issue of the Bulletin for a list of applicable codes.) The data collected will be used to improve the accuracy of global codes starting in 2019. The American College of Surgeons (ACS)

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This mandatory policy is designed so that CMS can gather enough data on postoperative visits to improve the accuracy of global code values starting in 2019. If practitioners do not report, CMS will be unable to collect accurate and complete data, and reimbursements for 10- and 90-day global services could be negatively affected in the future.

strongly urges all surgeons who are required to report to comply with this policy. Inaccurate and incomplete data collection may have a negative effect on 10- and 90-day global services.

**How should practitioners report postoperative visits?**
Postoperative visits should be reported through the usual process for filing claims. Practitioner, beneficiary, and date-of-service information should be submitted. The postoperative visit (the 99024 code) need not be linked to the related 10- or 90-day global code, and it is not necessary to add any modifiers. Practitioners should follow usual Medicare billing requirements to demonstrate that visits were provided and a code was correctly used (such as a chart note).

**How does CMS define a “group” and how should practitioners determine whether they are in a group of 10 or more practitioners?**
Both physicians and nonphysicians count for the purposes of determining whether a group comprises 10 or more health care practitioners. Unlike other Medicare programs, CMS does not define a group based on a shared tax identification number (TIN); rather, for these purposes, practices are defined as a group if their business or financial operations, clinical facilities, records, or personnel are shared by two or more practitioners (not necessarily at the same physical address).

Practitioner count should include all billing physicians and nonphysician practitioners regardless of whether they are furnishing services under an employment, partnership, or independent contractor model. For the purposes of this policy, CMS will look at whether practitioners share a facility or other resources.

**What if a practitioner provides services in two practices, but only one meets the size threshold?**
These practitioners are required to report under this policy. Practitioners are required to report if they have relationships with at least one group of 10 or more health care practitioners. Practitioners in this situation must report all eligible postoperative visits,

Starting July 1, CMS now requires both physician and nonphysician health care practitioners in nine states to report data on the number of postoperative visits that they provide for select 10- and 90-day global surgical codes.
How should practitioners account for part-time/short-term practitioners and staff fluctuation?
When practitioners provide services in multiple settings, the count may be adjusted to reflect the estimated proportion of time spent in the group practice and other settings. Generally, practitioners in short-term locum tenens arrangements should be omitted from the count of practitioners. Practices should determine their eligibility based on the typical number of practitioners who worked in the practice in the first six months of 2017.

What if postoperative care is transferred to another practitioner?
Reporting is required when a postoperative visit is furnished by another health care practitioner who is in the same practice or shares the same TIN. The practitioner who assumes responsibility for postoperative care should submit 99024 claims for postoperative visits if they meet other sampling requirements (that is, they practice in one of the nine selected states and their group includes 10 or more practitioners). This new reporting requirement does not change the services covered in the global payment period. If another practitioner in the TIN provides care that is unrelated to the procedure, the practitioner should continue to bill using the relevant evaluation and management (E/M) or other Healthcare Common Procedure Coding System (HCPCS) code.

What if a practitioner furnishes other services to the same patient on the same day?
All postoperative visits covered by the global period must be reported. If furnishing multiple postoperative visits to the same patient on the same day, only report 99024 once. Any service not covered by the global period is subject to normal billing rules.

Is reporting also required for Medicare Advantage and Veterans Affairs patients?
No. Reporting is only required for traditional fee-for-service Medicare patients and when Medicare is the primary payor for the global procedure.

Are CMS contractors prepared to accept 99024 claims? Can a small charge be attached to the claim?
CMS is working with contractors regarding appropriate processing. CMS also is working to enable its contractors to process claims for which providers put a 1 cent charge on the claim if the provider's software requires some charge for submission.

I am a surgeon who is required to report. Where can I find more information?
Visit the ACS website at facs.org/advocacy/regulatory/global-codes or the CMS website at www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeeSched/Global-Surgery-Data-Collection-.html. You also can e-mail the ACS at regulatory@facs.org.

FOR MORE INFORMATION
• ACS website: facs.org/advocacy/regulatory/global-codes
• CMS website: www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeeSched/Global-Surgery-Data-Collection-.html
Coding for dialysis circuit interventions

The American Medical Association (AMA) Current Procedural Terminology (CPT)* Editorial Panel and the AMA Specialty Society Relative Value Scale Update Committee (RUC) Joint Workgroup on Bundled Services is tasked with identifying CPT codes that are frequently reported together in various combinations as part of an effort to eliminate payment for work duplication. In January 2015, the workgroup identified several codes related to dialysis circuit interventions that will require the creation of new “bundled” codes. In October 2015, the CPT Editorial Panel approved deletion of four codes and creation of nine new codes to describe bundled dialysis circuit intervention services. The new codes and coding guidelines took effect January 1. A column in the January issue of the Bulletin offered an overview of new CPT codes for 2017.† This article provides more in-depth information about the nine new codes to report angioplasty, stent placement, thrombectomy, embolization, and radiological supervision and interpretation within the dialysis circuit.

Previously, percutaneous maintenance of a dialysis access circuit was reported with a CPT code for the introduction of a needle into the access and additional component coding to appropriately describe endovascular intervention(s) (for example, angioplasty or thrombectomy). Effective in 2017, three codes (36901, 36902, 36903) were created to bundle all work involved in the percutaneous management of a patent dialysis access, and three codes (36904, 36905, 36906) were created to bundle endovascular dialysis access thrombectomy procedures. Both code sets are hierarchical and describe increasing intensity of intervention. In addition, three add-on codes (36907, 36908, 36909) were created to reflect additional work in the central veins and/or branch vessel embolization (see Table 1, page 58).

What is a dialysis circuit?
The arteriovenous (AV) dialysis circuit is designed for easy and repetitive access to perform hemodialysis. It begins at the arterial anastomosis and extends to the right atrium. The circuit may be created using either an arterial-venous anastomosis, known as an AV fistula, or a prosthetic graft placed between an artery and vein, known as an AV graft. For coding purposes, the dialysis circuit comprises two segments: the peripheral dialysis segment and the central dialysis segment.

The peripheral segment begins at the arterial anastomosis and extends to the central segment. In the upper extremity, the peripheral segment extends up to and includes the axillary vein and entire cephalic vein. In the lower extremity, the peripheral segment extends up to and includes the common femoral vein. In the upper extremity, the central segment includes the subclavian and innominate veins through the superior vena cava. In the lower extremity, the central segment includes the external iliac and common iliac veins through the inferior vena cava.

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TABLE 1. DIALYSIS CIRCUIT INTERVENTION CODES

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>Descriptor</th>
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<tbody>
<tr>
<td>36901</td>
<td>Introduction of needle(s) and/or catheter(s), dialysis circuit, with diagnostic angiography of the dialysis circuit, including all direct puncture(s) and catheter placement(s), injection(s) of contrast, all necessary imaging from the arterial anastomosis and adjacent artery through entire venous outflow including the inferior or superior vena cava, fluoroscopic guidance, radiological supervision and interpretation and image documentation and report.</td>
</tr>
<tr>
<td>36902</td>
<td>with transluminal balloon angioplasty, peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty.</td>
</tr>
<tr>
<td>36903</td>
<td>with transcatheter placement of intravascular stent(s), peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the stenting, and all angioplasty within the peripheral dialysis segment.</td>
</tr>
<tr>
<td>36904</td>
<td>Percutaneous transluminal mechanical thrombectomy and/or infusion for thrombolysis, dialysis circuit, any method, including all imaging and radiological supervision and interpretation, diagnostic angiography, fluoroscopic guidance, catheter placement(s), and intraprocedural pharmacological thrombolytic injection(s).</td>
</tr>
<tr>
<td>36905</td>
<td>with transluminal balloon angioplasty, peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty.</td>
</tr>
<tr>
<td>36906</td>
<td>with transcatheter placement of intravascular stent(s), peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the stenting, and all angioplasty within the peripheral dialysis circuit.</td>
</tr>
<tr>
<td>+36907</td>
<td>Transluminal balloon angioplasty, central dialysis segment, performed through dialysis circuit, including all imaging and radiological supervision and interpretation required to perform the angioplasty. (List separately in addition to code for primary procedure.)</td>
</tr>
<tr>
<td>+36908</td>
<td>Transcatheter placement of intravascular stent(s), central dialysis segment, performed through dialysis circuit, including all imaging radiological supervision and interpretation required to perform the stenting, and all angioplasty in the central dialysis segment. (List separately in addition to code for primary procedure.)</td>
</tr>
<tr>
<td>+36909</td>
<td>Dialysis circuit permanent vascular embolization or occlusion (including main circuit or any accessory veins), endovascular, including all imaging and radiological supervision and interpretation necessary to complete the intervention. (List separately in addition to code for primary procedure.)</td>
</tr>
</tbody>
</table>

Additional codes related to dialysis circuit interventions

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>36215</td>
<td>Selective catheter placement, arterial system; each first order thoracic or brachiocephalic branch, within a vascular family.</td>
</tr>
<tr>
<td>75710</td>
<td>Angiography, extremity, unilateral, radiological supervision and interpretation.</td>
</tr>
<tr>
<td>75825</td>
<td>Venography, caval, inferior, with serialography, radiological supervision, and interpretation.</td>
</tr>
<tr>
<td>75827</td>
<td>Venography, caval, superior, with serialography, radiological supervision, and interpretation.</td>
</tr>
<tr>
<td>+76937</td>
<td>Ultrasound guidance for vascular access requiring ultrasound evaluation of potential access sites, documentation of selected vessel patency, concurrent real-time ultrasound visualization of vascular needle entry, with permanent recording and reporting. (List separately in addition to code for primary procedure.)</td>
</tr>
</tbody>
</table>

Peripheral dialysis segment imaging and interventions (36901–36906)

Code 36901 (dialysis circuit imaging) describes a traditional diagnostic fistulagram with assessment of the circuit from (and including) the arterial anastomosis through the vena cava. All needle placements, as well as nonselective catheter manipulations within the circuit, are included in 36901 and are not separately reported. If the catheter is advanced to the vena cava, code 36010, Introduction of catheter, superior or inferior vena cava, is not reported. Angiography performed during arm access of the superior vena cava (75827) or leg access of the inferior vena cava (75825) is bundled into 36901. However, if ultrasound guidance is required for access into the vessel, this procedure is separately reported with 76937.
Code 36901 and the other primary dialysis circuit intervention codes (36902–36906) include all the necessary catheter placement(s) and manipulation(s) to perform a graft/fistula diagnostic radiological study; however, 36215 is not inherent to the work of these codes. When a catheter is maneuvered from a puncture of the dialysis graft/fistula into the proximal inflow vessel for formal extremity diagnostic arteriography, code 36215 (first order cauterization) and code 75710 (unilateral extremity angiogram) are reported separately.

Code 36902 (peripheral dialysis segment angioplasty) includes all the work included in code 36901. Code 36902 may only be reported once per session. If more than one lesion is treated within the peripheral segment using balloon angioplasty, code 36902 bundles all additional peripheral segment angioplasty regardless of the number of inflations or balloons used. There is no longer any difference between treatments at the arterial anastomosis versus the venous outflow in the peripheral segment.

Code 36903 (peripheral dialysis segment stent placement) includes all of the work described by codes 36901 and 36902, plus all work to deploy an intravascular stent within the peripheral segment. The angioplasty is included even if it treats a lesion within the peripheral segment, but in an area separate and distinct from the stented lesion. For example, if a brachiocephalic fistula is found to have a peri-anastomotic stenosis as well as a stenosis in the mid-cephalic vein, treatment with balloon angioplasty at the peri-anastomotic region followed by a cephalic vein stent would all be reported with 36903. Code 36903 may only be reported once per session, regardless of the number of stents deployed within the peripheral segment. Code 36903 applies to any type of stent deployed, including bare metal, covered, or drug-eluting stents.

Previously, percutaneous thrombectomy of an occluded dialysis access was described by 36870 (deleted for 2017). Any subsequent interventions to ensure patency (such as angioplasty or stenting) were separately reportable. This convention was changed in 2017, and three new codes describing thrombectomy were established (36904–36906). It is important to note that for the purpose of thrombectomy, no distinction is made between the “peripheral” and the “central” dialysis segments; if a clot extends into the central veins, its removal is included in 36904–36906. If angioplasty or a stent is required in the central veins after successful thrombectomy, the central segment angioplasty or stent is separately reportable.

ACS CODING HOTLINE AND CODING WORKSHOPS

If you or your coding staff have questions, contact the ACS Coding Hotline at 800-ACS-7911 (800-227-7911) 8:00 am–5:00 pm (Central), Monday–Friday, holidays excluded. ACS Fellows are given five free consultation units each calendar year.

In addition, ACS Surgical Coding Workshop opportunities are available for surgeons and/or their coding staff. For more information or to sign up for one of the 2017 ACS Surgical Coding Workshops, go to facs.org/advocacy/practmanagement/workshops.
with codes 36907 or 36908, as detailed later in this article.

Code 36904 incorporates all components of a mechanical or pharmacological declot procedure (for example, mechanical thrombectomy, thrombolytic infusion, or thrombolytic bolus). Thrombectomy of an occluded dialysis access which involves balloon angioplasty in the peripheral segment would be reported with 36905. Similar to code 36902, code 36905 reflects all angioplasty within the peripheral segment regardless of the number of inflations or number of balloons used. Inflating a balloon to push a clot centrally is not considered angioplasty. Code 36905 implies that a stenosis is identified before or after thrombectomy, requiring a therapeutic dilatation to help maintain longer term patency. Stent placement in the peripheral segment would be reported with 36906, which is a comprehensive code involving all stents placed and all balloon angioplasty performed within the peripheral segment during the thrombectomy.

Central dialysis segment interventions (36907 and 36908)

Two add-on codes (36907 and 36908) were created to describe angioplasty or stenting, respectively, performed in the central veins. Catheter placement is bundled into these codes and is not separately reportable. All radiological supervision and interpretation needed to perform an intervention is included in 36907 and 36908 and is not separately reported. Similar to codes 36901–36906, codes 36907 and 36908 may only be reported once per session, regardless of the number of lesions treated. Code 36908 includes all of the work of code 36907; therefore, these two codes may not be reported together. These add-on codes must be reported with a primary procedure—typically one of the percutaneous dialysis circuit codes 36901–36906. However, these add-on codes also may be reported for percutaneous angioplasty or stent placement performed with an open creation (36818–36830) or revision (36831–36833) of an AV fistula or graft. For example, if during an AV graft revision without thrombectomy, a catheter is advanced into the subclavian and a stent is placed for stenosis, code 36832 should be reported for the revision, and add-on code 36908 should be reported for the stent placement.

Embolization of branch vessels (36909)

Add-on code 36909 describes any and all embolization procedures performed on branch or accessory vessel(s) off the hemodialysis circuit. Code 36909 may be reported with any of the base peripheral dialysis segment codes (36901–36906). Code 36909 also may be reported if the embolization is completed from an access other than the dialysis circuit. For example, if a brachiocephalic fistula side-branch is cannulated through an ipsilateral radial artery, code 36909 would be reported for the embolization. Selective venous catheterization(s) of branch vessel(s) (for example, 36011) is included in 36909 and not separately reportable.

Note

Accurate coding is the responsibility of the provider. This summary is intended only to serve as a resource to assist in the billing process.
I am not a rural surgeon per se. I admit it up front. I have resources and great partners. Nonetheless, I deal with delivering complex care in Montana—one of the nation’s most rural states—on a daily basis. I train residents who want to be rural surgeons in a focused year of surgery skills that will prepare them for success in rural surgical practice. I also frequently drive 200–300 miles back and forth to critical access hospitals (CAHs) in our state to help with operations and to see patients.

At Kalispell Surgical Specialists (KSS)—founded in 2013 as a service of Kalispell Regional Healthcare—my partners and I regularly think about the workforce shortage in rural surgery and its effect on our patients. KSS is a cohesive bunch of subspecialty-trained surgeons with a common goal of providing tertiary surgical care to Montanans. I was recruited to Montana in 2009 to create a surgical oncology service line in the Flathead Valley, which quickly grew to a statewide referral program, the first of its kind in this state. This program has evolved into the Montana Rural Surgery Support System (RS3) to better help rural surgeons provide complex surgical care with limited resources. I was asked to explain our program in this column and to provide a road map for other rural surgeons who want to help improve local access to surgical care.

Montana’s surgical landscape
Montana is a large state geographically, encompassing more than 147,000 square miles.* We have approximately 50 geographically dispersed CAHs, staffed by solo rural surgeons or small groups.* The closest quaternary care is out of the state—and in some cases too far for helicopter support, making fixed-wing transfer of complex surgical patients necessary.

The enormous distances and geographic barriers to delivering care in Montana are daunting. Imagine driving from the Upper East Side of New York, NY, in a snowstorm, to have a re-do Nissen in Richmond, VA. Stupid, right? But travel of this distance for care is a daily occurrence in Montana.

Our regional referral system comprises three hospitals with a staff of more than 300 physicians in Flathead Valley, a picturesque area of Northwest Montana. All surgical services, except for transplantation, are present on the KSS campus. We enjoy a visionary, supportive hospital administration that endorses our notion that no matter where episodic care is delivered in the state, as long as the patient has access to quality care and stays in Montana, the program, as a whole, has value. Enormous geographic barriers to competition (such as distance, topography, and weather) have resulted in isolation of our hospitals in the state, and it has also delayed the growth of subspecialty surgical care due to the small population base of each system.

At present, slightly more than 1 million people reside in Montana, and it makes little sense for every population base of less than 100,000 people to have a pediatric surgeon, cardiothoracic surgeon, or surgical oncologist. However, it does make sense for all those systems to share that subspecialty resource and deliver care that is appropriate for the venue when possible and to manage more complex or resource-intense episodes of care in a regional referral center equipped to manage them. This premise is the basis for our program to provide direct support for surgical needs in rural Montana hospitals.

Over the last several years, by necessity, we developed RS³, a clinically integrated network that was conceived, developed, and implemented by surgeons. The beauty of the program is its simplicity. All rural surgeons in Montana are well trained, but limited access to resources and quality support personnel, as well as hospital size, may constrain their scope of practice. To overcome these barriers to surgical care in a rural setting and to keep patients in Montana, we now directly support rural or solo surgeons in their locales, so they can handle cases as they see fit in their community hospital or CAH. These collaborative relationships improve the scope of services and the quality of care provided by our fragile rural surgical practices.

For instance, if a case that needs to be done locally is slightly more complex than usual, but the rural surgeon has the skill set to manage the patient’s care, we will travel to that hospital and lend an experienced hand, so the patient can stay local. A common situation is an obese patient with sigmoid diverticulitis, maybe with a colovesical fistula, who is predicted to have a technically difficult laparoscopic colectomy. The patient wants to remain near family and community for the elective operation. When we travel to the patient and directly support the surgeon’s practice, the surgeon, the hospital, the patient, and the community all benefit. For the solo surgeon, having an experienced second surgeon available to assist is deeply satisfying, allowing them to acquire up-to-date laparoscopic skills, and helps the CAH maintain its viability by keeping the patient in town. We provide these services throughout Montana on a weekly basis. You really only need a receptive administration that sees how these efforts keep the facility in the black and some courtesy privileges to make this program work. We are happy to bring our fly rods, of course, and enjoy a good meal.

In more complex situations, when a surgical problem arises that the rural surgeon is well trained to manage, but the CAH may not be the best site for that episode of care, we extend courtesy privileges to the surgeon to bring the patient to KSS, perform the procedure in our hospital with our assistance, and then co-manage the postoperative care. When appropriate, patients return to their hometown for postoperative care. For example, a fairly straightforward distal pancreatectomy or low-anterior resection of the rectum might be managed this way. On average, we host a rural surgeon in this manner about once every month. The biggest barrier to this management strategy ends up being coverage at the CAH while the rural surgeon is away. We are exploring a model of reciprocal call coverage by our group to stimulate more use of this service.

Even more complex cases, such as tertiary thoracic, hepatopancreatobiliary, and pediatric cases, and cases with complications, are directly transferred for management in KSS. It is comforting to us to know that on the other end of that
case, maybe hundreds of miles away, is a competent and collegial surgeon who is going to partner with us for postoperative care and management of complications. We bring patients in from around Montana several times a week, and herein lies the benefit that our administration now realizes. Until the development of the RS3 collaborative model, these patients would have left Montana, leaving behind distressed families and strained CAH bottom lines. We view our program, RS3, as an extreme value—a win-win-win for the solo surgeon, the patient, the CAH, and our program. The solo surgeon has established lines of support, the patient can stay close to home, the CAH is buoyed by the patient retention and is a referral line, and we get to practice tertiary, complex surgery on our terms in a collegial environment.

**Easy to reproduce model**

Our administration concurs that by directly supporting rural surgery practices, we contribute to the viability not only of the surgeon in that community, but the hospital that serves the community, and to the quality of surgical care in Montana. The model is easily reproduced and can be applied to almost any surgical subspecialty. This program is not outreach, where you travel to a clinic sparsely attended in some remote location and bring the patients to your hospital for care. That model is of minimal value to the CAH, and only serves to drain patients from their system. The RS3 fosters a partnership amongst practices and administrations. Old models of competition are obsolete in Montana and collegial professional relationships that benefit our population are replacing them (see Figure 1, page 62). Our view is that this model of care will make rural surgery practice in Montana appealing and sustainable for years to come, and we have noted successful recruitment of young surgeons in the state, at least in part due to the established support networks.

How do you make it work? First, you must have some good partners who see the greater good in such a program. By no accident, my partners all have the same vision. You must have a “just say yes” policy, which essentially means that any case the solo surgeon needs help with, for any reason, is dealt with promptly regardless of whether the patient is insured, uninsured, addicted, experiencing postop complications, and so on. The bottom line is that if a surgeon is calling (or texting, nowadays), he or she needs help. Your institutional administrators might need some education and likely some eye opening before implementing a similar program. But aside from institutional buy-in and support, the solo rural surgeons must want your support and ask for help when needed. If you boil it all down to what is best for the patient, irrespective of money, the answer is clear.

I welcome your comments, criticisms, or questions and can be reached on the Rural Surgery ACS Community listserv or directly via e-mail at david.sheldon@mac.com.

—Jennifer Stevane, MD, FACS, general surgeon, Community Hospital of Anaconda, MT

“Many rural critical access hospitals provide high-quality care, but we have limitations on our abilities due to resources, size, or geographic location. Through our collaborations with the group at Kalispell Surgical Specialists, I have been able to keep up to date and expand my practice, keeping more patients close to home during their treatment in an often-stressful time.”

—Jennifer Stevane, MD, FACS, general surgeon, Community Hospital of Anaconda, MT
FROM RESIDENCY TO RETIREMENT

Training and networking opportunities for medical students at the ACS Clinical Congress

by Audra Reiter; Keyonna Williams, MD; Shimena Li, MD; and Michelle R. Brownstein, MD, FACS

Each year, the Medical Student Program is developed and offered by the American College of Surgeons (ACS) Division of Education at the Clinical Congress. Participation in the three-day program is free to Medical Student Members of the ACS and is an opportunity for students to learn more about surgery, to network, and to get tips on applying to surgical residency programs.

Some of the sessions offered are presentations on surgery interest groups, resident training, the history of surgery, and other relevant topics. In addition, Panel Sessions and roundtable discussions focus on work-life balance and careers in surgical subspecialties, global surgery, and research. Workshops and skills sessions cover everything from interviewing and developing a personal statement when applying to training programs, to suturing and knot-tying workshops, to networking events with residents and program directors. With all of these informational sessions and workshops, the Medical Student Program underscores the fact that surgery is a rewarding profession with many different career paths. The program also dispels certain myths about the specialty, such as the lack of time to have a family or pursue outside interests. In addition, the Medical Student Program demonstrates that mentors in the field are willing to invest in and support the new generation of surgeons.

An essay written by a medical student featured on the American College of Physicians website describes specific benefits for medical students attending professional conferences, including opportunities to practice presenting research, receive feedback on their research, and critique and learn from oral presentations, as well as how to network with people in the field of their interest.*

More specific to surgery, a survey study from the U.K. showed that high school and premedical students who attended surgical conferences are more likely to pursue a surgical career.† This study used a Likert scale to measure student interest in a surgical career, with 1 being not interested and 10 being extremely interested. Before attending the conference, high school students had an average interest of 5.9 ± 2.3; after the conference their interest increased to 8.3 ± 1.3 (p = 0.0002).† Preclinical medical students had an average interest of 6.9 ± 2.0 before the conference and 7.9 ± 1.3 after the conference (p = 0.0027).† Other than this U.K. study, a literature search yielded little evidence to support the benefits of attending conferences specifically as medical students.

The authors of this month’s column make the case for medical student attendance at the Clinical Congress and for faculty members and advisors to encourage their medical students to attend this annual meeting.

Ms. Reiter: Conversations that opened doors
I have attended a few medical conferences during my time in medical school, but Clinical Congress 2016 was by far the best experience I have had.

Having a program tailored to medical students showed me that the ACS is dedicated to recruiting these individuals into the field of surgery. In addition to gaining knowledge about the field of surgery and the training program application process, I had the opportunity to network at the Clinical Congress.

—Ms. Reiter

None of the other conferences that I attended included a program specific to medical students like this one from the ACS Division of Education. Having a program tailored to medical students showed me that the ACS is dedicated to recruiting these individuals into the profession of surgery. In addition to gaining knowledge about the field of surgery and the training program application process, I had the opportunity to network at the Clinical Congress.

Physicians, especially surgeons, are busy people, so it can be hard to approach them or find time to meet with them while at your home institution. At Clinical Congress, these health care professionals are away from the stress of work and strict operating schedules, so they are more approachable. I even got to meet Heena P. Santry, MD, FACS, ACS Governor and one of the surgeons who writes my favorite blog, Hot Heels, Cool Kicks, & a Scalpel, at the conference. I was also able to speak with surgeons from my own institution whom I’d never met, and those conversations opened a lot of doors for me when it came to research projects and mentor relationships.

The Medical Student Program at the annual Clinical Congress meeting is particularly well done. The mock interview sessions were helpful, as they provide exposure to some common questions and provide experience in maintaining composure during tough interviews. I appreciated that we were able to practice our answers and get specific feedback on how to improve. Roundtable discussions on what to include and what to exclude when writing the personal statement and other topics of special interest also were helpful. I appreciated getting tips on applying to residency programs, and I was able to speak to many professionals representing different programs across the U.S., which gave me a sense of how their institutions do things differently than my home institution.

Dr. Williams: Meeting future colleagues
During my preclinical years, I knew that I wanted to go into surgery and was fortunate to begin networking early. The first surgery conference that I attended as a second-year medical student introduced me to one of the most valuable aspects in my journey—a mentor. As a result of this early experience, I was especially

MEDICAL STUDENT PROGRAM AT CLINICAL CONGRESS 2017
The Medical Student Program at the Clinical Congress is offered annually by the ACS Division of Education. Medical Student Program dates for Clinical Congress 2017 are Sunday, October 22, through Tuesday, October 24. The three-day program will include several presentations by leaders in surgery, including messages from the ACS President and Chair of the Board of Regents. A Medical Student Poster Session will be a part of the programming, and Panel Sessions will address issues of relevance to students. Students will be able to participate in surgical skills workshops, working elbow-to-elbow with seasoned surgeons. In addition, the program will include a session on preparing for the surgery residency interview, complete with small group mock practice sessions. Students also will participate in several networking events, including meeting in small groups with surgeons representing a variety of surgical specialties and practice settings, surgical residents, and residency program directors and administrators.
The first surgery conference that I attended as a second-year medical student introduced me to one of the most valuable aspects in my journey: a mentor.

—Dr. Williams

FROM RESIDENCY TO RETIREMENT

MEDICAL STUDENT PROGRAM VOLUNTEERS

Last year, this program benefited from the efforts of more than 200 volunteers over the course of the three days, not counting the members of the Committee on Medical Student Education who meet monthly with Division of Education staff to plan and present the program.

Members of the Committee on Medical Student Education are as follows:

- Celeste M. Hollands, MD, FACS, Chair
- Susan Steinemann, MD, FACS, Vice-Chair
- Adnan A. Alseidi, MD, EdM, FACS
- Sarah J. Armenia
- Mary L. Brandt, MD, FACS
- Navin Changooor, MD
- Rebecca Evangelista, MD, FACS
- Joseph A. Iacono, MD, FACS
- Jeremy M. Lipman, MD, FACS
- Barbara J. Petitti, MD, FACS
- Paul J. Schenarts, MD, FACS
- Stephen C. Yang, MD, FACS

For details about the 2017 Medical Student Program, visit facs.org/clincon2017/events/special/medical-student. Member students who preregister for the program participate at no charge. Students who register on-site at the Clinical Congress pay a nominal fee.

Dr. Li: Reigniting the fire for surgery

Attending Clinical Congress 2016 was an incredible experience for me as a fourth-year medical student applying for general surgery training. I had previously attended the American Society of Hematology conference, but later found that surgery was my calling. My favorite part of Clinical Congress was being surrounded by people who liked the same aspects of medicine as I do and the wealth of information I could get from a five-minute conversation with other conference attendees.

The Medical Student Program offered by the Division of Education allowed me to learn more about matching into surgery and the interview process, and it gave me the opportunity to meet
My favorite part of Clinical Congress was being surrounded by people who liked the same aspects of medicine as I do and the wealth of information I could get from a five-minute conversation with other conference attendees.

—Dr. Li

other medical students. I feel that attending this conference has given me an advantage and an insider’s view into the interview process. I decided to pursue general surgery late in my third year of medical school, but I think attending this conference would be beneficial to any medical student who is interested in learning more about surgery. Having been outside of the operating room for a few months, attending this conference reignited my fire for surgery. Clinical Congress also was a wonderful networking opportunity, as it provided the opportunity for me to meet people from all over the country, including potential mentors.

Moving forward
Attending the Medical Student Program as early as the first year of medical school encourages young physicians to go into surgery and will help students understand what they need to do to be a successful applicant. At our institution, the University of North Carolina, Chapel Hill, the annual Clinical Congress meeting has not been well publicized, and it was only by chance that one of our advisors mentioned the conference to the three of us. We want this oversight to change, so we are urging faculty members and advisors to encourage their medical students to attend the Medical Student Program at Clinical Congress. We recommend informing the surgery interest group presidents about the Clinical Congress Medical Student Program, so they can spread the word or include it in a medical student e-newsletter.

Attendance at the Medical Student Program is free for ACS Medical Student Members who preregister; however, the costs to provide this programming designed specifically for students are substantial. The ACS Foundation has developed a new giving opportunity for members who would like to support this program (see sidebar, this page).

Some medical schools have research grants for students who attend conferences to present research, and some surgery interest groups have a budget that can be used toward hotel rooms and airfare for students interested in attending educational conferences. Getting the word out about this program and making it financially feasible for students to attend should be a goal for surgery departments across the U.S.

SPONSOR A STUDENT PROGRAM
At present, the ACS bears the costs of developing and offering the three-day Medical Student Program. To help offset these expenses, the ACS Foundation is launching a new giving opportunity, which will ensure that medical students can continue to participate in the Medical Student Program this year and in the years to come.

Your gift of $250 to the Sponsor a Student program will help defray some of the cost to the ACS for one student to participate in the Medical Student Program at Clinical Congress 2017. A medical student will be made aware of your gift, opening the door to a potential mentoring relationship that may last a lifetime. As always, your gift to the ACS Foundation is tax-deductible, and you may sponsor as many students as you want. For details about Sponsor a Student, go to facs.org/acsfoundation or call 312-202-5338.
Gastric cancer is a significant cause of cancer morbidity and mortality in the U.S., with an estimated 26,370 new cases and 10,730 deaths in 2016.1 The incidence of gastric cancer is rising, particularly proximal tumors, and among young (< 40 years old) Caucasians, who have experienced a nearly 70 percent increase in the incidence of gastric cancer in the last few years.2 In addition, more gastric cancers are being identified at an earlier stage, potentially allowing for less invasive approaches to treatment.

Clear advantages of minimally invasive surgery have been demonstrated for some operations, such as cholecystectomy and colectomy. These benefits include decreased postoperative pain, morbidity, recovery time, length of stay, and overall hospital cost. However, for other operations, such as appendectomy, and ventral and inguinal hernia repair, the benefits are less apparent. Do the benefits of a minimally invasive approach translate to gastrectomy for gastric cancer? Minimally invasive gastrectomy has become the standard of care in Asia, where a higher incidence of gastric cancer and screening programs contribute to a high detection of early-stage gastric cancer.3 Data are less robust in Western populations, where patients typically present with more advanced disease and studies are fewer.3

Distal gastrectomy and early gastric cancer
With respect to distal gastrectomy, multiple trials, including several randomized controlled trials, suggest that laparoscopic-assisted distal gastrectomy (LADG) is associated with decreased intraoperative blood loss, decreased pain scores and length of stay, improved quality of life, and longer operative times.5−7 Notably, these studies predominantly involve patients with small, distal tumors identified during routine screening endoscopy.

The Korean Laparoendoscopy Gastrointestinal Surgery Study (KLASS) Group is a multicenter effort to evaluate the feasibility of LADG versus open distal gastrectomy for early gastric cancer. Initial results showed a decrease in overall complication rate in the laparoscopic group (13 percent versus 20 percent, p = 0.001).7 Major intra-abdominal complications and mortality rates were similar between the two groups.

An important oncologic quality measure is lymph node retrieval. In a recent report from a large randomized controlled trial, the number of lymph nodes retrieved in the LADG group was slightly inferior to open gastrectomy (40.5 versus 43.7, p < 0.001), but was nonetheless sufficient for pathologic staging.7

Meta-analysis of LADG for early gastric cancer has shown no difference in mortality or anastomotic, pulmonary, or wound complications. Despite a longer operative time and a slightly lower lymph node harvest, LADG has been associated with lower morbidity, decreased pain scores, and shortened length of stay, as well as significantly fewer complications and equivalent oncologic outcomes.3,8

One randomized trial in a Western population did demonstrate reduced
Intraoperative blood loss, earlier resumption of oral intake, and a shorter length of stay for patients who underwent laparoscopic rather than open radical subtotal gastrectomy, with no differences in long-term oncologic outcome. A recent retrospective study looking at outcomes of stage-matched laparoscopic and open gastrectomies also found that more patients who required adjuvant treatment for their gastric cancers were able to undergo that treatment after laparoscopic gastrectomy versus open, perhaps suggesting another benefit for minimally invasive approaches in terms of quicker and more complete recovery.

### Advanced gastric cancer and total gastrectomy

Initial results supporting the use of minimally invasive gastrectomy for early gastric cancer have led to its increasing application for treating advanced gastric cancer. Several retrospective studies have suggested that laparoscopic-assisted gastrectomy is associated with less blood loss, decreased hospital stay and pain, decreased early postoperative complications, and no difference in overall survival compared with open gastrectomy. One randomized trial has compared laparoscopic-assisted gastrectomy with open gastrectomy. Although operative duration was longer in the laparoscopic group, pulmonary infection was more frequent in the open group. No difference in morbidity or mortality was noted.

Meta-analyses of laparoscopic-assisted gastrectomy for advanced gastric cancer have demonstrated longer procedure times, decreased intraoperative blood loss, decreased length of stay, similar number of lymph nodes harvested, and decreased complications, as well as no difference in overall or disease-free survival between laparoscopic-assisted gastrectomy and open gastrectomy.

### Selection for minimally invasive gastrectomy

Patient selection is critical for achieving acceptable outcomes with minimally invasive gastrectomy. Important considerations include size

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### REFERENCES


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**TABLE 1. ONGOING CLINICAL TRIALS IN MINIMALLY INVASIVE GASTRECTOMY**

<table>
<thead>
<tr>
<th>Trial name, national clinical trial (NCT) ID</th>
<th>Patient population</th>
<th>Intervention</th>
<th>Primary outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>KLASS-03 trial, NCT01584336</td>
<td>Clinical stage I gastric cancer</td>
<td>Laparoscopic-assisted total gastrectomy</td>
<td>Morbidity and mortality</td>
</tr>
<tr>
<td>KLASS-02 trial, NCT01456598</td>
<td>Locally advanced gastric cancer</td>
<td>Laparoscopic versus open gastrectomy</td>
<td>Three-year relapse-free survival</td>
</tr>
<tr>
<td>JLSSG0901 (phase III)</td>
<td>T1-3, N0-2, M0 gastric cancer</td>
<td>Laparoscopic-assisted versus open distal gastrectomy</td>
<td>Relapse-free survival</td>
</tr>
<tr>
<td>CLASS-01 trial, NCT01609309</td>
<td>T2-4a, N0-3, M0 gastric cancer</td>
<td>Laparoscopic versus open gastrectomy</td>
<td>Three-year disease-free survival rate</td>
</tr>
<tr>
<td>Surgical Technique, Open versus Minimally-invasive gastrectomy After Chemotherapy (STOMACH), NCT02130726</td>
<td>T1-3, N0-1 gastric cancer after chemotherapy</td>
<td>Minimally invasive versus open gastrectomy</td>
<td>Extent of lymph node dissection</td>
</tr>
</tbody>
</table>
Patient selection is critical for achieving acceptable outcomes with minimally invasive gastrectomy. Important considerations include size and location of the tumor, prior abdominal surgery, patient body habitus, and surgeon experience.

and location of the tumor, prior abdominal surgery, patient body habitus, and surgeon experience. Laparoscopic gastrectomy is a technically challenging operation; for distal gastrectomies, it has been suggested that surgeons may need to complete up to 90 cases to achieve proficiency. For total gastrectomies, as many as 100 cases may be needed.

Multiple ongoing randomized trials to evaluate the efficacy of laparoscopic gastrectomy, both for early cancers and for advanced disease, are in process (see Table 1, page 69).

Conclusion
A high-quality patient outcome should always take precedence over surgical approach (open versus laparoscopic). However, as surgical experience with minimally invasive techniques grows and as technology advances, it is becoming clear that minimally invasive appropriate resections can play an important role in the care of well-selected gastric cancer patients. The indications for this approach continue to advance and may provide benefits for our patients, not only in faster recovery times and other minimally invasive benefits, but perhaps even in terms of fewer complications and quicker initiation of recommended adjuvant treatments.

REFERENCES, CONTINUED


Politics and the president’s gallbladder

by Theodore N. Pappas, MD, FACS

Editor’s note: This article is an edited version of a previously published work from the author.* Many of the details of this article were obtained via personal correspondence with Donald C. McIlrath, MD, FACS, in November 2008.

U.S. President Lyndon Baines Johnson was 57 years old when he developed right upper quadrant abdominal pain on September 7, 1965. The White House physician, George G. Burkley, MD, suspected gallbladder disease and confirmed his suspicion with an oral cholecystogram. X rays also showed a kidney stone in the right mid ureter. George Hallenbeck, MD, FACS, a noted gastrointestinal surgeon at the Mayo Clinic, Rochester, MN, was consulted and recommended surgery. Dr. Hallenbeck chose Donald C. McIlrath, MD, FACS, another Mayo surgeon, as his assistant.

The surgeons arrived in Washington, DC, two days before the operation and met with the president in the White House. The operative plan was to take

The president was only mildly interested in the details of the procedure but was very interested in its potential political implications. First, the president wanted to know how long he would be under anesthesia—unaware of his surroundings.

Friday also was selected because the president did not want his operation to have a negative effect on the stock market.

Dr. Hollenbeck and his team performed the operation Friday, November 8, at the Naval Hospital in Bethesda, MD. The gallbladder was inflamed, but the cystic artery and cystic duct were successfully exposed, ligated with catgut sutures, and divided. The gallbladder was resected from the bottom up with sharp dissection. Once the gallbladder was removed, Dr. Culp mobilized the right ureter, palpated the ureteral stone, and removed it through a transverse ureterotomy. Total operative time was approximately two hours.

Some scars take longer to heal
The president’s recovery was uneventful, and he was able to resume his duties the next day. He met the press on Monday without an intravenous line in his arm and reassured the nation that he was recovering well. The stock market responded favorably.

He advanced to an oral diet by day four, and on postoperative day 12, he was photographed showing his scar to reporters (see photo, page 71). He was discharged on postoperative day 17 without incident.

Although President Johnson was incapacitated during the operation, there was no transfer of power to Vice-President Hubert Humphrey because the U.S. Constitution did not provide for this circumstance. In fact, the 25th Amendment, which created clear transfer of power in the case of presidential incapacity, was not ratified until 1967. Nonetheless, President Johnson made an informal arrangement with Mr. Humphrey that the Vice-President would be empowered if a vital decision was required in the perioperative period.

President Johnson had an eventful presidency that included the passage of the Social Security Amendments of 1965, which included Medicare and Medicaid, and the disastrous fallout from the Vietnam War. Although the president’s surgical scars healed quickly, the scars of the war were much slower to heal and were largely responsible for his decision not to seek re-election in 1968.†

National Doctors’ Day initiative highlights gratitude for mentors

The American College of Surgeons (ACS) Foundation has created a special giving opportunity for ACS Fellows who want to acknowledge their mentors on National Doctors’ Day (March 30). The donations received this year will be used to support ACS scholarships and other philanthropic programs. Donors and their honorees received special recognition in the June issue of the Bulletin.*

“I was privileged to work with him and was influenced by his professionalism, knowledge, and compassion. I became his first fellow two years later. He changed my career trajectory, and I am grateful for his willingness to share his knowledge and to send me [into surgical practice] with confidence and caring for the patients that we have the honor in treating.”

Marc A. Hoeksema, MD, FACS, general and critical care surgeon, Mercy Health Saint Mary’s, Grand Rapids, MI, who gave in honor of James E. Sampliner, MD, FACS, general surgeon, Louis Stokes Cleveland Veterans Affairs Medical Center, OH, also acknowledged his gratitude for his mentor. “Dr. Sampliner’s love of surgery and his love for his residents shone brightly in each interaction I had with him. He demanded excellence and always gave us glimpses of our better selves—the surgeons we could become through hard work, persistence, and compassion,” Dr. Hoeksema noted.

As an ACS Foundation Board Member for nine years, it is heartening to see so many surgeons take part in the National Doctors’ Day giving initiative, as this program not only raises important contributions for philanthropic offerings, but also recognizes the inspiring work of mentors. The response from Fellows underscored the value they place on their mentors’ role in teaching, encouraging, and supporting them in their surgical training, particularly at the start of their career.

Priceless inspiration
K. Kristene Koontz Gugliuzza, MD, FACS, professor of surgery, the University of Texas Medical Branch, Galveston, gave in honor of Edward E. Etheredge, MD, FACS, retired professor of surgery, Tulane University School of Medicine, New Orleans, LA. “In 1983, Dr. Etheredge came to Tulane Medical School to revamp the kidney transplant program,” Dr. Gugliuzza wrote.

Lifelong appreciation
I also feel grateful for one of my early mentors, Edgar Fincher, MD, FACS, former chair, neurosurgery section, Emory University, Atlanta, GA. As a senior medical student in 1960, I was assigned a surgical rotation, spending a month with a senior surgeon at the Emory University Hospital. My placement was with Dr. Fincher, and his reputation preceded our meeting. He was renowned for being a pioneer in neurosurgery, but I had also heard rumors that he could be overly demanding of his residents. This assessment could have not been more wrong. As I arrived the first day and shook

Many of the ACS programs and scholarships, funded through ACS Foundation contributions, lead to strong mentor/mentee relationships.... Each donation to National Doctors’ Day represents the appreciation that the protégé has for the mentor.

Dr. Fincher’s hand, my fears were relieved immediately. I found a warm, caring man who became my friend, teacher, and mentor.

From the beginning, Dr. Fincher treated me as an equal professional. We enjoyed working with each other, and he left no question unanswered or treated as trivial. During my rotation with him, I viewed all of his daily activities at the hospital. This included time in the operating room, office visits, hospital rounds, and even coffee in the lounge. When Dr. Fincher learned of my interest in surgery, he suggested that I consider applying to Barnes Hospital, now Barnes-Jewish Hospital, Washington University School of Medicine, St. Louis, MO. He thought it would be an ideal residency program for me under the tutelage of another important mentor for me, Carl A. Moyer, MD, FACS, former professor and head of surgery (1951–1965). Dr. Fincher provided an excellent referral for me, and the rest is history. I soon moved there and spent my entire medical career in St. Louis.

After leaving Emory, I continued to correspond with Dr. Fincher until his death in 1969. He was always interested in my professional progress and my family life. There have been many times in my career when I have gratefully reflected on my relationship with Dr. Fincher. He exemplified my concept of a mentor through his concern, wise counsel, and guidance.

Continuing legacy
It is encouraging that the tradition of mentorship in surgical residency programs continues on today. In the inaugural Herand Abcarian Lecture delivered at the ACS Clinical Congress 2007, former ACS Executive Director Thomas R. Russell, MD, FACS, emphasized the importance of mentorship, stating, “Mentors are...interested in their trainees not only professionally, but as human beings as well. They promote their trainees’ efforts to balance professional and personal needs and obligations. They are, on multiple levels, a resident’s or a student’s support system and biggest fan.”

Many of the ACS programs and scholarships, funded through ACS Foundation contributions, lead to strong mentor/mentee relationships. For example, the ACS Committee on Trauma offers a Future Trauma Leaders mentorship program, which focuses on trauma and acute care surgeons who are in their first five years of practice. Each donation to National Doctors’ Day represents the appreciation that the protégé has for the mentor. I am proud to be a part of the ACS Foundation’s efforts to recognize and thank these individuals who have helped others reach their full potential.

For more information about National Doctors’ Day and the ACS Foundation, visit facs.org/acsfoundation.

Joint Commission releases data on challenging requirements for OBS practices

by Carlos A. Pellegrini, MD, FACS, FRCSI(Hon), FRCS(Hon), FRCSEd(Hon)

If your office-based surgery (OBS) practice is having trouble complying with standards related to clinical privileges and infection control, you’re not alone. The Joint Commission regularly collects data on compliance with standards and other requirements among its accredited health care institutions and has found that these challenges are quite common.

Earlier this year, The Joint Commission released a list of the top five areas of noncompliance for institutions that were scheduled to be surveyed and reviewed during calendar year 2016.¹ The data represent citations only from organizations due to be surveyed during this time period.

Five most challenging standards for OBS practices

Data specific to OBS practices were included on the comprehensive list. According to the study results, the top five requirements that were most challenging for OBS practices in 2016 were as follows:

• Human resources (HR.02.01.03): The practice grants initial, renewed, or revised clinical privileges to individuals who are permitted by law and the organization to practice independently—with a 60 percent noncompliance rate (which indicates the number of organizations that received requirements for improvement [also known as RFIs] for this standard)

• Infection control (IC.02.02.01): The practice reduces the risk of infections associated with medical equipment, devices, and supplies—57 percent noncompliance

• Environment of care (EC.02.04.03): The practice inspects, tests, and maintains medical equipment—41 percent noncompliance

• National Patient Safety Goals (NPSG.07.01.01): Comply with either the current Centers for Disease Control and Prevention (CDC) hand hygiene guidelines or the current World Health Organization (WHO) hand hygiene guidelines—24 percent noncompliance

Suggested solutions

In a recent post to the Ambulatory Buzz blog, Joint Commission staff offered solutions for complying with some of the standards.² Joyce Webb, a project manager in The Joint Commission’s department of standards and survey methods, provided guidance for HR.02.01.03—A standard dedicated to verifying that licensed independent practitioners are capable of providing quality, safe patient care. Ms. Webb wrote that compliance with this requirement is one of the most important responsibilities of a health care facility. To become compliant with the requirement, Ms. Webb recommended that OBS practices take the following steps:
Organizations that have used the TST have increased their overall hand hygiene compliance and decreased their health care-associated infections.

- Designate a detail-oriented point person to handle credentialing and privileging tasks
- Establish a routine and standardized process for primary source verification and granting of privileges
- Use a standardized personnel and credentialing file format
- Monitor time frames for review and renewal of privileges using a calendar or computerized prompts/reminders
- Obtain a written health attestation from all providers going through the credentialing and privileging processes

Regarding IC.02.02.01, The Joint Commission infection prevention specialist Lisa Waldowski asserts that the standard directly affects patient care. She offered several ideas to help OBS practices comply with the requirement, including the following:

- Train staff who perform high-level disinfection and sterilization to the appropriate competency
- Assess competence of those with supervisory oversight to sign off and monitor staff conducting high-level disinfection/sterilization
- Confirm the location of documented competencies
- Ensure staff has access to the manufacturer instructions for use of instruments, equipment, and supplies used for high-level disinfection/sterilization
- Review evidence-based guidelines specific to high-level disinfection/sterilization with frontline staff and ensure future access to updated guidelines
- Perform staff teach-backs of evidence-based guidelines for high-level disinfection and/or sterilization

In May, The Joint Commission released a new resource on this topic published in Quick Safety, Issue 33, “Improperly sterilized or HLD [High-Level-Disinfectant] equipment—a growing problem.”

With regard to EC.02.04.03 — The practice inspects, tests, and maintains medical equipment — Ms. Waldowski recommends that OBS practices adhere to the manufacturer’s instructions for use. This may include working
with facilities/engineering/plant operations and/or contracted staff to ensure compliance.

For IC.01.03.01—The practice identifies risks for acquiring and transmitting infections, according to Ms. Waldowski, the organization’s risk assessment should serve as the basis for developing written goals and measurable outcomes for infection control activities. Other recommendations were that the assessment meets the following criteria:

• Represents the entire organization
• Documents prioritized risks
• Includes input from multiple disciplines, as appropriate
• Has a continuous process for planning and maintaining infection prevention and control activities

In reference to NPSG.07.01.01 — Comply with either the current Centers for Disease Control and Prevention (CDC) hand hygiene guidelines or the current World Health Organization (WHO) hand hygiene guidelines—the Joint Commission Center for Transforming Healthcare developed a Hand Hygiene Targeted Solutions Tool (TST)® that can help health care institutions become compliant with that requirement. Organizations that have used the TST have increased their overall hand hygiene compliance and decreased their health care-associated infections. For more information on the TST, visit www.centerfortransforminghealthcare.org/tst_hhy.aspx.

For the full list of top five challenging requirements for all programs, review the March 29 issue of Joint Commission Online or the April issue of Perspectives.1,4 For more guidance with standards compliance, see The Joint Commission’s Standards Frequently Asked Questions or online question form.

Disclaimer
The thoughts and opinions expressed in this column are solely those of Dr. Pellegrini and do not necessarily reflect those of The Joint Commission or the American College of Surgeons.

REFERENCES
American author Mark Twain credited former British prime minister Benjamin Disraeli with coining the phrase, “lies, damned lies, and statistics.”

For this inaugural National Cancer Database (NCDB) cancer bytes column, I would like to describe the NCDB, its relationship to the American College of Surgeons (ACS) Commission on Cancer (CoC) programs, and summarize how the database is used. For many of us in surgical oncology, the NCDB helps us get past the “lies and damned lies” about cancer care with verifiable statistics from hospital registry data that are collected from CoC-accredited facilities.

What are the CoC and NCDB?
The CoC is an ACS quality improvement program. According to the American Hospital Association, there are 5,564 acute health care facilities in the U.S. More than 1,500 programs (28 percent) are accredited by the CoC and an estimated 70 percent of all cancer patients receive care from CoC-accredited programs. These programs submit deidentified case-level data for every cancer patient they diagnose or treat to the NCDB. Data abstraction (submission) is performed by the cancer program registry within six months of the patient’s first encounter with the reporting facility.

The NCDB was established in 1989 and is jointly funded by the College and the American Cancer Society. It contains records on more than 34 million patients and captures 250 data points for each patient. Data points include site of care (75 in all), demographic data, American Joint Committee on Cancer (AJCC) stage, histologic type, time to first treatment, distance traveled for treatment, type of first treatment, long-term all-cause mortality, and other data point information. The data are password protected and are accessible only to CoC-accredited programs. Just imagine the power of this database: it is accessible via the web, can crunch 8.5 billion cancer bytes (34 million patients multiplied by 250 data points apiece), and produces a result within a few seconds.

Other cancer registries
In collaboration with the National Cancer Institute (NCI), the Centers for Disease Control and Prevention (CDC) receives cancer-related data from all health care facilities in the U.S. This information is initially sent to each state’s Department of Public Health and then forwarded to the CDC in Atlanta, GA. The CDC reports demographic data, screening and risk factors, cancer incidence, prevalence, and mortality, and tracks related trends. These results can be searched at the county, state, and national level. This information is accessible to the public at www.statecancerprofiles.cancer.gov.

Overall, the CDC database provides a quick glimpse into what is happening in cancer care, including tracking trends related to prevalence and mortality, whereas the NCDB allows a deeper dive, since it collects case-level treatment and staging data. Using both of these databases in conjunction with one another paints a bigger picture about cancer throughout the U.S. by state, county, and all CoC programs.

Complementing NCDB data with CDC data
Since 1997, the American Cancer Society’s National Colorectal Cancer Roundtable has been educating the American public on how colon cancer mortality rates may decrease by following screening recommendations. In 2014, the roundtable announced the “80% by 2018” initiative to have 80 percent of Americans older than 49 or younger persons in high-risk groups screened for colon cancer by 2018. By achieving this screening goal, the American Cancer Society estimates that 21,000 lives will be saved and...
43,000 colorectal cancer cases prevented annually by 2030.\(^4\)

Using CDC and NCDB data to get a better picture of geographic and temporal trends could help inform roundtable efforts and other policies. Figure 1, this page, depicts the results from an opinion poll conducted through the CDC in 2005 concerning the public’s knowledge about getting colon cancer. People in north central and western states are apparently less aware of the steps they can take to lower the risk of getting colon cancer.

Taking a deeper dive into colon cancer using the NCDB, we can look at AJCC combined pathologic and clinical staging groups during a 10-year period. In Figure 2, page 80, we have split these data between 2004–2009 and 2010–2014 because the AJCC definitions for colon staging changed between the release of 6th and 7th editions of the *AJCC Staging Manual*, which could affect trends over time. At first glance, it would appear that more changes in stage distribution occurred during the 6th edition, but that finding is likely due to data quality; that is, changes in the number of “unknown” stage cases fluctuated over time. Overall, the graph shows a progressive decrease in colon cancer incidence and no substantial change in the stage of colon cancer at diagnosis 2004–2014.

Figure 3, page 80, shows age at time of diagnosis by year. There is a decrease in older age (70+) at diagnosis and, more importantly, an unexpected increase in the number of younger people developing colon cancer. This surprising shift was also identified this year using Surveillance Epidemiology and

*continued on page 81*
FIGURE 2. NCDB COLON CANCER DIAGNOSES
BY COMBINED AJCC PATHOLOGIC AND CLINICAL STAGE, 2004–2014

FIGURE 3. NCDB COLON CANCER DIAGNOSES BY AGE GROUP, 2004–2014
When NCDB data are viewed alongside CDC results, it is possible to get a comprehensive picture of trends in cancer. This perspective of utilizing the NCDB to investigate trends among CoC-accredited facilities will be the purpose of this quarterly column in the future.

For more information about the NCDB, go to facs.org/ncdb. For more information about CDC State Cancer Profiles, go to statecancerprofiles.cancer.gov/index.html.

Acknowledgement
The author thanks NCDB specialists Ryan McCabe, PhD; Ashley Loomis, MPH; and Nina Miller, MSSW, OSW-C, ACS Cancer Programs staff, Division of Research and Optimal Patient Care, for their assistance with this column.

REFERENCES
Amusement park injuries are not amusing

by Richard J. Fantus, MD, FACS

According to the International Association of Amusement Parks and Attractions (IAAPA), billions of people worldwide have visited amusement parks in calendar years 2003–2015, consuming junk food and taking part in exciting thrill rides. In the U.S. alone, 335 million guests went to 400 amusement parks and safely enjoyed 1.6 billion rides in 2015. According to a 2013 study from the Center for Injury Research and Policy (which is affiliated with The Research Institute at Nationwide Children’s Hospital) in the 20-year span between 1990 and 2010, more than 90,000 children younger than 18 years old sought medical attention for amusement park-related injuries (including fixed-site, mobile-site, and arcades), which averages out to more than 4,400 injuries in this population per year. Nonetheless, the chance of being seriously injured (requiring immediate hospitalization and admission for more than 24 hours) from a fixed-site ride (a ride that is part of a permanent amusement park) is estimated at one in 16 million.

The chance of being seriously injured (requiring immediate hospitalization and admission for more than 24 hours) from a fixed-site ride (a ride that is part of a permanent amusement park) is estimated at one in 16 million.

Ride at your own risk
A comprehensive study of roller coaster-related fatalities in the U.S. revealed that in the 10-year period from 1994 to 2004, a total of 40 people ages seven to 77 years old died from injuries sustained on these rides, averaging out to about four fatalities per year. Of these fatalities, 18 resulted from exacerbation of preexisting medical conditions, with the remaining 22 attributable to external trauma. To put these data into perspective, the chance of being hit by lightning is 16 times greater than being seriously injured on a roller coaster.

To examine the occurrence of amusement park-related injuries contained in the National Trauma Data Bank® (NTDB®) research dataset admission year 2016, medical records were searched using the International Classification of Diseases, Tenth Revision, Clinical Modification codes. Specifically searched were records that contained a place of occurrence code of Y92.831 (amusement park). A total of 238 records were found, 204 contained a discharge status, including 186 patients discharged to home, 10 to acute care/rehab, and seven to skilled nursing facilities; one patient died. Of the patients, 57 percent were male, on average 29.4 years old, had an average hospital length of stay of 3.2 days, an intensive
care unit length of stay of 3.9 days, an average injury severity score of 7.9, and were on the ventilator for an average of 3.8 days (see Figure 1, this page).

Remind your patients that amusement park safety is a partnership between the park and the patron. The IAAPA has created a list of amusement ride safety tips, including the following: Adhere to posted age, height, weight, and health restrictions; observe all posted safety rules and follow verbal instructions from ride operators; keep hands, arms, legs, and feet inside the ride at all time; be sure to secure loose articles such as wallets, phones, hats, and glasses; do not board a ride impaired; and remain seated until the ride comes to a complete stop. After all, there is nothing amusing about being injured at an amusement park. For more safety tips, visit: www.iaapa.org/safety-and-advocacy/safety/entertainment/entertainment-safety-tips.

Throughout the year, we highlight NTDB data through brief monthly reports in the Bulletin. The NTDB Annual Report 2016 is available on the American College of Surgeons website as a PDF file at facs.org/quality-programs/trauma/ntdb. In addition, information is available on the NTDB web page about how to obtain NTDB data for more detailed study. To submit your trauma center’s data, contact Melanie L. Neal, Manager, NTDB, at mneal@facs.org.

Acknowledgment
Statistical support for this column was provided by Ryan Murphy, Data Analyst, NTDB.

REFERENCES
Letters to the Editor

Editor’s note: The following letter was submitted regarding a recent “From the Archives” column published in the Bulletin. A response from the author of the column follows. Because the editors agree that this topic merits in-depth discussion, we are devoting the entire “Letters to the Editor” page to it.

Letters should be sent with the writer’s name, address, e-mail address, and daytime telephone number via e-mail to dschneidman@facs.org, or via mail to Diane Schneidman, Editor-in-Chief, Bulletin, American College of Surgeons, 633 N. Saint Clair St., Chicago, IL 60611.

Letters may be edited for length or clarity. Permission to publish letters is assumed unless the author indicates otherwise.

J. Marion Sims, MD: A controversial legacy

In the January 2017 Bulletin of the American College of Surgeons, the surgeon J. Marion Sims was presented as a pioneering humanitarian for developing and popularizing novel procedures to treat vesicovaginal fistulas, whereas his controversial legacy was alluded to only briefly in concluding remarks.1 While we are not medical historians, we feel that readers ought to thoroughly consider the larger context of Dr. Sims’ innovations.

The manner in which Dr. Sims’ patients were selected for enrollment in his studies on vesicovaginal fistulas would clearly violate the ethical standards put forth by the Belmont Report, if repeated today.2 Black women slaves were the epitome of a vulnerable population. The very fact that it was poor black women, and not wealthy white women, who were subjected to Sims’ initial learning curve is a reflection of systematic oppression of African Americans in U.S. history. Not only is it unlikely these women truly understood the unforeseen risks of Sims’ novel fistula repair techniques, but it is also difficult to imagine that they chose to participate of their own free will, given that they were viewed as personal property in the eyes of the law. Thus, they were likely neither informed nor able to give consent.

Moreover, the failure to use anesthesia during these procedures goes against the principle of minimizing harm to human research subjects. While some historians argue that Sims may not have been comfortable using anesthesia since it had only recently been discovered, it is also likely that black women’s pain was not fully appreciated as some thought them to possess “a grim stoicism which may have been part of their racial endowment.”3,4

Let us pause for a moment to imagine the horrendous pain these women undoubtedly felt, naked and restrained, feeling the blade of the scalpel on their genitals, repeating this nightmare over and over again without knowing if a cure would come, and without a way to object.

We agree that one must acknowledge “the circumstances of that particular period of history.” Sims lived and worked in the antebellum South and experimented on black women slaves, obtaining his surgical discoveries in a way that would be considered morally reprehensible today. To summarily dismiss these
violations is to suggest that the basic principles of research ethics that have been painstakingly developed over the last century are not fundamental and timeless, but rather wavering and easily abandoned.

We would argue that no matter how groundbreaking the discovery, the manner in which scientific discoveries are made must rigorously be held accountable to a consistent ethical standard—in the past, present, and future. The ends cannot be made to justify the means.

Finally, we do not feel that simply “celebrating” the forced contributions of vulnerable subjects alongside surgeons who volunteered their efforts toward scientific progress can negate the transgressions of the past. Rather, it is by critically examining both the successes and failures of the giants upon whose shoulders we stand that we ultimately honor our profession—by learning always from our mistakes, and committing to do no harm in our quest to find truth and better the lives of others.

Malini D. Sur, MD
New York, NY

David Muller, MD, FACP
New York, NY

Peter Angelos, MD, PhD, FACS
Chicago, IL

Selwyn O. Rogers, Jr., MD, MPH, FACS
Chicago, IL

REFERENCES


Response from the author

I appreciate the insightful and eloquent comments offered in the preceding letter and am grateful for the opportunity to respond here, especially because the 500-word limit for “From the Archives” columns may have inhibited my ability to fully articulate the context in which I believe we should view Dr. Sims’ work.

To begin, I agree that the manner in which Dr. Sims selected his patients for enrollment in his studies on vesicovaginal fistulas would be in violation of the Belmont Report’s provisions pertaining to informed consent from participants in experimental procedures. Lest we forget, however, the concept of informed consent is relatively new. Until the 20th century, the physician was considered the best judge of what procedures and treatment options would restore the patient’s health, and therefore, the physician had final say on all medical decisions. Indeed, the Belmont Report was released as recently as 1979—more than 100 years after Dr. Sims was performing his operations.

So, what were the standards of the time? Although the original American Medical
To whom it may concern,

Dear sir or madam,

Association Code of Medical Ethics, published in 1847, did call for physicians to discuss with patients the risks and benefits of procedures, it made no mention of patient consent.* So, it is likely that Sims was acting in accordance with the accepted ethics of the time.

Furthermore, after told of the possible benefits of the procedure, it is conceivable that Dr. Sims’ patients acquiesced. These patients were experiencing the considerable physical and emotional anguish associated with vesicovaginal fistula and its source—prolonged obstructed labor. In addition to the fistula, which leads to urinary and often fecal incontinence, obstructed labor almost always resulted in the baby’s death, secondary infertility, loss of vaginal function, and damage to the pubic bones. Consequently, these patients often became social outcasts.† Might not someone in this circumstance agree to undergo these procedures if she believed doing so would end her pain?

The authors note that Dr. Sims did not use anesthesia during these operations, thereby inflicting further pain on his patients. Again, Dr. Sims began these operations in 1845—more than one year before ether was introduced to the medical community and several years before it was commonly administered intraoperatively. Furthermore, he believed the risks outweighed the benefits of using anesthesia and continued to perform the operation without intraoperative anesthetics on the mostly white, middle-class patients at his Woman’s Hospital in New York, NY. In both situations, he did offer the common postoperative painkiller of the era—opium—derivatives of which are still prescribed today.‡

We may look back with disdain at some of the approaches 19th century surgeons used. Doing so is a reflection of our profession’s evolution, of our ongoing commitment to patient safety and better quality care, and to our dedication to upholding the highest ethical standards. I applaud the authors’ suggestion that we critically examine both the successes and failures of our forebears. At the time he was practicing surgery, Dr. Sims received worldwide acclaim and was considered an ethical practitioner. One can’t help but wonder how surgical ethicists will judge us 150 years from now.

LaMar S. McGinnis, Jr., MD, FACS
Atlanta, GA

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The inaugural Chapter Officer Leadership Program took place May 6 in Washington, DC, prior to the kickoff of the American College of Surgeons (ACS) 2017 Leadership & Advocacy Summit. The program was designed to provide chapter officers with the tools they need to succeed as leaders and with an opportunity to network and share best practices with colleagues in similar roles.

More than 30 ACS chapter officers, primarily chapter Presidents and Presidents-Elect, attended the all-day session at the Renaissance Downtown Hotel. “The Chapter Officer Leadership Program is an important component of the ACS strategy to support our domestic chapters,” said Patricia L. Turner, MD, FACS, Director, ACS Division of Member Services, Chicago, IL. “Chapters provide a significant benefit for our members, and this new approach to leadership education will help to ensure that our chapter officers are provided the support they need to deliver high-quality programs and services to ACS members.”

A range of leadership presentations
Program speakers represented a mix of ACS leadership, former and current chapter leaders, and ACS administrators, and addressed topics aimed at providing attendees with the skills and knowledge they need to effectively manage a chapter. Specific presentations included the following:

- Members Services Pillar Update on Efforts to Support Chapters
- Leading in Your Setting: How Effective Leaders Use Multiple Leadership Styles to Impact Change
- ACS Resources for Chapters
- Strategic Planning Strategies for ACS Chapters
- Panel Discussion: What I Wish I Knew Before Becoming a Chapter President
- Results of the 2016 Chapter Survey
- Chapter Communications & Marketing
- Volunteerism through Operation Giving Back: How Can We Help?
- Grassroots Advocacy at the State Level: Making Chapters Strong Advocates for Surgeons
- Resident and Associate Society and Young Fellows Association Engagement in Chapters
- Chapter Involvement in Stop the Bleed®
- Funding Chapter Activities through Sponsorship and Philanthropy

The day concluded with an opportunity for program attendees to discuss issues of concern with members of the Board of Governors Chapter Activities Domestic Workgroup, which serves as an advocate for ACS chapters in the U.S. and Canada. This meeting gave chapter leaders the opportunity to provide feedback on initiatives that the workgroup has been working on over the last year. One such initiative is revising the ACS Chapter Guidebook, a living document that is housed on the ACS website and that will be updated as new topics of interest arise, such as how to effectively use social media to promote chapter activities. The guidebook is available at facs.org/member-services/chapters/guidebook.

The agenda and presentations from the Chapter Officer Leadership Program are available at facs.org/member-services/chapters/acs-events/2017-leadership. For more information about chapter support services, contact Luke Moreau at lmoreau@facs.org or 312.202.5737.

by Luke Moreau
Dr. Turner concludes term as SBAS president

Patricia L. Turner, MD, FACS, Director, American College of Surgeons (ACS) Division of Member Services, recently concluded her term (2016–2017) as president of the Society of Black Academic Surgeons (SBAS). She is the first woman to have served in that role.

Dr. Turner addressed attendees during the April 27–29 SBAS annual meeting, cohosted with the University of Chicago Medicine and Department of Surgery, IL, which is chaired by Jeffrey B. Matthews, MD, FACS, Dallas B. Phemister Professor of Surgery. In her presidential address, The Enduring Influence of Surgical Societies, she described the first time she attended an SBAS meeting as a medical student and expressed her gratitude for being able to lead the meeting as its 22nd president. “I am also grateful to SBAS for the privilege of serving as its first female president,” she said. (Watch a video from the meeting on the Women of SBAS, including Dr. Turner, at www.sbas.net/media/surgeon-spotlight.aspx?id=13).

In her address, Dr. Turner highlighted historical elements of surgery and the activities of surgical societies. She challenged SBAS to continue to expand diversity in all contexts, including age, specialty, gender, and representative institutional members. She urged the organization to extend its influence by amplifying existing relationships with other organizations, such as the ACS, National Institutes of Health, and the Association of American Medical Colleges, while developing new partnerships with other societies and institutions. She also noted that mentorship and excellence in the surgical sciences continue to be the hallmarks of SBAS.

“SBAS has become a formidable scientific forum for surgeons of all backgrounds interested in quality and excellence,” Dr. Turner said. “[Our membership is] small in number, but the power invested in our members and leaders is substantial; we are influential.”

Anthony Stallion, MD, FACS, chief of pediatric surgery, Carolinas HealthCare System, Charlotte, NC, was installed as Dr. Turner’s successor. ♦
The Society of Surgical Chairs (SSC) Women’s Committee hosted a leadership symposium for 40 women surgeons April 18–19 at the Union League of Philadelphia, PA, immediately preceding the annual meeting of the American Surgical Association. The event was sponsored by the American College of Surgeons (ACS) Foundation, Johnson & Johnson Ethicon, and the SSC Women’s Committee.

Anne C. Mosenthal, MD, FACS, Benjamin F. Rush, Jr. Endowed Chair and professor and chair of surgery at Rutgers New Jersey Medical School, Newark, and chair of the SSC’s Women’s Committee led the daylong educational program, which featured the following sessions:

- A team from Johnson & Johnson Ethicon spoke on the Changing Healthcare Landscape.
- Larry R. Kaiser, MD, FACS, Lewis Katz Dean, School of Medicine, senior executive vice-president for Health Affairs, Temple University, and president and chief executive officer (CEO), Temple University Health System, Philadelphia, spoke on the Healthcare System and Academic Medicine.
- ACS President-Elect Barbara L. Bass, MD, FACS, the John F. and Carolyn Bookout Distinguished Endowed Chair and chair, department of surgery, Houston Methodist Hospital, TX; and Past-Chair of the ACS Board of Regents Julie A. Freischlag, MD, FACS, president and CEO, Wake Forest Baptist Medical Center, Winston-Salem, NC, spoke on leadership challenges.
- Sandra Humbles, vice-president of Global Educational Solutions for One Medical Devices at Johnson & Johnson, and Vice-Chair of the ACS Board of Regents Leigh A. Neumayer, MD, MS, FACS, professor and chair, department of surgery, University of Arizona College of Medicine, Tucson, led a session on Performance, Impact, and Exposure.
- Dr. Mosenthal moderated a panel discussion on advancing women to leadership roles, which included the following panelists: Daniel V. Schidlow, MD, Drexel University, Walter H. and Leonore Annenberg Dean and senior vice-president, medical affairs, at Drexel University College of Medicine; Nancy Spector, MD, executive director, executive leadership in academic medicine, and associate dean for faculty development, Drexel University College of Medicine; Mary T. Hawn, MD, FACS, professor of surgery and chair, department of surgery, Stanford University, CA; and Jeffrey B. Matthews, MD, FACS, Dallas B. Phemister Professor of Surgery and chair, department of surgery, University of Chicago, IL.

The ACS Foundation hosted a dinner for the SSC Women’s Committee members and Shane Hollett, ACS Foundation Executive Director, spoke with them about the future of women in philanthropy.

Participants at the symposium (from left): Dr. Neumayer; Dr. Hawn; Mary T. Killackey, MD, FACS, professor and Robert & Viola Lobrano Chair, department of surgery, Tulane University School of Medicine, New Orleans, LA; Dr. Spector; and Nita Ajuja, MD, FACS, professor, Johns Hopkins University School of Medicine, Baltimore, MD.
ASBrS hosts first ACS/ASBrS International Scholar

The first American College of Surgeons (ACS)/American Society of Breast Surgeons (ASBrS) International Scholar, Juan Jose Cossa Morchio, MD, FACS (second from right), met colleagues at the April 2017 ASBrS annual meeting. From left: Juan Carlos Paramo, MD, FACS; Steven Li-Wen Chen, MD, FACS, new ASBrS president; Dr. Cossa; and Jane E. Mendez, MD, FACS, Chair, ASBrS International Relations Committee.

The application deadline for the 2018 ACS/ASBrS International Scholarship is November 15, 2017.
During the American College of Surgeons (ACS) Leadership & Advocacy Summit 2017 in Washington, DC, May 6–9, the ACS Professional Association political action committee (ACSPA-SurgeonsPAC) raised more than $61,000 from more than 175 members, staff, and other attendees. In addition to raising funds to elect and reelect congressional candidates who support a pro-surgeon, pro-surgical patient agenda, the Advocacy Summit provided an opportunity to recognize 2017 SurgeonsPAC contributors. SurgeonsPAC notably recognized Gary Timmerman, MD, FACS, as its newest Willens Society member. To become a member of the Willens Society—SurgeonsPAC’s highest giving level named in memory of Past-PAC Vice-Chair Mitchell Willens, MD, FACS—as its newest Willens Society member. To become a member of the Willens Society—SurgeonsPAC’s highest giving level named in memory of Past-PAC Vice-Chair Mitchell Willens, MD, FACS—members must pledge a sum total of $25,000 over 10 years.

SurgeonsPAC events showcased ACSPA members’ broad-based commitment to the PAC, particularly at the SurgeonsPAC-sponsored reception at the Smithsonian American Art Museum and National Portrait Gallery, which more than 175 program participants attended. Guests enjoyed VIP access to special exhibitions and views of downtown Washington, DC.

Other SurgeonsPAC-sponsored events included a political luncheon featuring special guest speaker Mara Liasson, national political correspondent for National Public Radio, and presentation of the 2016 PAC awards. For the second consecutive year, South Dakota achieved the highest percent of PAC participation. California was recognized for most dollars raised, and Michael Coburn, MD, FACS, professor and chairman, Scott Department of Urology, and the Russell and Mary Hugh Scott Chair in Urology, Baylor College of Medicine, Houston, TX, received the Warshaw-PAC MVP Award (named in honor of Andrew L. Warshaw, MD, FACS, founder of the PAC) for his leadership raising funds within the ACS Committee on Trauma.

To learn more about SurgeonsPAC fundraising or disbursements, visit www.surgeonspac.org (log in: ACS username and password) or contact ACSPA-SurgeonsPAC staff at 202-672-1520 or surgeonspac@facs.org. For more information about the College’s legislative priorities, go to www.surgeonsvoice.org.

Note
Contributions to ACSPA-SurgeonsPAC are not deductible as charitable contributions for federal income tax purposes. Contributions are voluntary, and all members of ACSPA have the right to refuse to contribute without reprisal. Federal law prohibits ACSPA-SurgeonsPAC from accepting contributions from foreign nations. By law, if your contributions are made using a personal check or credit card, ACSPA-SurgeonsPAC may only use your contribution to support candidates in federal elections. All corporate contributions to ACSPA-SurgeonsPAC will be used for educational and administrative fees of ACSPA and other activities permissible under federal law. Federal law requires ACSPA-SurgeonsPAC to use its best efforts to collect and report the name, mailing address, occupation, and the name of the employer of individuals whose contributions exceed $200 in a calendar year. ACSPA-SurgeonsPAC is a program of the ACSPA, which is exempt from federal income tax under section 501c (6) of the Internal Revenue Code.
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AUGUST 10–11
Nashville, TN

NOVEMBER 2–3
Chicago, IL

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Resident Research Scholarships for 2018–2020 available

The American College of Surgeons (ACS) is offering two-year Resident Research Scholarships for 2018–2020. Eligibility for these scholarships is limited to the research projects of residents in general surgery or a surgical specialty. These scholarships are supported by the generosity of Fellows, ACS chapters, and friends of the College to encourage residents to pursue careers in academic surgery. The closing date for receipt of the completed online application and all supporting documents is 5:00 pm (CDT) September 1, 2017.

General policies covering the granting of the ACS Resident Research Scholarships are as follows:

- Applicants must be Resident Members of the College who have completed at least two postdoctoral years in an accredited surgical training program in the U.S. or Canada at the time the scholarship is awarded—July 1, 2018—and plan to complete formal residency training no earlier than June 2020. Scholarships do not support research after completion of the chief residency year.

- The scholarship is awarded for two years and requires commitment for the two-year period. The award is to support a research plan for the two years of the scholarship, July 2018–June 2020. Residents must be involved in full-time investigation in basic science, translational, surgical education, clinical, or outcomes research. Study outside the U.S. or Canada is permissible. Renewal of the scholarship for the second year is required and is contingent upon the acceptance of a progress report and research study protocol for the second year, as submitted to the Scholarships Section of the College by May 1, 2019.

- Applications may be submitted even if comparable applications to other organizations have been made. Recipients who are offered scholarships, fellowships, or research awards from other organizations must contact the ACS Scholarships Administrator to request approval of the additional award. The Scholarships Committee reserves the right to review potentially overlapping awards and adjust the award accordingly. In general, receipt of a federally funded training award (T32, F32) is acceptable, but receipt of multiple society awards for the same project is prohibited.

- The scholarship is $30,000 per year; the total amount is to support the research of the recipient and may be used for salary or stipend, research materials, and travel related to the research. Indirect costs are not paid to the recipient or the recipient’s institution.

- The scholar is expected to attend the ACS Clinical Congress in 2020, submit to the Scientific Forum on the research, and make a brief presentation at the annual meeting of the Scholarships Committee.

- The administration (dean or fiscal officer) of the applicants’ training institution must approve all applications. Supporting letters from the head of the department of surgery (or the surgical specialty) and from the mentors who will be supervising the applicants’ research must be submitted. The College encourages diversity of applicants and institutions; only in exceptional circumstances will more than one scholarship be granted in a single year to applicants from the same institution.

For further information regarding this scholarship, go to facs.org/member-services/scholarships/resident/acsresident or contact the ACS Scholarships Administrator at scholarships@facs.org or 312-202-5281.
Award named in honor of Dr. Clowes available for 2018

The American College of Surgeons (ACS) is accepting applications for the 2018 George H. A. Clowes, Jr., MD, FACS, Memorial Research Career Development Award, made possible through the generosity of The Clowes Fund, Inc., of Indianapolis, IN. This award provides support for the research of a promising young surgical investigator and consists of a stipend of $45,000 for each of five years. The closing date for receipt of completed applications and all related documents is August 1, 2017.

• The award is restricted to a Fellow or Associate Fellow of the ACS who has completed an accredited residency in general surgery within the preceding seven years (not including time off for maternity leave, military deployment, or medical leave) and has received a full-time faculty appointment at a medical school accredited by the Liaison Committee on Medical Education in the U.S. or by the Committee for Accreditation of Canadian Medical Schools in Canada. The applicant’s academic appointment may not be above the level of assistant professor. Applicants should provide evidence (by publication or otherwise) of productive initial efforts in laboratory research.

• The award may be used for salary support or other purposes at the discretion of the recipient and the institution. Indirect costs are not paid to the recipient or to the recipient’s institution.

• The ACS Scholarships Committee will not consider applicants who have already received research career development awards from professional societies or the ACS Faculty Research Fellowship. The committee will give preference to applicants who have received or are working toward a K08 or K23 National Institutes of Health (NIH) grant. The recipient is responsible for notifying the College’s Scholarships Administrator if another source of scholarship or fellowship funding is secured.

• Applications must be approved by the administration (dean or fiscal officer) and the head of the applicant’s department or administrative unit. This approval includes a commitment to continuation of the academic position and facilities for research during the entire period of the award. In addition, at least 50 percent of the applicant’s time must be spent in the research proposed in the application. This percentage may run concurrently with the time requirements of NIH or other accepted funding.

• In addition to the application form, applicants must submit an NIH-style biosketch, a detailed research plan up to seven pages in length, and a proposed budget for the five-year period of the award. Applicants also must submit a cover letter of up to 400 words describing their career objectives, how these career objectives will be achieved, and how the research protocol furthers their career development. The ACS Scholarships Committee requires an annual narrative and financial progress report from the recipient upon which annual renewal of the award is based.

• While holding the award, the recipient is required to attend the ACS Clinical Congress in 2019, 2021, and 2023 and present reports to the Scholarships Committee and its guests.

• Upon completion of the five-year funding period, the recipient will be expected to submit a report summarizing research progress and providing information regarding current academic rank, sources of research support, and future plans. The recipient also is required to apply to the Scientific Forum at the conclusion of his or her award period.

The application form is to be completed online and may be accessed from the College’s website at facs.org/member-services/scholarships/research/acsclowes. Contact the ACS Scholarships Administrator at scholarships@facs.org with questions.
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### MEETINGS CALENDAR

**Calendar of events**

*Dates and locations subject to change. For more information on College events, visit www.facs.org/events or facs.org/member-services/chapters/meetings.*

#### JULY

**North Carolina Chapter & South Carolina Chapter**

**July 14–16**

Pinehurst, NC

Contact: Janna Pecquet, janna@ncfacs.org, www.ncfacs.org and www.scfacs.org

#### AUGUST

**Mexico, Federal District Chapter**

**August 4–5**

Acapulco, Guerrero, Mexico

Contact: Rosa Aurora Ruiseco, colegioamericanodecirujanos@yahoo.com.mx, www.facs.org.mx

**Tennessee Chapter**

**August 4–6**

Nashville, TN

Contact: Wanda G. McKnight, wanda@tnacs.org, www.tnacs.org

**2017 ACS CPT Coding Workshop**

**August 10–11**

Nashville, TN

Contact: Jan Nagle, jlmdata@aol.com

**Georgia Society of the ACS**

**August 18–20**

St. Simons Island, GA

Contact: Kathy Browning, gasacs@gmail.com, www.georgiaacs.org

#### SEPTEMBER

**Jordan Chapter**

**September 7–9**

Amman, Jordan

Contact: Dr. Abdalla Bashir, aybashir@gmail.com

**Kentucky Chapter**

**September 8**

Lexington, KY

Contact: Linda Silvestri, lsilv2@uky.edu, kentuckychapter.facs.org

**New Mexico Chapter**

**September 8–9**

Albuquerque, NM

Contact: Melissa Davis, mdavis@nmms.org

**Arizona Chapter**

**September 9–10**

Scottsdale, AZ

Contact: Joni Bowers, jonib@azmed.org, www.azacs.org

**Egypt Chapter**

**September 14–15**

Cairo, Egypt

Contact: Dr. Mohey Elbanna, moheyelbanna@yahoo.com

**Kuwait Chapter**

**September 30—October 1**

Kuwait City, Kuwait

info@kuwaitsurgicalassociation.org

**Nevada Chapter**

**September 30**

Las Vegas, NV

Contact: Camille Sprenner, camillespenner@gmail.com, nevadaacs.org

#### FUTURE CLINICAL CONGRESSES

**2017**

**October 22–26**

San Diego, CA

**2018**

**October 21–25**

Boston, MA

**2019**

**October 27–31**

San Francisco, CA