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*continued on next page*
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Over the last several months, the issue of concurrent and overlapping operations has received considerable attention in the lay and professional press. The American College of Surgeons (ACS) Statements on Principles have long included a section on the surgeon’s responsibility to be present for key parts of the preoperative, intraoperative, and postoperative phases of care. In light of the media play that this topic is now receiving, however, the ACS leadership recently determined that the time was ripe to clarify the College’s position on this matter.

**Overlapping and concurrent operations: The controversy**

The issue of concurrent and overlapping surgery came to the public’s attention last fall, when the *Boston Globe*’s Spotlight team reported on alleged double-bookings of surgical procedures at a nationally recognized area hospital.

As most surgeons know, overlapping operations are performed routinely and safely at many health care centers, particularly teaching hospitals and trauma centers. Overlapping operations occur in two general circumstances. The most common scenario is when the key or critical elements of the first operation have been completed, and it is unlikely that the primary attending surgeon will need to return to that procedure. In this circumstance, the surgeon may supervise the start of another operation while a qualified health care professional, such as a resident or a surgical assistant, performs the final, rudimentary components of the first operation, such as closing the incision. Less commonly, the primary surgeon will have completed the critical elements of the first operation and begun performing key portions of a second procedure in another room.

Concurrent operations, on the other hand, are procedures in which a surgeon is involved in two operations—both of which are in the critical stages simulaneously.

Proponents of overlapping and concurrent operations maintain that the practice allows hospitals to reduce wait times and frees up their most in-demand surgeons to do more procedures. Furthermore, teaching hospitals often condone the practice as a means of allowing trainees to develop graduated autonomy in the completion of common procedures, and trauma centers sometimes rely on overlapping operations when faced with clusters of emergency and urgent cases.

Opponents have two primary concerns: that sometimes the attending surgeon may be away from a case for an extended period of time, during which complications may arise; and that some surgeons may provide their patients with insufficient information about the practice before receiving consent.

**The College’s stance**

As an organization dedicated to surgical education and training, the College recognizes the benefits of allowing interns, residents, and fellows to participate in certain aspects of operations with varying levels of autonomy based on experience, technical skill, and cognitive ability. To ensure patient safety, though, the College also maintains that the attending surgeon should remain in the operating room or immediate vicinity for the entire procedure, ready to intervene should a complication arise. Furthermore, the ACS has advocated that patients be fully informed of their primary surgeon’s direct and indirect involvement in their care before they consent to an operation.

The College’s Statements on Principles have long reflected these positions. However, the ACS has avoided being overly prescriptive and has viewed surgical scheduling as a responsibility best handled at the institution’s discretion.

The revelations in the *Boston Globe*’s exposé and subsequent articles brought to light the considerable
Ultimately, the issue of overlapping and concurrent surgery revolves around three key concerns: ensuring patient safety, training the next generation of surgeons, and empowering patients with the information they need to make informed decisions.

variations in standards from institution to institution. As a result, the federal government—specifically the Senate Finance Committee, chaired by Sen. Orrin Hatch (R-UT)—and various groups have sought clarity.

Achieving consensus, setting standards
As the standard-bearer for surgical patient safety and surgical education, the College’s leadership took responsibility for gathering the collective intelligence of ACS leaders, representatives from stakeholder groups, the ACS legal counsel, and advisors to the Senate Finance Committee. We used their insights to develop more definitive yet unobtrusive guidelines for overlapping and concurrent operations.

What emerged from these discussions is the updated version of the section on “The Operation—Intraoperative responsibility of the primary surgeon,” in the ACS Statements on Principles, which is reprinted on pages 9–11 and posted on the ACS website at facs.org/about-acrs/statements/stonprin#anchor172771. The new language sets forth details about when overlapping operations are appropriate and how they should be handled. The revised document also more clearly delineates what information the surgeon should provide to the patient in order to receive truly informed consent and when this information should be communicated to the patient, and defines key terms.

Ultimately, the issue of overlapping and concurrent surgery revolves around three key concerns: ensuring patient safety, training the next generation of surgeons, and empowering patients with the information they need to make informed decisions. The College believes that the updated language in the Statements on Principles will serve as a useful guide for institutions to use in balancing these demands.

If you have comments or suggestions about this or other issues, please send them to Dr. Hoyt at lookingforward@facs.org.
Overlapping Operations
Overlapping of two distinct operations by the primary attending surgeon occur in two general circumstances.

The first and most common scenario is when the key or critical elements of the first operation have been completed and there is no reasonable expectation that there will be a need for the primary attending surgeon to return to that operation. In this circumstance a second operation is started in another operating room while a qualified practitioner performs non-critical components of the first operation allowing the primary surgeon to initiate the second operation, for example, during wound closure of the first operation. This requires that a qualified practitioner is physically present in the operating room of the first operation.

The second and less common scenario is when the key or critical elements of the first operation have been completed and the primary attending surgeon is performing key or critical portions of a second operation in another room. In this scenario, the primary attending surgeon must assign immediate availability in the first operating room to another attending surgeon. The patient needs to be informed in either of these circumstances. The performance of overlapping procedures should not negatively impact the seamless and timely flow of either procedure.

Multidisciplinary Operations
Contemporary surgical care may require multidisciplinary operations. During such operations, it is appropriate for surgeons to be present only during the part of the operation that requires their surgical expertise. However, an attending surgeon must be immediately available for the entire operation.

Delegation to Qualified Practitioners
The surgeon may delegate part of the operation to qualified practitioners including, but not limited to residents, fellows, anesthesiologists, nurses, physician’s assistants, nurse practitioners, surgical assistants or another attending under his or her personal direction. However, the primary attending surgeon’s personal responsibility cannot be delegated. The surgeon must be an active participant throughout the key or critical components of the operation. The overriding goal is the assurance of patient safety.

Procedure-Related Tasks
A primary attending surgeon may have to leave the operating room for a procedure-related task. Such procedure-related tasks could include review of pertinent pathology (“frozen section”) and diagnostic imaging; a discussion with the patient’s family; and breaks during long procedures. The surgeon must be immediately available for recall during such absences.

Unanticipated Circumstances
Unanticipated circumstances may occur during procedures that require the surgeon to leave the operating room prior to completion of the critical portion of the operation. In this situation, a backup surgical attending must be identified and available to come to the operating room promptly.

Circumstances in this category might include sudden illness or injury to the surgeon, a life-threatening emergency elsewhere in the operating suite or contiguous hospital building, or an emergency in the surgeon’s family.

If more than one emergency occurs at the same time, the attending surgeon may oversee more than one operation until additional attending surgeons are available.

Surgeon-Patient Communication
(Section II.A.)
The surgical team involved in an operation is dependent on the type of facility at which the operation is performed and the complexity of the surgery. At a free standing outpatient surgical center, many procedures are performed solely by the primary attending surgeon with no assistant. In contrast, a complex procedure at an

continued on next page
D. The Operation—
Intraoperative responsibility of the primary surgeon
(continued)

An academic medical center may involve multiple qualified medical providers in addition to the primary attending surgeon. As part of the pre-operative discussion, patients should be informed of the different types of qualified medical providers that will participate in their surgery (assistant attending surgeon, fellows, resident and interns, physician assistants, nurse practitioners, etc.) and their respective role explained. If an urgent or emergent situation arises that require the surgeon to leave the operating room unexpectedly, the patient should be subsequently informed.

Definitions
In an effort to provide some standardization of nomenclature and terminology, the following definitions are provided:

Back-up surgeon/surgical attending
The qualified surgical attending who has been designated to provide immediately available coverage for an operation, during a period when the primary surgeon might be unable to fill this role.

“Concurrent or simultaneous operations” (or surgeries)
Surgical procedures when the critical or key components of the procedures for which the primary attending surgeon is responsible are occurring all or in part at the same time.

“Critical” or “key” portions of an operation
The “critical” or “key” portions of an operation are those segments of the operation when essential technical expertise and surgical judgment are required in order to achieve an optimal patient outcome. The critical or key portions of an operation are determined by the primary attending surgeon.

Immediately Available
Reachable through a paging system or other electronic means, and able to return immediately to the operating room. This should be defined more completely by the local institution.

Informed consent
Described in ACS Statements on Principles II.A.

Multidisciplinary Operations
One example of this would be a procedure where a surgeon of one specialty provides the exposure required by a second surgeon who performs the main surgical intervention (e.g.; a general or thoracic surgeon providing exposure for a neurosurgeon or orthopaedist to operate on the spine). Another example would be an operation that requires the involvement of two or more surgeons with different specialty expertise (e.g.; chest wall or head and neck resection followed by plastic surgical reconstruction; face or hand transplantation; repair of complex craniofacial defects).

“Overlapping or sequenced” operations for surgeons
The practice of the primary surgeon initiating and participating in another operation when he/she has completed the critical portions of the first procedure and is not essential for the final phase of the first operation. These are by definition surgical procedures where key or critical portions of the procedure are not occurring simultaneously.

Physically Present
Located in the same room as the patient.

Primary Attending Surgeon
Considered the surgical attending of record or the principal surgeon involved in a specific operation. In addition to his/her technical and clinical responsibilities, the primary surgeon is responsible for the orchestra and progress of a procedure.

Qualified Practitioner
Any licensed practitioner with sufficient training to conduct a delegated portion of a procedure without the need for more experienced supervision and who is approved by the hospital for these operative or patient care responsibilities.
Progress in achieving universal access to surgical care: An update and a path forward

by Nakul Raykar, MD, MPH; Swagoto Mukhopadhyay, MD; Joshua S. Ng-Kamstra, MD, MPH; Yihan Lin, MD; Saurabh Saluja, MD, MPP; John W. Scott, MD, MPH; Geoffrey Anderson, MD, MPH; John G. Meara, MD, DMD, MBA, FACS; Girma Tefera, MD, FACS; and Stephen W. Bickler, MD, FACS
More than 5 billion people worldwide lack access to safe, affordable, and timely surgical and anesthesia care. These global deficits in surgical and anesthesia care—and the means to alleviate them—moved into sharper focus in 2015, as the result of initiatives led by the World Bank, The Lancet Commission on Global Surgery, and the World Health Organization (WHO). Additionally, a new surgery-focused advocacy group called the G4 Alliance formed in May 2015, and the United Nations (UN) has adopted a new health systems framework that will set the global health agenda for the next 15 years. These initiatives are not merely the latest academic and political trends; rather, they represent a paradigm shift regarding the importance of quality health and surgical care access for resource-poor populations. This article summarizes these initiatives and offers a context for the future role of the American College of Surgeons (ACS) in making surgical care available to patient populations that are without access at present.

Disease Control Priorities

In March 2015, the World Bank released the first volume of its third edition of Disease Control Priorities. Disease Control Priorities in Developing Countries was published in 1993 against the backdrop of the growing human immunodeficiency virus (HIV) pandemic and a global malnutrition crisis. Along with the World Bank’s 1993 World Development Report, which focused on investing in health care (see Figure 1, page 14), the first edition of Disease Control Priorities provided policymakers with strategies that would produce the greatest benefits to the public welfare and promote economic growth with limited resources. Surgery was not mentioned in the first edition of the report. The second edition of Disease Control Priorities, however, included a chapter on the cost-effectiveness of surgery, in which Haile T. Debas, MD, FACS, and colleagues estimated that 11 percent of the global burden of disease could be addressed with surgical care. Until it was significantly revised upward in 2015, this estimate was one of the most widely cited statistics in global surgery.

The third edition of Disease Control Priorities, the first full volume of which is titled Essential Surgery, breaks with the past and recognizes recent evidence that proves that surgical care is cost-effective and essential for meeting health care targets in low-resource settings. The authors of the third edition describe the importance of assessing the cost-effectiveness of surgical care platforms, such as the rural, first-level hospital, which can provide a broad array of surgical and other health care services. The authors demonstrate that surgical care is cost-effective, with spending at
only $10 to $100 per disability-adjusted life year (DALY) and deaths averted, a common measure used in public health to compare death and disability averted from interventions. This price tag compares favorably with some of the most accepted cost-effective interventions in public health, including vaccinations and antiretroviral therapy (see Figure 2, page 14).

Furthermore, the authors of the third edition of the report suggest that the universal provision of 44 essential surgical procedures could avert 1.5 million global deaths annually, or up to 7 percent of all avoidable deaths in low- and middle-income countries (LMICs) with a 10:1 benefit-cost ratio, making these surgical services a high-value investment rather than an expenditure. With the focus on cost-effectiveness, the World Bank, the document’s key sponsor, opens the door to attention from large-scale donors and policymakers who seek high return on investments in global health.

The Lancet Commission on Global Surgery
The Lancet periodically commissions reports on issues of global significance that require attention from policymakers. In the summer of 2013, The Lancet commissioned a report on the state of surgical care worldwide. This led to an 18-month deliberative process involving more than 500 clinicians, researchers, policymakers, and funders from more than 110 countries (see Figure 3, page 15). Commissioners, advisors, collaborators, and contributors engaged in interviews, online data and article submissions, and new primary research examining the current state of surgical care around the world. The end result of this process was the publication of the commission’s report, Global Surgery 2030: Evidence and Solutions for Achieving Health, Welfare, and Economic Development.6

The Global Surgery 2030 report outlines important statistical information, including the fact that at least 5 billion people, or approximately 70 percent of the world’s population, lack access to safe, affordable, and timely surgical care (see Figure 4, page 15). This number represents a startling uptick and is more than double the previous estimates. Furthermore, patients in the world’s poorest countries will need to undergo 143 million additional procedures to meet minimum needs based on the global demand, requiring the training of at least 1.25 million additional surgeons, anesthetists, and obstetricians. Notably, the scale-up of surgical care will require careful attention to financing models to prevent undue financial burden on individual patients. And although the challenges are daunting, the consequences of inaction are even more perilous. The world’s poorest economies will lose up to 2 percent of their gross domestic product annually by 2030 as a result of surgical illness.

In addition to assigning numbers to the problem, the report provides more than 100 recommendations and six surgery-specific indicators to stimulate and measure systems improvement. The WHO and World
Bank—the global agenda-setting institutions for health metrics and monitoring—have endorsed the six surgical indicators by incorporating them into their respective frameworks, and, in April, the World Bank published the first set of surgical indicators in its World Development Indicators dataset. Together, the commission’s recommendations and indicators create a framework for the systematic strengthening of surgical systems in low-resource environments for the first time in this emerging field of global health.

**WHA resolution 68.15**

The WHO, formed in 1948 out of the groundswell of global cooperation following World War II, is tasked with monitoring and improving global public health. Its policymaking body, the World Health Assembly (WHA), is composed of health ministers from the UN’s 194 member states and is responsible for setting the budget and electing WHO leadership (see Figure 5, page 16). In May 2015, the 68th WHA passed resolution 68.15, “Strengthening emergency and essential surgical care and anesthesia as a component of universal health coverage,” which officially declares surgical care a priority initiative for the WHO (see Figure 6, page 16).

The resolution calls for a $23 million investment over five years for implementation, with the primary aim of enhancing surgical systems in the areas of advocacy, governance, data collection, essential medicines, and training. The office within the WHO responsible for the effort will expand from a staff of one to a seven-person operation and will spread its reach beyond the WHO’s Geneva, Switzerland, headquarters to regional offices.

As a capstone to this sequence of events, in December the WHO hosted its 10th anniversary meeting of the Global Initiative for Emergency and Essential Surgical Care in Geneva, during which a plan for implementing the WHA resolution was developed. Participants from six continents and more than 40 countries...
approved this initiative, which calls for a strong focus on global indicator collection and monitoring and coordinated support for national surgical planning.

**Global alliance**

More than 60 surgical, anesthetic, obstetric, and trauma federations, professional societies, academic entities, and nongovernmental organizations have signed on to support the Global Alliance for Surgical, Obstetric, Trauma, and Anesthesia Care (the G4 Alliance). The G4 Alliance is the first professional advocacy-based organization “dedicated to building political priority for surgical care as part of the global development agenda.” Holding its first executive board meeting in Geneva in May 2015, and various webinars and regional events throughout the year, the G4 Alliance will play an important role in keeping surgery and anesthesia at the forefront of the global public health conversation.

**Sustainable development goals**

The Millennium Development Goals (MDGs) established by the UN in 2000 (see Figure 7, page 17) included eight anti-poverty targets to be achieved by 2015. Significant progress has been made toward reducing the number of people living in poverty. Last year, the UN Member States adopted the Sustainable Development Goals (SDGs) to extend these efforts through the next 15 years (see Figure 8, page 18).

In contrast to the MDGs, which focused on disease-specific interventions, the 17 SDGs emphasize “horizontal” development, which entails investing in broad-based health systems and universal health care instead of a narrow, “vertical” focus. With the latest estimate suggesting that one-third of the world’s burden of disease requires some form of surgical care, it is clear that the SDGs cannot be fully
realized without an emphasis on improving surgical access and quality. The third SDG calls for ensuring healthy lives and promoting well-being for all.

Within this goal, the UN set a target of reducing the global maternal mortality rate to less than 70 per 100,000 live births, cutting by one-third the rate of premature death from non-communicable diseases, and halving the number of deaths due to road traffic accidents. The link between achieving the third SDG and surgical care is most direct, but the role of surgery in development extends far beyond this milestone. Strengthening the world’s surgical systems will be an important step toward achieving targets for many other SDGs. For example, the first SDG calls for ending poverty, the eighth SDG for promoting economic growth, and the 10th for reducing inequality. The third edition of the Disease Control Priorities and The Lancet Commission both suggest that a lack of a strong surgical system inhibits economic growth, hitting the lowest-income countries the hardest with a cumulative loss of $12.3 trillion across LMICs from the burden of surgical disease. Achieving each of the SDGs will require interventions that include both prevention and treatment and that fundamentally rely on robust hospital systems offering comprehensive health care, including surgery.

Role of surgical organizations

At the North American launch of Global Surgery 2030, ACS Executive Director David B. Hoyt, MD, FACS, noted that the Commission’s report represents a call to action for surgeons to recognize the deficits in global surgical care and to accept responsibility for resolving this problem. Extending access to surgical care beyond the world’s wealthiest 2 billion people will require the coordinated action of international agencies, national governments, and clinicians. It also will necessitate the attention and commitment of influential surgical organizations, particularly those in high-income countries.

Many surgical organizations have already begun to heed this call to action. The ACS, the Royal Australasian College of Surgeons (RACS), and the Royal College of Surgeons of Ireland (RCSI) are already playing an important role in this process.

The ACS Operation Giving Back (OGB) program started in 2004 as a portal to coordinate American surgical volunteerism around the globe. Its mission is to leverage the passion, skills, and humanitarian ethos of the surgical community to effectively meet the needs of medically underserved populations. OGB seeks to provide the necessary tools to facilitate humanitarian outreach among surgeons of all specialties at all stages in their professional careers and with emphasis on both domestic and international service.

The RACS Pacific Islands Project, established in 1995, is a longitudinal program that focuses on strengthening workforce and clinical support capacity across the Asia-Pacific region. Meanwhile, the RCSI has long-standing training collaborations with the College of Surgeons of East, Central, and Southern Africa (COSECSA). These initiatives have appropriately garnered accolades as models of collaboration between partners in high-income and LMICs.

But more can be done. One important strategy is to continue to foster direct collaboration between surgical organizations in high- and low-income countries,
particularly in the context of systematic national surgical planning. To address long-term workforce strengthening, surgical organizations in low-resource settings should have direct channels to their high-income partners for financial, technical, and material support for education, training, and research. National and regional surgery societies, such as the West African College of Surgeons and COSECSA, provide the bulk of surgical training for the African continent. Their success hinges on maintaining long-term training programs that fit the needs of their populations while creating local practice environments that will retain graduates. As the world’s leading surgical organization, the ACS is well-positioned to play a major role in supporting the global community of surgeons in advocating for the underserved surgical patient, both domestically and internationally.

The landmark events and publications of 2015 reveal a moral imperative for all surgeons to meaningfully support the research, advocacy, and training that is a part of the growing field of global surgery. The health care community can no longer turn a blind eye to the gross inequities in access to surgical care. For more information or to get involved, go to www.lancetglobalsurgery.org and facs.org/ogb.

REFERENCES
Social media is user-generated content in the form of written stories, infographics, pictures, or videos that are shared via the Internet and that promote engagement, sharing, and collaboration. These tools use mobile and Web-based technology that create highly interactive platforms where individuals and communities may participate in an exchange of information. Many people find Facebook, a popular form of social media, to be a good way to keep in touch with family, friends, and colleagues; others watch videos on YouTube; and, perhaps most prevalently, people use Twitter to get bites of information about people and topics of interest to them. Nonetheless, some surgeons have yet to actively use social media and integrate it into their practices. This article offers the uninitiated some insights into how social media works, specifically Twitter, and how it can work for them.

**Twitter basics**

Twitter is a specific social media service that allows you to share information in the form of a tweet, which may contain a maximum of 140 characters. Each tweet can include links, images, and mentions of other users, and can be augmented with hashtags to make it easier to find and share.

## The surgeon and social media:

### Twitter as a tool for practicing surgeons

by Paula Ferrada, MD, FACS; James W. Suliburk, MD, FACS; Sarah B. Bryczkowski, MD; Luke V. Selby, MD; Eugenia E. Lee, MD; Madeline Torres, MD; Anai N. Kothari, MD; and Afif N. Kulaylat, MD
characters. At press time, Twitter announced it was considering a move to stop counting photos and links in its character limit, which would give users the opportunity to compose longer messages. Twitter can be accessed via a user’s computer, tablet, or smartphone.

New users can register via the Twitter website, https://twitter.com/signup, and by clicking on “sign up” or by using one of the many Twitter applications (apps) that are available for download via iTunes or Google Play. The following are examples of popular third-party Twitter apps:

- Twitterrific 5, Tweetbot 3 (iPhone only), Echofon Pro, and Osfoora 2 are examples of apps that are popular for Apple products.
- Carbon for Twitter, Fenix for Twitter, HootSuite, plume, Talon for Twitter, and Tinfoil for Twitter are some of the most popular apps for Android devices.

When signing up, you are prompted to choose a username. The only requirements for usernames are that they be unique, limited to 15 characters or less, and not contain the words “Twitter” or “admin.”

Once registered, give careful consideration to the image you want to present to the Twitterverse. As a health care professional, the content of a Twitter profile can be extremely important because it is indexed by major search engines and easily discovered by coworkers, family, friends, and patients.

Your profile picture can speak volumes about you. When a user first joins Twitter, the default profile picture is an egg. “Hatching” the egg by uploading a picture is important, as it adds to your profile’s credibility and personality. In other words, if you’re going to take the time to set up a Twitter account, take the time to include a photo. Your profile picture can be modified to reflect the image you want to project. Having trouble getting started with Twitter? Check out the Twitter Help Center at https://support.twitter.com/.

Twitter—a news and networking tool
In the fast-paced world of surgical practice and training, it can be hard to keep up with current events and information. Twitter is a valuable resource for news, often providing real-time updates on what is happening around the globe. Not only can you, a physician, share perspectives and ideas, but you can also obtain information on new literature, conferences, and best practices related to a variety of specialty topics.

Twitter also is an effective means of networking with other users who share your interests. Once an account is established, you may search for institutions, organizations, and individuals with which you want to connect. Whenever you decide to “follow” individuals, agencies, institutions, media outlets, and so on, the content they post will appear on your Twitter feed. To start following another user, click the “Follow” button next to the user name or on the person’s or institution’s profile.

Once you start following others, take the opportunity to scroll through your Twitter feed before you start tweeting to observe how others in your area of expertise use the social media tool. It is not uncommon for an individual to follow multiple users without posting any original content.

As you become more proficient in using Twitter, you will likely find that following journals that appeal to your interests can be a good way to keep up with
recent research, as virtually all of these publications post tweets highlighting upcoming abstracts and articles. These journals, or any collection of Twitter handles, can be grouped into a Twitter list, allowing a user to quickly browse the latest research or related posts/content.

As a new user, it is easy to start building connections by retweeting (RT, done by clicking 🔄) or replying (clicking 🔄) to other tweets. Once the 🔄 function is selected, you will have the option of retweeting or quoting the tweet. An RT simply reposts the tweet from your username, also known informally as a user’s Twitter handle. Quoting a tweet posts the same tweet as a slightly smaller version of the original with any additional comments you choose to include. Once you RT the square arrow changes from gray to green (��). Choosing to RT or quoting a tweet enhances your visibility in the Twitterverse. (In terms of Twitter etiquette, it is generally considered poor form to copy someone’s tweet and simply put RT @ username in front of it.) (See Figure 1, page 20, for an annotated tweet.)

Another way of fostering communication with others on Twitter is to include people in your tweets using their Twitter handle, @username. By including other people in a tweet, your message will show up in their notifications feed. You can also show your support for a tweet by clicking the small heart 🙏 icon. Once you like a tweet, the heart will change color from gray to red 🙏. This is equivalent to “liking” a post on Facebook or giving someone a virtual thumbs-up or high-five.

To get the most out of your Twitter experience, avoid setting your account to private. Private accounts cannot be quoted, retweeted, or tagged, severely limiting the benefits of participation in the platform.

Twitter journal clubs
As previously noted, one way to stay current with newly published content is to participate in Twitter journal clubs. Users can also have access to journal clubs by simply “lurking,” which in this context

**AUTHOR TWEETS**

Twitter is a flexible form of social media that is used in different ways by people representing a full spectrum of professional backgrounds and interests. Below are tweets that highlight how Twitter has uniquely affected each of this article’s authors:

- **@pferrada1**: Connecting with individuals that share common goals globally. Allowing me to be part of the culture change in supporting diversity. #globalsurgery #diversymatters

- **@jsuliburk**: Continuing the conversation w/ #surgtweeting & virtual networking to foster #engagement in a lifetime of learning. Improving #patientoutcomes.

- **@SarahB_MD**: Friendship, authorship, mentorship & leadership. Twitter has brought academic surgery to a whole new level. #SurgTweeting #CrowdSourcing

- **@lvselbs**: #SurgTweeting has allowed me to make friends with residents across the country. Actual friends that I look forward to seeing at meetings.

- **@eugeeli626**: #surgtweeting keeps me updated, connected, and #inspired. I love the easy networking and supportive twitter communities.

- **@MadelineBTorres**: twitter has #connected me with #mentors and people with #diverse backgrounds allowing me to #grow personally and professionally

- **@anaikothari**: Twitter has enriched my life by connecting me to individuals in and out of my field I couldn’t have met any other way. #friendsforever

- **@AfifKulaylat**: Exposure 2 ideas & research in & out field of interest. Chances 2 share & spread information & knowledge. #beinspiredbyothers #houseofsurgery
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SUGGESTED TWITTER ACCOUNTS TO FOLLOW

SOCIETIES

• ACS Committee on Trauma: @ACSTrauma
• American College of Surgeons: @AmCollSurgeons
• American Board of Surgery: @AmBdSurg
• Association for Academic Surgery: @AcademicSurgery
• Association for Surgical Education: @Surg_Education
• Resident and Associate Society of the ACS: @RASACS

JOURNALS

• Annals of Surgery: @AnnalsofSurgery
• JAMA Surgery: @JAMASurgery
• Journal of Surgical Research: @JSurgRes
• Journal of Trauma and Acute Care Surgery: @JTraumAcuteSurg
• Journal of the American College of Surgeons: @JAmCollSurg
• The New England Journal of Medicine: @NEJM

JOURNAL CLUBS (WITH CORRESPONDING HASHTAGS)

• Eastern Association for the Surgery of Trauma Journal Club: @EASTjournalclub, #EASTjc
• International Urology Journal Club: @iruojc, #urojc
• The International General Surgery Journal Club: @IGSJC, #IGJSC

THE AUTHORS

• Sarah Bryczkowski: @SarahB_MD
• Paula Ferrada: @pferrada1
• Anai Kothari: @anaikothari
• Afif Kulaylat: @AfifKulaylat
• Eugenia Lee: @eugeeli626
• Luke Selby: @lvselsb
• James Suliburk: @jsuliburk
• Madeline Torres: @MadelineBTorres

means the user follows the clubs without tweeting or participating. One example of a Twitter journal club is the International General Surgery Journal Club, @IGSJC, which a group of academic surgeons started in 2014. The group hosts monthly Twitter journal clubs to discuss recently published articles with a guest author who also is on Twitter. Each journal club lasts for two days to allow asynchronous conversations about a selected article. The journal club activity is tracked by including #IGSJC in all tweets.

The criterion for articles selected includes work that is recently published, peer reviewed, and relevant to the field of surgery. Journal club articles are offered through open access (available to download for free) by publishers for the month of the journal club. In August and December 2015, two articles published in the Journal of the American College of Surgeons were included in the International General Surgery Journal Club and were available for discussion in the Twitter-based forum. And, for the first time in Twitter history, the International General Surgery Journal Club partnered with JAMA Surgery to offer continuing medical education credit for participants.

Glossary of useful terms

The Twitterverse has its own language, as illustrated by a few terms defined earlier in this article. The following is a brief list of terms with which new Twitter initiates should be familiar:

• The @ sign: The @ is used to call attention to a topic or individual. It is also a way to “mention” other users or attribute content to a particular user or users. For example, “hello @pferrada1” is a greeting to a particular user that will show up in the person’s Twitter notification feed.
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• Block: If you block a Twitter user, that account will be unable to follow you or add you to their Twitter lists, and you will not receive a notification if they mention you in a tweet.

• Direct messaging (DM): You can send and receive private messages, but only among people whom you follow and who follow you back.

• Hashtag (#): People use the hashtag or pound symbol # before a keyword or phrase (no spaces) within a tweet to categorize those messages and to help them become more searchable to other users. For example, #IGSJC is used for all tweets made during the monthly Twitter journal club.

  A hashtag can be used to live tweet conferences. An example of this is #ACSCC15, which was the hashtag used for the American College of Surgeons (ACS) Clinical Congress 2015. When you click on a hashtag, you can see all other tweets containing the same keyword or topic.

• Like (❤): Show your love for tweets by clicking the small heart at the bottom right corner of the tweet. Likes are saved to your profile and can be looked at from your profile page. This function also allows users to see what other people are liking.

• Lurk: To follow a thread of tweets without tweeting.

• Modify tweet (MT): This function is somewhat outdated and involves quoting a tweet, but slightly changing the content. You would use this function to announce you have corrected a typo, added or removed information, or clarified information from a previous tweet.

• Reply (↩): This function is found at the bottom left of all tweets. By clicking reply, a new tweet is generated with the person who authored the original tweet. Note that this tweet will show up only on the Twitter feed of the individual to whom you are replying, as well as anyone who follows both you and the original author. For example, the reply, "@RASACS great link, thanks for sharing!" will be sent to the Twitter feed of the @RASACS account and anybody who follows you and the Resident and Associate Society (RASACS). If instead you include a period or space before the reply, such as, ". @RASACS great link, thanks for sharing!" then all of your followers will see the tweet regardless of whether they also follow the @RASACS account.

• Retweet (ツ): You can use this feature to share a tweet posted by another user with all of your followers. Some users will copy the tweet and insert RT @username to the beginning of the tweet instead of hitting the RT button (ツ), but this has become a less acceptable way to share someone else’s tweet.

• Tagging: On Twitter, you have the ability to tag people in pictures. Since tweets allow only 140 characters, the number of people whom you can mention is limited. One way to include more individuals in a tweet is to tag them in a picture. Pictures generally get more visibility than text-only tweets. The number of people who can be tagged in a tweet is limited to 10.

• Thread: A series of tweets by multiple users connected to a general topic, usually by a hashtag.

• Tweetation: A citation or link to a journal article found within a tweet.

• Username or Twitter handle: The login name users select for Twitter.

Real-time collaboration

Although primarily an online social networking tool, Twitter is increasingly used to disseminate scientific information. For example, attendees at scientific meetings often use Twitter as a means of stimulating and engaging in further dialogue about presentations and papers. Not everyone has the interest or opportunity to pose questions at meetings, but it is possible to foster a virtual discussion on Twitter. While the speaker presents data at a panel session or meeting, a full discussion can occur on Twitter related to the
information being relayed by the presenter, which allows for additional questions to be raised and discussed. These conversations can lead to an expansion of the research, future collaboration, and improved dissemination of the work. In fact, live tweeting at conferences using the assigned conference hashtag could become a powerful recruitment tool to bolster an organization’s membership as well as future meeting attendance.

**Professionalism and Twitter**

Users, particularly physicians, should remember that all tweets are public. Anyone with Internet access can find your tweets. Once you start tweeting or posting on Facebook, expressing views or content in an unedited manner can become almost second nature. Keep in mind, however, that once your message is out there it is nearly impossible to completely erase it from the Web. It is important to set a professional example for both colleagues and junior physicians on social media, and that includes ensuring patient confidentiality at all times. A popular rule of thumb is a 12-word social media policy: “Don’t lie, don’t pry; don’t cheat, can’t delete; don’t steal, don’t reveal.”

**Conclusion**

Twitter is an influential tool because it offers opportunities to share ideas. This influence is especially apparent when ideas are shared by enough people to motivate others to action. Social media platforms like Twitter can generate increased interest in a topic and enhance the legitimacy of a wide range of ideas and perspectives. In other words, there is “power in numbers.” How many people can you reach in a classroom or in a meeting—20? 300? How about sharing your ideas with 30,000 people in an instant via a hashtag discussion on Twitter?

Consider that someone on the other side of the world might be experiencing the same issue that you have at your hospital, and they have found a solution. Twitter offers an endless supply of crowd-sourcing opportunities. Once you establish a network of academic surgeons, you have the ability to tweet a question and get instant answers. If you’ve found better ways to do things, whether solutions for increasing efficiency or improving outcomes, wouldn’t you want to share your experiences with your colleagues? You can. It is just a tweet away. ♦

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As the Director of the Division of Member Services at the American College of Surgeons (ACS) and a regular tweeter, I find Twitter to be an effective means of staying abreast of what rank-and-file members of our organization are experiencing, of exchanging ideas with colleagues, and of remaining current with the surgical literature. I employ a range of social media, including Facebook, YouTube, LinkedIn, and more, in addition to Twitter. And, like most people, I use different platforms in different ways, but tend to favor Twitter, professionally, for many of the reasons cited in the accompanying article on page 19.

One of the Twitter functions that I find most valuable is the ability to curate feeds on topics of interest. This functionality makes it easier to keep track of what’s going on in areas of interest without wading through a random assortment of posts. For example, I can readily access tweets from surgical organizations like the ACS, the American Board of Surgery, the Association of Women Surgeons, or the Society of American Gastrointestinal and...
Endoscopic Surgeons; medical organizations like the American Medical Association or the Association of American Medical Colleges; research organizations like the Centers for Disease Control and Prevention; and my favorite journals with just a few clicks. I can also add or delete organizations or individuals just as easily as their shared content becomes more or less relevant.

**Exchanging ideas**

Twitter also allows for two-way communication between followers and the people and/or groups they are following, which allows sharing to be more interactive and nuanced than on some other social media platforms. For the ACS membership, Twitter provides a venue for the exchange of ideas and concerns with the College’s Officers, Regents, Governors, other committees, and Executive Staff, some of whom have an active presence on Twitter.

Another benefit of Twitter—interesting people tend to follow interesting people. Consequently, each time you engage with someone new, you are exposed to his or her followers and potentially those whom they follow. As a result, your community is ever enlarging. The information that you want and need becomes more readily accessible and your opportunities to learn and grow expand every time you click the “follow” button. Furthermore, your exposure spreads as well, as your followers retweet or respond to your posts and their followers are, in turn, exposed to these interactions.

Perhaps most important for time-pressed surgeons is the fact that posting on Twitter is quick and easy, because the platform is responsive and well-suited to handheld devices. Thus, it’s easy to post an interesting sound bite or slide from a meeting in real-time, particularly for colleagues who were unable to be present, without having to wait until you’re back in the office or until the presentation is posted on a website or printed in a publication. Notably, these types of posts often spark immediate discussion and interest among followers.

Due to Twitter’s ease of use, as well as its potential to reach countless users, online Twitter virtual journal clubs have become quite popular, and nearly every science journal shares seminal papers online prior to their availability in print. In this way, one can learn the newest science first by engaging on Twitter. The platform’s design also makes it a good place for posting photos, short videos, and other visuals. One of our Member Engagement activities at Clinical Congress 2015 was the ACS Selfie Scavenger Hunt, which encouraged attendees to post photos of themselves with ACS leaders, colleagues, and friends, and at sessions and networking functions. The response was overwhelming, with surgeons in all categories of membership sharing their memorable experiences on Twitter. A video of some of these memorable photographs can be viewed at www.youtube.com/watch?v=d88Mbnl2Wf8.

Finally, Tweeting can be an effective means of letting your patients, legislators, the public, and the press know that you’re staying informed about innovations in surgical care, of your opinions about timely events, and what being a Fellow of the ACS means. Start tweeting about the issues that affect your practice and your patients. In this way, Twitter allows you to exert influence on matters pertaining to our profession.

We are fortunate to practice at a time when it’s possible and encouraged to access and share information rapidly. So take advantage of Twitter as a forum for exchanging ideas, learning about innovations, and sharing concerns of interest to our profession. ♦
2015 ACS Governors Survey: Surgeons speak out on GME funding issues

by Mark W. Puls, MD, FACS

Editor’s note: The American College of Surgeons (ACS) Board of Governors 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 ACS leadership. The 2015 ACS Governors Survey, which was conducted in August 2015, had a 76.2 percent (208/273) response rate.

The following article focuses on funding for graduate medical education (GME) and is the last in a series of three feature articles highlighting key issues addressed in the Governors Survey. The previous articles were published in the April and May issues of the Bulletin and centered on the electronic health record and the Affordable Care Act, respectively.

The 2015 Governors Survey provided data on the Governors’ age range, surgical practice setting, and the type or size of the hospitals where they work. Through a deeper analysis, answers to survey questions were linked to these different demographic categories. Most ACS Governors are 51–65 years old (see Figure 1, page 28), and most (52 percent) are in full-time academic practice (see Figure 2, page 28). Of the remaining survey respondents, 28 percent are in private practice; 16 percent are full-time, hospital-employed physicians; and 4 percent work for a government agency. The survey also highlighted the fact that ACS Governors work in varying types and sizes of hospitals—most of the Governors (62 percent) work in academic, quaternary, or tertiary facilities; of the remaining Governors, most are at large hospitals, rather than small hospitals (see Figure 3, page 29).

Given these practice types and institutional affiliations, it is easy to understand why GME funding is a topic of considerable interest to members of the ACS Board of Governors. But ultimately, GME affects all of us, as it is used to train the surgeons who will be providing care to surgical patients in the years to come.

GME funding: How the system works

The U.S. physician workforce has always been considered a “public good.” A goal of the GME system is to train the proper number and type of physicians who can meet the health care needs of our nation. In training future physicians, however, teaching hospitals incur costs beyond those associated with providing patient care. To address this situation, the Social Security Amendments of 1965 established the Medicare and Medicaid programs, including provisions that mandate federal funding for GME. Due to the public policy-based nature of these monetary provisions, any changes in public financing of GME requires a change in legislation. The most
significant piece of legislation affecting GME was the Balanced Budget Act (BBA) of 1997, which capped the number of residency training positions that Medicare would fund at approximately 100,000.1

Current public financing for GME is approximately $15 billion per year. This money comes from multiple sources, with Medicare contributing 62.5 percent ($9.7 billion), Medicaid contributing 25.2 percent ($3.9 billion), the U.S. Department of Veterans Affairs contributing 9.3 percent ($1.437 billion), and the U.S. Health Resources & Services Administration contributing 3.0 percent ($464 million).2

Medicare currently makes payments to teaching hospitals through direct graduate medical education (DGME) payments and indirect medical education (IME) payments. DGME payments, which comprise 29 percent ($2.7 billion) of Medicare’s contribution to GME, are paid out on a per resident basis to cover costs, such as residents’ stipends and benefits, and compensation to teaching faculty.3

IME payments comprise 71 percent ($6.7 billion) of Medicare’s contribution to GME and cover additional patient care costs due to the unique teaching hospital mission of education and research.3 The current system rewards teaching hospitals based on the number of residents they train and the percentage of publicly funded patients whom they treat.

**Can the GME system produce enough physicians?**

GME is a complex issue that affects the gamut of health care challenges. At present, many health policy experts are concerned with whether the GME system can continue to produce enough physicians to meet the evolving health care needs of U.S. patients.
A study by the Association of American Medical Colleges projects a deficit of 46,100 to 90,400 physicians by 2025 due to an aging population requiring more care, physician retirements, and the Affordable Care Act potentially introducing 32 million more patients into the health care system.\(^4\) To counteract this projected deficit of physicians, the number of domestic medical school graduates has increased recently. However, this uptick in medical school graduates has added to the complexity of the GME conundrum.

The BBA of 1997 was enacted in an era when health policy experts were projecting an oversupply of physicians. Passing legislation to change the BBA’s cap on residency positions has proven difficult. Because of the increased number of domestic medical school graduates and the capped number of residency positions available, it has become more difficult for medical students to be accepted into the residency programs of their choice. When Governors were asked whether the current level of GME funding should change, 80 percent responded that GME funding should be increased, 19 percent responded that GME funding should remain at the same level, and 1 percent responded that GME funding should be decreased (see Figure 4, page 30). Responses to this question did not vary by age or practice setting, although Governors in smaller hospitals were more likely to favor the option of “regional sponsorship for a resident’s commitment to practice in the region for a period of time” in comparison with Governors in larger hospitals or academic institutions.

Some states are beginning to develop alternative sources of supplemental GME funding. Although existing teaching hospitals have not received additional funds to support new residency positions since the BBA was enacted, residency programs at new teaching hospitals may receive additional DGME and IME funding if certain Medicare requirements are met.

Georgia, for example, has actively sought to increase the number of new residency positions available in the state by helping new teaching hospitals to develop training programs and by contributing to the start-up costs of these programs. These expenditures can be significant. Start-up costs are estimated to be $3.88 million.

**Alternative sources of GME funding**

For the GME system to be able to produce more physicians to meet U.S. workforce needs, some policymakers and members of the surgical education community have suggested that alternative sources of funding should be developed. New financing mechanisms are necessary for several reasons. First, existing legislation limits the amount of funding that Medicare can contribute to GME. Second, Medicaid contributions to GME are not required under federal law; as a result, some states that are experiencing budgetary issues are choosing to stop making Medicaid payments to GME programs.

The ACS Governors were asked to select options for alternative sources for additional GME funding (see Table 1, page 30). Their responses did not vary by age or practice setting, although Governors in smaller hospitals were more likely to favor the option of “regional sponsorship for a resident’s commitment to practice in the region for a period of time” in comparison with Governors in larger hospitals or academic institutions.
for one hospital with five new residency programs. In 2012, the Georgia State Legislature proposed legislation to fund the start-up costs for new teaching hospitals, with the hospital required to match the funding on a 1:1 basis starting in fiscal year (FY) 2013. As of May 2015, 11 new teaching hospitals have been developed to establish 415 new residency positions in the state.5

Meeting U.S. physician workforce needs

The amount of financial support that the federal government provides for physician training exceeds the total for any other profession. Concerns have been raised that, despite the billions of dollars of public funds that have been invested in GME since 1965, the current GME system may be ineffective in meeting U.S. physician workforce needs. An Institute of Medicine (now the Health and Medicine Division of the National Academies of Science, Engineering, and Medicine) report from July 2014 indicates, “There is a striking absence of transparency and accountability in the GME financing system for producing the types of physicians that the nation needs.”2

The Medicare Payment Advisory Commission (MedPAC) is an independent, nonpartisan agency that advises Congress on overall Medicare spending. A February 2015 MedPAC report on GME stated that only 46 percent of Medicare IME payments were empirically justified.6 In

TABLE 1.
ALTERNATIVE SOURCES FOR ADDITIONAL GME FUNDING

<table>
<thead>
<tr>
<th>Source of Funding</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical insurance companies</td>
<td>69%</td>
</tr>
<tr>
<td>Regional sponsorship for a resident’s commitment to practice in the region for a period of time</td>
<td>51%</td>
</tr>
<tr>
<td>State governments</td>
<td>49%</td>
</tr>
<tr>
<td>Large hospital systems</td>
<td>44%</td>
</tr>
<tr>
<td>Military support for a resident’s commitment to serve as a physician in the military for a period of time</td>
<td>40%</td>
</tr>
<tr>
<td>Finances from the general fund of the teaching hospital that sponsors the residency program</td>
<td>39%</td>
</tr>
</tbody>
</table>

FIGURE 4. LEVEL OF GME FUNDING

FIGURE 5. PRESERVATION OF RESIDENCY PROGRAMS BASED ON NEED OF SURGICAL SPECIALTY

V101 No 6 BULLETIN American College of Surgeons
another example of the federal government questioning the value of spending for GME funding, President Obama’s FY 2016 budget called for reducing the IME adjustment by 10 percent.\(^7\)

If GME funding were to be cut, it would be important to ensure that the specialty mix of physicians produced by the GME system would be compatible with the nation’s health care needs. Governors were asked whether they felt the ACS should function in an advisory capacity to determine which surgical specialties or subspecialties are most needed, so that if GME funding is decreased, decisions could be made to preserve residency positions in those disciplines. Of the respondents surveyed, 79 percent either agreed or strongly agreed that the ACS should play this role. Only 10 percent of the respondents either disagreed or strongly disagreed that the ACS should act in this capacity, and 11 percent were neutral on this issue (see Figure 5, page 30). Answers to this question did not vary based on age, type of surgical practice setting, or type or size of hospital.

Another goal of GME should be to produce a physician workforce that meets the health care needs of all areas or regions of the U.S. Some residency programs are more likely than others to produce physicians who practice in areas of greater need. The data show that many physicians will ultimately practice in an area near where they completed their residency training. In a report from the Association of American Medical Colleges, 52.9 percent of individuals who completed residency training in an Accreditation Council for Graduate Medical Education program from 2005 through 2014 were shown to be practicing in the state where they completed their residency training.\(^8\)

If GME funding were to decrease nationwide, one could argue that residency programs that produce physicians who more frequently practice in areas of need should be preserved. Governors were asked whether they felt that the ACS should function in an advisory role to determine which areas or regions need surgeons more than others, so that if GME funding is decreased, it would be possible to preserve residency positions in areas of greater need (see Figure 6, this page). Of the respondents surveyed, 63 percent said they agreed or strongly agreed that the ACS should function in an advisory role, 21 percent were neutral on the issue, and 16 percent either disagreed or strongly disagreed that the ACS should function in an advisory role. Answers were invariable based on age, practice setting, or type or size of hospital.

**Importance as a legislative issue**

Any significant changes in the current GME funding system will require changes in legislation. Governors were asked how high on its list of priorities the ACS Division of Advocacy and Health Policy should place GME. Of the respondents, 45 percent listed GME as an extremely high priority, 40 percent as a high priority, and 13 percent as a moderate priority. Only 2 percent of the respondents indicated that GME was a low priority, and none responded that it was a very low priority (see Figure 7, page 32).

Answers to the question of how the ACS should prioritize GME funding were similar regardless of the age of the respondent. When answers were examined based on the type of surgical practice setting, a higher percentage of academic surgeons answered “extremely high priority” in comparison with surgeons in other practice settings. A higher percentage of Governors in private practice answered “high priority” when compared with those in other practice settings. Based on
type or size of hospital, a higher percentage of ACS Governors in academic facilities or larger hospitals answered “extremely high priority,” and a higher percentage of surgeons in smaller hospitals answered “high priority.”

Conclusion

ACS Governors clearly have significant concerns about GME. Of the survey respondents, 80 percent said that GME funding should be increased. This sentiment was expressed regardless of the type of practice, be it academic, hospital-based, or private practice.

Governors also suggested that the College and other stakeholders explore alternative funding options for GME funding, specifically insurers, for sources of additional funding. It was clear that respondents felt that simply having teaching hospitals supplement GME funding from their general fund was not a good option as an alternative source of GME funding.

Furthermore, the Governors indicated that the ACS should play an advisory role, first in determining which surgical specialties are most needed so that residency positions in those disciplines can be preserved, and second, to help determine which parts of the U.S. have the greatest need for access to surgical care so that residency positions can be sustained in these areas.

Survey results suggest that ACS Governors would encourage the ACS Division of Advocacy and Health Policy to keep GME funding at the forefront of its legislative agenda. Only 2 percent of the respondents indicated that this issue is a low priority.

The ACS leadership can use the information provided by the 2015 Governors Survey to make GME a program that produces surgeons who are prepared to provide for the health care needs of our nation.

REFERENCES

Presentation of the Great Mace to the ACS by Surgeons of Great Britain, 1920.
(Left to right): Sir William Taylor, KBE; George E. Armstrong, MD, FACS; Sir Berkeley Moynihan, KCMG, CB; Albert Carless, CBE; Francis A. C. Scrimger, VC.
“Who can foretell the extent of the influence the American College of Surgeons may exert in the coming years upon the profession of surgery in Canada and the United States? If it is rightly used, it may be more far-reaching in its effect than even the most sanguine among us now dares hope. With the confidence and the united and enthusiastic support of the best element in the profession... its influence and power for good will be unlimited.”

J.M.T. Finney, AB, MD, FACS, 1913
American College of Surgeons First Presidential Address
In the photo on this page, we are presenting the Distinguished Organization Award to Norman M. Rich, MD, FACS, and Eric Elster, MD, FACS, at the ACS Foundation 2015 Donor Recognition Luncheon. They were representing the department of surgery at the Uniformed Services University of the Health Sciences, which received the award in honor of its philanthropic funding to help establish a partnership between the College and the Military Health System.

On that day, we also had the honor of welcoming and thanking many of you in person for your support of the ACS Foundation. If you are a donor and were unable to attend, we hope you too know how appreciative we are of your generosity to the College.

During the luncheon, it was shared with the audience of donors that while philanthropy has been a part of the College since its founding, this year is the 10th year of operation for the ACS Foundation. We are pleased to report that over these 10 years, $26 million in philanthropic-sourced income has been distributed to support nonrevenue priorities of the College.

For example, gifts to the Sustaining Fund have funded meaningful benefits, such as academic awards that support surgeons seeking specialized knowledge, surgical volunteerism through Operation Giving Back, lifelong learning for surgeons at all career phases, and educational resources that empower patients before and after their procedures. Many other initiatives—all in the mission of optimal patient care—are active today in large part because of philanthropy, like the ACS Military Health System Strategic Partnership. Read more about the Partnership later in this report.

The impact of your support on the College’s mission cannot be overstated. You are ensuring that the legacy of surgical heroes and the advancement in patient care continue on…inspiring the next generation of surgeons and helping save lives every day.

David B. Hoyt, MD, FACS
ACS Executive Director
Amilu Stewart, MD, FACS
ACS Foundation Chair
2015 AT A GLANCE:
GIFT INCOME REPORT
FISCAL YEAR ENDING JUNE 30, 2015

TOTAL CONTRIBUTIONS:
$1,687,848

TOTAL EXPENDITURES FROM CURRENT CONTRIBUTIONS AND INVESTED FUNDS:

- Scholarships: $1,372,368
- Archives, Patient Education, Operation Giving Back, Trauma Education and Research, and Other Nonrevenue Programs: $1,008,752
- Lectureships and Other Awards: $271,809

THANK YOU
for Your Investment in the Mission!
IMPACT OF YOUR GIFTS

SUSTAINING FUND

Gifts to the Sustaining Fund support the ACS programs of greatest need. Examples are as follows:

- Travel costs for international surgeons to gain skills and training by attending Clinical Congress

- Creation and distribution of patient education materials, on subjects such as wound management, to hospitals to empower patients and their caregivers to provide proper home care

- Strategic planning for greater volunteerism outreach through Operation Giving Back

- Helping surgeons better track outcomes through the Surgeon Specific Registry (SSR)

OPERATION GIVING BACK

Russell E. White, MD, MPH, FACS, FCS (EASC), a 2012 ACS/Pfizer Humanitarian Award Winner (above), has focused his career on improving surgical care in Bomet, Kenya.

KEEP THE IMPACT ALIVE

Visit facs.org/acsfoundation
TRAUMA

In 2015, contributions to the ACS Trauma Program helped fund the full promulgation of the Advanced Trauma Life Support® (ATLS®) program in Mongolia, including translation of all the materials into Mongolian.

ATLS presents a concise approach to assessing and managing multiple injured patients. The course presents doctors with knowledge and techniques that are comprehensive and easily adapted to fit their needs.

RURAL SURGERY

The ACS hosted a regional skills course, Advanced Endoscopic Skills Training for Rural Surgeons, on May 8, 2015. This pilot course explored the feasibility of offering smaller, regional courses to increase accessibility to surgeons practicing in rural areas. Course participants came from North Dakota, South Dakota, Montana, Illinois, and Manitoba, Canada. The curriculum covered the topics of advanced polypectomy techniques, endoscopic dilation and stent placement, management of upper gastrointestinal hemorrhage, and removal of esophageal foreign bodies.
Philanthropic support has recently helped to launch a new initiative with the goal of better providing care to men and women serving in the U.S. Armed Forces. The Uniformed Services University of the Health Sciences (USU) department of surgery has provided generous funding to help establish a partnership between the ACS and the Military Health System.

During the ACS Clinical Congress 2014 in San Francisco, CA, the ACS and the Military Health System first met to discuss this strategic alliance. The goals are expanding education and training for military surgeons, sustaining systems established during times of war, ensuring military surgeon readiness, and increasing quality and patient safety in the Military Health System. A panel session at the Clinical Congress 2015 provided a one-year update on the initiative.

“For thousands of years, the battlefield, unfortunately, has been the classroom where the greatest medical advances have been made,” said Jonathan Woodson, MD, FACS, Assistant Secretary of Defense for Health Affairs. “Working with the ACS, we can translate these learnings to the private sector. But knowledge sharing is a two-way street, and our relationship with ACS is as important in peacetime as it is in wartime.”
Panelists highlighted progress made over the past year of the partnership, including:

- Efforts to expand the ACS National Surgical Quality Improvement Program (ACS NSQIP) to additional military hospitals by 2016, including development of an ACS NSQIP tool kit to help hospitals implement the program, initiate improvement, and establish systems and culture to sustain improvement over time.

- Work with the ACS Committee on Trauma to capture lessons learned from wars of the past decade and establish lasting systems that can be readily deployed in times of war.

- Revival of the Excelsior Surgical Society, a group for military surgeons formed after World War II. The new Excelsior Surgical Society held its first meeting in 2015, and planning for a 2016 annual meeting has begun.

Over the coming years, additional efforts will focus on creating an “optimal resources” book for military trauma, similar to the ACS Resources for Optimal Care of the Injured Patient book created for private sector trauma centers.

Other efforts will include partnering with the ACS Division of Education to share education and training resources and identify the best way to prepare new military surgeons to serve in combat. The latter may include partnerships with high-volume private sector trauma centers across the U.S.

“Our number one priority is to sustain the lessons learned by the men and women who put themselves in harm’s way,” said Jay Johannigman, MD, FACS, Cincinnati, OH.

Eric Elster, MD, FACS, Bethesda, MD, professor and chair, department of surgery at USU and Walter Reed National Military Medical Center, and Military Health System Strategic Partnership American College of Surgeons Executive Co-Chair, agreed.

“We can’t wait five or 10 years to be prepared. We need to be prepared tomorrow.”
BENJAMIN LEVI, MD, ACS Associate Fellow, was presented with the 2015 Jacobson Promising Investigator Award for his innovative surgical research. He is director of the Burn/Wound and Regenerative Medicine Laboratory and assistant professor in surgery, University of Michigan.

To date, Dr. Levi’s research and clinical efforts have resulted in numerous awards and honors. He has received career development awards and grants from the National Institutes of Health, American Association of Plastic Surgery, American Association of the Surgery of Trauma, U.S. Department of Defense, Plastic Surgery Foundation, and Association for Academic Surgery.

His mentor, Stewart C. Wang, MD, PhD, FACS, stated, “Dr. Levi is one of the most important young investigators in the areas of trauma and stem cell biology and in the surgical care of burn patients. He is the only person I know who can admit a burn patient, direct their critical care, perform their acute operations, and subsequently perform their reconstructive procedures while taking ideas to his basic science laboratory to improve all of these steps. His path-breaking work has opened a new area for pharmaceutical intervention in the progression of heterotopic ossification. This fundamental discovery research is coupled with extraordinary clinical care of patients and ensures that trauma and burn patients under his care are provided with the most informed management of their disease.”
SHUDDHADEB RAY, MD, MPH

“The ACS Emerson Scholar-in-Residence Fellowship award has been productive and fulfilling to my surgical career. I spent my time pursuing activities in five main academic areas: a master’s degree in Population Health Sciences, patient safety and quality improvement projects, and education at Washington University, training and research in surgical ethics, clinical research in minimally invasive and thoracic surgery, and finally, a growing interest in global surgery. In sum, the opportunities given to me as an ACS scholar have been life-changing.”

Dr. Ray is completing a general surgery residency at Washington University, St. Louis, MO.

KIMBERLY J. RIEHLE, MD, FACS

“As a former recipient of both an ACS Resident Research Award and the Louis C. Argenta Award, I wanted to let the ACS Scholarship Selection Committee know that I just received a fundable score on my most recent National Institutes of Health (NIH) grant. I want to express my sincerest appreciation to the ACS for all of their support over the years. The support of the College is what facilitated my ability to receive this NIH award. Thank you!”

Dr. Riehle is a pediatric surgeon at Seattle Children’s Hospital, WA.
After undergoing throat surgery as part of his cancer treatment, Clint B. temporarily needed to rely on a feeding tube to maintain proper nutrition. With a PhD in psychology and after years of conducting research in technology, gaming, and learning outcomes, Dr. B was surprised to find that he and his caregiver were woefully ill-prepared for his feeding tube experience.

“We ended up being unnecessarily frustrated, worried, and stressed during an already difficult time. This led to several calls and visits to health care providers. We felt our anxiety and these visits could have been avoided had we been adequately prepared,” Dr. B. stated.

In partnership with the ACS Foundation, the ACS Division of Education has received generous grant funding for patient education programs and sees this resource as a way to not only improve surgical outcomes and the quality of life for surgical patients but also provide an additional benefit to ACS surgeon members. These educational grants allow the kits to remain affordable.

In this latest venture of feeding tube instruction, the ACS Surgical Patient Education Program will produce, distribute, and evaluate 2,500 home skills kits over the next two years funded by an educational grant from Applied Medical Technology, Inc. (AMT).

Applied Medical Technology is proud to partner with the ACS to support patients and their surgical caregivers with evidence-based education materials on feeding tube management post-discharge. AMT is committed to the care of their patients through education, innovation, quality products, and building customer loyalty. We have focused on enteral feeding for over 25 years and it is our core concern and business,” AMT founder George Picha, MD, FACS, said.

The ACS Foundation’s Sustaining Fund, which supports ACS programs that are not fully funded, is an additional source of philanthropic contributions.

“The Surgical Patient Education Program, with its emphasis on an optimal care experience for patients, falls perfectly within the crosshairs of the Sustaining Fund’s directive,” according to Shane Hollett, Executive Director, ACS Foundation.
In 2015, the ACS Foundation Board of Directors established the Distinguished Organization Award to recognize the unique philanthropic partnerships between the ACS and organizations. The inaugural Distinguished Organization Award was presented to the Norman M. Rich Department of Surgery at Uniformed Services University of the Health Sciences (USU). Through the advocacy of Norman M. Rich, MD, FACS, a retired U.S. Army Colonel and the Leonard Heaton and David Packard Professor at USU, the USU Surgical Associates Military Professor of Surgery Fund has been established at ACS. This funding will be used to improve surgical care for current and former members of the U.S. Armed Forces and their families and to ensure the professional standing of surgeons in the military and public health services.

The ACS Foundation proudly acknowledges the philanthropy of individuals who have distinguished themselves through their extraordinary investment in the mission of the College.

We are pleased to honor them with the Distinguished Philanthropist Award.

**RECIPIENTS**

Danny Robinette, MD, FACS, and Paula Robinette (2015)

Patricia R. and W. Gerald Austen, MD, FACS (2014)

Dr. Elias S. Hanna (2013)

Dr. Murray F. Brennan (2012)


Dr. and Mrs. Norman M. Kenyon (2010)

Dr. and Mrs. Richard B. Reiling (2009)

'Dr. Paul F. Nora (2008)

'Dr. and Mrs. Maurice J. Jurkiewicz (2006)

Dr. Robert W. Hobson II, and Mrs. Joan P. Hobson (2005)

'Drs. C. Rollins and Margaret H. Hanlon (2004)

'Dr. William W. Kridelbaugh (2003)

Dr. and Mrs. Robert E. Berry (2002)

Dr. Pon Satitpunwaycha (2001)

Dr. and Mrs. Paul H. Jordan, Jr. (1999)

Dr. and Mrs. LaSalle D. Leffall, Jr. (1998)

Dr. and Mrs. Eric Lincke (1997)

Dr. and Mrs. Neil C. Clements (1996)

Dr. and Mrs. Scott W. Woods (1995)

The Abdol Islami Family and Foundation (1994)

Dr. Julius H. Jacobson II (1993)

'Dr. Oliver H. Beahrs (1992)


'Dr. John Conley (1990)

'Dr. Armand Hammer (1989)

'Deceased
2015 FELLOWS LEADERSHIP SOCIETY AWARD RECIPIENTS

MAYNE HERITAGE SOCIETY (Legacy/Planned Gifts)
Charles and Carol Balch
Dr. Marcel C. C. Machado
Drs. Roger S. Foster, Jr., and Baiba J. Grube

FOUNDERS CIRCLE (cumulative gifts totaling $75,000 to $100,000)
Drs. Samuel P. and Leaena N. Reyes

PRESIDENTS CIRCLE (cumulative gifts totaling $50,000 to $75,000)
Dr. Mehmet Ali Haberal

REGENTS CIRCLE (cumulative gifts totaling $25,000 to $50,000)
Dr. David J. Brown
Dr. and Mrs. Basil A. Pruitt, Jr.
Dr. Rahul Shah and Dr. Banu Karimi-Shah
Dr. Jon A. van Heerden

GOVERNORS CIRCLE (cumulative gifts totaling $10,000 to $25,000)
Dr. Nicole Baril
Arthur Cooper, MD, FACS
Brian J. and Lisa C. Daley
Michael and Laurie Ewald
Dr. Edwin S. Gerrish and Dr. Catherine C. Gerrish
Gregory J. Kechejian, MD, FACS
Dr. Trevor J. McGill
David and Hilary Parry
Dr. David W. Roberson
Dr. David J. Terris
Dr. David S. Zamierowski

CORPORATE AND FOUNDATION GIVING

REGENTS CIRCLE (cumulative gifts totaling $250,000 to $500,000)
Medtronic
Smith & Nephew

Dr. Stewart presents the Governors Circle award to Drs. Edwin and Catherine Gerrish.

Dr. Stewart with Komel Grover, Senior Director, Scientific Communications/Strategic Development at Smith & Nephew and Kathleen Heneghan, ACS Division of Education.
Dr. Cochran’s first gift to the College was to the Thomas R. Russell, MD, FACS, Scholarship Fund, a named scholarship to honor Dr. Russell’s commitment to research pursuits of young surgeons. Dr. Cochran’s annual gifts have now led her to include the College in her estate plans, citing her gift as part of her civic responsibility as a surgeon and leader.

Interestingly, Dr. Cochran is the first member of the Young Fellows Association to confirm her intent of including the College in her bequest.

Dr. Cochran currently serves as an ACS Governor, an ACS Foundation volunteer, and is Vice-Chair of the ACS SurgeonsPAC Board.

“I have the ACS Foundation named in my trust to receive a portion of my estate when I die. (Yes, you can do that!) And since I don’t anticipate having any human heirs, I have named several organizations in my trust. For me, this is an important way to leave a durable legacy.

The College does so many things to promote our profession and to enhance the care of our patients; I hope I can convince others to share my philanthropic perspective.”

CONTINUE TO MAKE AN IMPACT

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to learn about all the ways to give
SUPPORT THE ACS—SAVE LIVES

Becoming a philanthropic partner of the ACS is one of the best ways to make a lasting mark on the profession.

The ACS Foundation is the philanthropic arm of the College, and its purpose is to secure the resources to advance the priorities of the College and its mission of ensuring the best patient care. It is because of your generosity that the ACS is able to provide funding for 50 annual scholarship and research fellowship awards, patient education outreach, support for Operation Giving Back, advocacy for the profession, and more.

You can donate to the Sustaining Fund, which supports the area of greatest need or emerging opportunity, or you can designate your gift to a number of the College’s programs such as Scholarships, Trauma, Cancer, and Operation Giving Back—all helping to save more lives.

THE FELLOWS LEADERSHIP SOCIETY

Join a philanthropic community of generous supporters who invest in optimal patient care.

The major gift society of the ACS Foundation, the Fellows Leadership Society, offers increased donor recognition, an invitation to an annual luncheon, and use of the hospitality center during Clinical Congress. The entry level is $1,000 per year; a commitment of $10,000 or more will provide even more benefits and can be contributed in multiyear installments.

APPRECIATED SECURITIES

Gifts of appreciated stock can offer significant tax savings.

Contact your broker and provide required instruction authorizing the transfer of stock to the American ACS. Call the ACS Foundation at 312-202-5338 for transfer instructions.
PLANNED GIFTS

Did you know there are many ways to give to the ACS Foundation besides writing a check?

With a little planning, you can include a gift to us within your overall estate or financial plans. These types of gifts are known as “planned gifts,” and they often provide you with two main benefits:

- Your gift is generally deferred until after your lifetime, so your current income is not affected.
- With many planned gifts, you have the right to change your mind at any time throughout your lifetime, if necessary.

The ACS Foundation staff would be honored to discuss a possible deferred gift with you. There are a number of giving vehicles you may consider, including charitable gift annuity, retirement plan, and insurance.

But the easiest way is to name the ACS as a beneficiary by including the official legal bequest language for the ACS Foundation:

“I give and bequeath to the ACS Foundation, Chicago, Illinois, the (sum of $_____ or _____ percent of the rest, residue, and remainder of my estate). This gift shall be used to further the educational mission of ACS in such a manner as the Board of Regents of the College may direct.”

ANNUAL GIFTS

You can donate online at facs.org/acsfoundation or by sending a check or money order, payable to:

American College of Surgeons Foundation
633 N. Saint Clair St.
Chicago, IL 60611-3211
The transition to the 10th revision of the International Classification of Diseases (ICD-10) has gone relatively smoothly, and some general surgery practices and departments of surgery already are asking private consultants for audits to verify that codes are being selected and submitted accurately to the Centers for Medicare & Medicaid Services. The results of these reviews indicate that, although most general surgeons are documenting and coding for ICD-10 at a basic level, they are underusing or overlooking several essentials. This column discusses some common problems with the transition to ICD-10 codes and solutions for correcting these issues.

**Specificity and laterality**

An overarching finding in recent general surgery coding and documentation audits is a lack of specificity resulting from the use of unspecified codes and the failure to code for laterality. When treating a breast cyst, for example, the surgeon knows whether it is on the right or left breast, but he or she has to document the position so that the staff knows how to code for it and the payor knows how to reimburse for it. Similarly, when performing a lumpectomy for breast cancer, the surgeon needs to report the exact location (at the nine o’clock position, or in the upper, outer quadrant, for example); otherwise, the specific location will be indiscernible.

General surgeons in particular can improve their documentation for operating on neoplasms. For example, when coding for colon cancer, coders need to know which specific part of the colon was involved, such as sigmoid, ascending, or descending. The exact location is essential; providing a code for colon cancer alone is too imprecise.

These types of deficiencies can have a significant effect on reimbursement. Failing to code for laterality may result in a rejected claim and thereby delay payment. A lack of specificity (not specifying which part of the colon was involved, for example) won’t necessarily cause a denial—at least not until October 1, when the one-year grace period for surgeons to transition to the use of correct ICD-10 codes ends. This year, many payors are passing through claims that lack some of this detail to give physicians a chance to learn the new system. However, payors will likely tighten their claims auditing systems this fall, at which point either the claim will be denied completely or payment will be lower than if more specific codes had been used.
That said, physicians are at times justified in using an unspecified ICD-10 code. When seeing a patient for the first time, for example, the specific diagnosis may be unknown. If the patient has a lesion and a biopsy is ordered to determine whether it is benign, it is acceptable to code the claim as “unspecified.” However, once the results are back from the lab, the claim should specify whether the lesion is malignant or benign.

Comorbidity codes
Many surgeons document the primary diagnosis and nothing else, assuming that if they are getting properly reimbursed using only the primary diagnosis, it is unnecessary to code for any other comorbidities. This thinking is shortsighted. Medicare and other payors are building the reimbursement databases of the future by using the diagnosis codes that physicians submit today. Coding for comorbidities, especially those that potentially affect patient care, offers a more complete picture of the patient’s health status and the complexity of care delivered. When comorbidities as secondary diagnoses are omitted, the payer sees only part of the patient’s story.

If a surgeon provides only part of the story, he or she likely will receive reduced reimbursement in the future. As Medicare and other payors move toward value-based reimbursement, comorbidity diagnoses will matter a great deal, and the number of comorbidities and other elements of a patient’s history are likely to affect the ability of surgeons and hospitals to negotiate bundled payments.

Payors also use the primary and comorbidity diagnoses to create and modify medical policies, as well as to determine whether a procedure was medically necessary.

Personal history codes
Personal history diagnosis codes are essential to accurate coding. Every personal history code should be reported and documented. If the surgeon removes a cancerous tumor from a patient with previous history of cancer, with or without removal of an organ, all of the cancer sites in the patient’s history should be reported.

Oncologists typically are good at reporting this history, but general surgeons frequently code only the primary site. “The patient has secondary lung cancer” is not enough information; coding staff needs the surgeon to report all of the sites, not just the primary location. This level of documentation is essential to the staff’s ability to code and bill all diagnoses.

Surgical coding staff sometimes think they cannot bill a diagnosis code that is not in the diagnosis list on the operative report. This false assumption causes coders to overlook many valid diagnoses because they do not read the report, which costs physicians money.

For example, if a surgeon performs an open abdominal procedure and finds that the gallbladder is thickened and inflamed and must be removed, the operative note should include the finding of acute cholecystitis (K81.0) and a description of the cholecystectomy performed. If this finding is omitted from the postoperative diagnosis list, staff should code it after finding it in the documentation.
As another example, if a patient has metastatic rectal cancer that has spread to the right lung, the brain, and the right adrenal gland and presents for partial colectomy with anastomosis, the surgeon should report the rectal cancer (C20) to support the procedure, as well as the metastatic sites: C78.01 for the right lung, C79.31 for the brain, and C79.71 for the right adrenal sites. If they are pertinent to the present encounter, report the patient’s personal history of cancer, chemotherapy, and radiation therapy.

Personal history codes also can support complexity and may support additional payment in some cases. If the surgeon performs abdominal surgery on a patient who had a prior partial colectomy and encounters dense adhesions that make repairing the site more complex, the coding staff could append the Current Procedural Terminology (CPT)* code with modifier 22 to indicate that the procedure was more complex or complicated than usual.

Modifier 22 is used to indicate that the case required more work than normal and that the physician should be paid for this increased work. Adding diagnosis codes for absence of part of the colon (Z90.49) and peritoneal adhesions (K66.0) may help support the additional fees charged, but this additional information must be documented in your report.

Physicians must tell the patient’s full story in the operative note or documentation for staff to research all of the codes that fully describe the case. Three pages of notes on the patient are not necessary; one or two detailed sentences or a few descriptive words that will help staff choose codes with the right specificity should suffice (see sidebar, page 51).

**Overlapping sites**

ICD-9 included codes for contiguous sites. In ICD-10, those codes were eliminated and replaced with overlapping sites codes. If the patient has a mass in the middle to lower esophagus, it is considered overlapping because it is not in the top, nor the middle, nor the lower. Instead of coding for middle and lower, choose one code for overlapping lesion.

Overlapping sites codes are an unusual concept in ICD-10 because they provide less specificity, while ICD-10 overall is driving more specificity. For example, if a patient has a malignant tumor in the colon that begins in the ascending colon and ends in the transverse colon, do not choose C18.2 (ascending colon) and C18.4 (transverse colon). The correct code to describe this is C18.8 (malignant neoplasm of overlapping sites).

In the neoplasm table in ICD-10, the overlapping codes are broken down by site and morphology. Some organs are further broken down to specific portions of an organ, like upper outer quadrant of the breast or lower lobe of the lung. If a primary malignancy overlaps two or more sites that are contiguous, one code should be reported from the subcategory of the code with a fourth character of .8 (overlapping lesion) unless a specific combination code is available.

If the anatomic sites overlap, use overlapping lesion codes rather than codes for each distinct area. The choice of overlapping code series will depend on the part of the body.

**Conclusion**

While ICD-10 has many more codes than ICD-9, with attention to documentation, ICD-10 coding is manageable. Be as descriptive as possible in ICD-10 coding. Everything done to care for the patient should be documented in the operative report. Awareness of issues such as severity, laterality, specific location, chronicity, causation, and treatment encounter all increase the specificity of ICD-10 codes. ♦
This month’s column highlights two important resources that add to clinical expertise and improve the quality of your patient care. The *Journal of the American College of Surgeons* (*JACS*) is the premier surgical journal, which is available as a benefit to all members of the American College of Surgeons (ACS); this column outlines the ways in which you can interact with *JACS* and use it to meet your continuing medical educational (CME) needs.

Just as *JACS* provides readers with important patient care research and content, the College’s National Surgical Quality Improvement Program (ACS NSQIP®) Surgical Risk Calculator can help you make evidence-based decisions about treatment options. This tool can serve as an important resource to enhance patient interactions in the office and at the bedside.

**JACS**
The College’s official scientific publication, *JACS* is a monthly peer-reviewed journal containing original contributions on all aspects of surgery. Free electronic access to *JACS* is a high-value benefit for all ACS members and can be accessed online at [www.journalacs.org](http://www.journalacs.org) or on the go via the mobile app available in the Apple Store and on Google Play.

**Valuable resource for CME**
*JACS* is widely recognized as one of the top surgery journals in the world. One of the key indicators of a scientific journal’s importance and relevance to the medical community is its impact factor. In 2015, the impact factor for *JACS*—reflecting the frequency of average citations for articles published in 2012 and 2013—was 5.122, representing a more than 95 percent increase over the last 10 years. Along with this jump, the number of original scientific manuscripts submitted to *JACS* has increased significantly.

The *JACS* CME program is available online as a free benefit to all ACS members at [jacscme.facs.org](http://jacscme.facs.org), and is the largest CME program offered by the College. Online quizzes are available for the last 24 months of publication, and members can earn three or more credits for each month by taking exams covering a variety of relevant surgical topics. In 2015, 3,566 individual test takers—the highest number of users to date—earned a total of 82,736 credits.

**Embracing the future**
Although the College continues to mail the print version of *JACS* to Fellows who want to receive a physical copy, *JACS* has begun the process of transforming from a primarily print publication to an electronic journal that meets the needs of surgeon-readers in the 21st century. The *JACS* staff is working to provide ease of access to online, full text articles for ACS members and to enhance the mobile application and website, as well as provide more supplemental material that cannot be presented in print, such as video and datasets.

The *JACS* Twitter feed—[@JAmCollSurg](https://twitter.com/JAmCollSurg)—continues to feature tweets on research articles, coverage of *JACS* articles in the news media, and important content trending on social media. In the past year, the number of *JACS* Twitter followers has increased by more than 400 percent.

Recently, the International General Surgery Journal Club, a popular monthly Twitter discussion forum, featured two *JACS* articles—one on resident duty hours and one on leadership styles and team behavior in the operating room. (For more information about Twitter and journal clubs, see related article, page 19.)

*JACS* also recently began collaborating with the Resident and Associate Society of the ACS (RAS-ACS) via a quarterly literature appraisal forum.
discussing JACS articles. This project exposes young surgeons to JACS content while encouraging direct social media participation through selecting the articles and discussing them on Facebook. JACS also worked with the RAS-ACS to publish the winning essays from their Spectacular Cases Session at Clinical Congress 2015.

Special issues
JACS has partnered with three distinguished surgical associations to produce special issues that highlight papers from their annual meetings. Each year, the April issue is devoted to papers from the Southern Surgical Association, the June issue to the New England Surgical Society, and papers from the Western Surgical Association are published in July. Each fall, JACS also publishes all of the abstracts from the ACS Clinical Congress. In addition to the Scientific Forum abstracts published in the September supplement in print, JACS now publishes the remainder of the abstracts from each Clinical Congress online, including Scientific Forum Papers and Scientific Poster Presentations. These abstracts are accessible via the ACS mobile app.

111 years of keeping surgeons informed
By the end of the 19th century, the practice of surgery had been transformed by “anesthesia, asepsis, and a changing understanding of disease.” As an outgrowth of these medical breakthroughs, in 1905 the successful Chicago, IL, gynecologic surgeon, Franklin H. Martin, MD, FACS, launched the monthly peer-reviewed journal Surgery, Gynecology & Obstetrics (SG&O), and served as its managing editor and publisher for 30 years. Dr. Martin envisioned that the journal would be for all surgeons and prospective surgeons throughout the U.S. and would focus on educating the practicing surgeon rather than the academic elite. To further this aim, in 1910 SG&O announced the first Clinical Congress, and these annual meetings formed the basis of the founding of the ACS in 1913. In 1919, SG&O became the College’s official scientific journal, and 75 years later was renamed the Journal of the American College of Surgeons. Even as JACS has evolved in its now 111-year history, it continues Dr. Martin’s vision of educating general surgeons and providing its readership “the highest quality rapid retrieval of information relevant to surgeons.”*

ACS NSQIP Surgical Risk Calculator: A powerful decision-making aid
The ACS NSQIP Surgical Risk Calculator (www.riskcalculator.facs.org) quickly and easily estimates the risks of postoperative complications for thousands of surgical operations based on a patient’s demographics, comorbidities, and the type of procedure to be performed. As such, it has value as a decision-support aid and informed-consent tool, benefiting patients, surgeons, and other providers in the discussion of the risks of surgery and whether surgery is the best possible treatment option for a specific individual. The calculator also may be used to help plan necessary postoperative care, including the likely need for intensive care, cardiac monitoring, and so on.

The ACS NSQIP Surgical Risk Calculator currently uses a platform based on data from more than 2.7 million patient records. These data are collected by trained and audited surgical clinical reviewers in approximately 600 ACS NSQIP-participating hospitals. Almost 2,000 different operations as

defined by Current Procedural Terminology (CPT) codes are available in the calculator. Prediction equations are based on a rigorous statistical methodology and have been thoroughly evaluated in terms of discrimination and calibration—statistical features that describe the quality of prediction.

To date, the ACS NSQIP Surgical Risk Calculator has been used to estimate risk in more than 1 million patients. In May 2016, the ACS NSQIP Risk Calculator underwent numerous advances, including the addition of new postoperative outcomes, improved analytics, and redesign of the website.

Using the Surgical Risk Calculator
Figures 1 through 4 (this page and pages 56 and 57) show the main sections of the Surgical Risk Calculator. These sections address: (1) introductory and disclaimer statements; (2) entry of patient-specific information; (3) estimates of risk for each outcome; and (4) reporting options.

The calculator allows users to enter the CPT code for the planned operation and 19 standard preoperative risk factors. The Surgical Risk Calculator Web platform provides simplified definitions and instructions so that surgeons and patients...
can successfully enter data and interpret the results. Based on these risk factors and the prediction equations embedded in the calculator, the user then sees estimated risks for each of approximately 15 postoperative outcomes, including mortality, morbidity, and complications specific to the patient.

In addition to the patient’s risk for each outcome, average risks for all patients in the database who have undergone that specific operation are provided for comparison (see Figure 3, this page). This comparison allows the patient to put his or her predicted risks into the context of other patients who have undergone the procedure. The patient also receives estimates for their length of hospital stay, likelihood of being discharged to a nursing or rehabilitation facility, and risk of hospital readmission.

The surgeon, meanwhile, has the opportunity to adjust the reported risk using a Surgeon Adjustment Score if he or she believes the estimates are inappropriate given the surgeon’s evaluation and experience. The surgeon might use this function if, for example, the patient has a clinically significant risk factor that is not included in the standard list and which affects the likelihood of postoperative complications.

Users have found the Surgical Risk Calculator to be helpful in the informed consent process, providing a platform for objective shared decision making, as well as for documenting the shared information with a hard copy printout or e-mail. The document includes all the risk results, definitions, and disclaimers necessary for the patient to study and absorb the information during as well as after the clinic visit.

Since the ACS NSQIP Surgical Risk Calculator was released in 2013, several new outcomes measures common to all operations have been added, including those mentioned earlier, such as length of stay, discharge to nursing or rehab center, and risk of readmissions. The measure most recently added is procedure-specific.
complications for colon resection, including risk of anastomotic leak and ileus. When the surgeon enters a CPT code specific to colectomy, the calculator will automatically generate these outcomes.

Future directions
Although the Surgical Risk Calculator was conceived to contribute to surgeons’ ability to evaluate and assess risk, as well as to provide objective numbers to inform patients about that risk, the calculator continues to evolve. ACS NSQIP staff intends to continue to add more outcomes, particularly procedure-specific outcomes, and to improve statistical modeling whenever possible. New outcomes will be added with their appearance in ACS NSQIP quality improvement benchmarking models, and the predictor variable sets will be made more concise when appropriate.

At a technical level, while the Risk Calculator’s predictive accuracy repeatedly has been shown to be excellent, new methods are being implemented to incorporate mathematical recalibration processes that will further improve prediction. Finally, plans are in development to release Surgical Risk Calculator versions in the near future for pediatric patients using the ACS NSQIP Pediatric dataset and for bariatric surgery patients using the ACS Metabolic and Bariatric Surgical Accreditation and Quality Improvement Program dataset. For more information, contact Mark Cohen, PhD, at mcohen@facs.org.

Both of these important programs are available as free benefits of your membership in the ACS. Be sure to take advantage of all they have to offer.

BIBLIOGRAPHY
Support surgical time outs on National Time Out Day—and all year long

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

The Association of periOperative Registered Nurses’ (AORN) National Time Out Day is an initiative that calls for surgeons and surgical teams to hit the pause button before starting an operation and review the importance of creating a safe environment for every patient, every time. The initiative also contributes to the development of a safety culture for surgical teams by introducing each other, initiating a dialogue, and enhancing the relationships of the entire team so that every member feels comfortable speaking up during the entire procedure.

This year’s National Time Out Day is Wednesday, June 8. And with the national incidence rate for wrong patient, wrong site, and wrong procedure surgeries estimated as high as 40 a week, according to the Joint Commission Center for Transforming Healthcare, the need for surgical teams to use time outs effectively is more important than ever.

Avoiding sentinel events
A total of 111 sentinel events involving wrong patient, wrong site, and wrong procedure surgeries estimated as high as 40 a week, according to the Joint Commission Center for Transforming Healthcare, the need for surgical teams to use time outs effectively is more important than ever.

This year’s National Time Out Day is Wednesday, June 8. And with the national incidence rate for wrong patient, wrong site, and wrong procedure surgeries estimated as high as 40 a week, according to the Joint Commission Center for Transforming Healthcare, the need for surgical teams to use time outs effectively is more important than ever.

The Joint Commission identified several factors that may contribute to this failure, including:

• Having multiple surgeons involved in one case, such as when multiple procedures are performed on the
An effective time out is the last line of defense against an adverse event of the nature described in this month’s column. These events may happen infrequently, but when they do, they can have drastic consequences for patients.

Ensuring effectiveness of time outs
An effective time out is the last line of defense against an adverse event of the nature described in this month’s column. These events may happen infrequently, but when they do, they can have drastic consequences for patients.

Some errors related to time outs/checklists as determined by The Joint Commission include the following:

- Time outs occurring before all staff members are ready or before prep and drape occurs
- Performing time outs without full participation of the staff
- Lack of senior leadership engagement in the time out
- Staff feeling passive or unable to speak up
- An inconsistent organizational focus on patient safety
- Policy changes made with inadequate or inconsistent staff education
- Distractions or rushed time outs

In 2012, the Joint Commission Center for Transforming Healthcare launched its Targeted Solutions Tool (TST) for Safe Surgery. It serves as a step-by-step guide—including tips for time outs—for accredited health care organizations to identify, measure, and reduce risks in key processes that contribute to wrong patient, wrong site, and wrong procedure operations.

The TST provides tools and tips for observing and recording failures when scheduling and preparing a patient for surgery, as well as other guidelines to enhance the safety of an operation. After using the TST for Safe Surgery and implementing the suggested solutions, the participating organizations that worked on the project with the center reduced the number of cases with risks by 46 percent in the scheduling area, 63 percent in the preoperative holding area, and 51 percent in the OR.

For more information about the TST, go to www.centerfortransforminghealthcare.org/tst_ss.aspx. For more information about time outs, go to www.jointcommission.org/assets/1/18/National_Time_out_infographic_2015.pdf.

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.
Fossilized remains found in the Russian province of Siberia in the 1970s are the earliest and best preserved of a pet dog, the oldest domesticated animal, with carbon dating indicating that this animal lived more than 33,000 years ago. The origin of domestic dogs likely stems from curious wolves remaining around Stone Age people and their food remnants. Over time, these early dogs evolved into the canine companions we know today.\(^1\)

A post on the U.S. News & World Report website lists 10 reasons why people choose to own a pet, which include companionship, exercise, lower stress, and a means of making new friends, to name a few.\(^2\) According to a 2015 biennial National Pet Owners survey by the American Pet Products Association, almost 80 million U.S. households (65 percent) have a pet, including 78 million dogs and 86 million cats. Six percent of dogs and 27 percent of cats are taken in as strays.\(^3\)

A common source of injury
Although dogs may be our closest companions, live in our homes, decrease our stress, increase our exercise, and play with our children, they are still animals with teeth. The Centers for Disease Control and Prevention (CDC) estimates that approximately 4.5 million dog bites occur annually in the U.S., and almost 20 percent of these injuries become infected. Children are more likely to receive medical attention for dog bites, with those ages five through nine most at risk for dog bites. Men are more likely than women to be bitten by a dog.\(^4\) Almost half of all dog bites involve the upper extremity.

Bite victims who seek medical attention typically are classified into two groups based upon the time of presentation. The first group presents within eight to 12 hours of the incident, with fears of contracting rabies or other infections or with concerns about permanent disfiguration of the injured body part; these wounds are often contaminated with bacteria but do not show evidence of infection. The second group seeks help more than 12 hours after the incident, most often presenting with signs and symptoms of developing infections.\(^5\)

To examine the occurrence of dog bites to the upper extremity, medical records in the National Trauma Data Bank\(^\circledR\) (NTDB\(^\circledR\)) dataset for 2014 were searched using the International Classification of Diseases, Ninth Revision, Clinical Modification diagnoses codes. Specifically searched were records that contained an external cause of injury code (E-code) E906.0 (dog bite) and one of the following diagnosis codes: 880 (open wound shoulder/upper arm), 881 (open wound elbow/forearm/wrist), 882 (open wound hand), 883 (open wound fingers), 884 (open wound upper limb unspecified), 885 (traumatic amputation thumb), 886 (traumatic amputation other fingers), or 887 (traumatic amputation arm/hand). A total of 1,693 records were found, of which 1,376 contained a discharge status, including 1,315 patients discharged to home, 25 to acute care/rehab, and 30 to skilled nursing facilities; six patients died. Of these patients, 53.2 percent were male, on average 36.9 years of age, had an average hospital length of stay of 3.4 days, an intensive care unit length of stay of 5.1 days, an average injury severity score of 3.3, and were on the ventilator for an average of 4.3 days (see Figure 1, page 61).

Proper care for dog bites
Overall, dogs are great pets and provide their human companions with many emotional and physical health benefits. It is hard to imagine that they would bite the hand that feeds them—but it does sometimes happen, and the health effects can be significant. More than 60 different kinds of bacteria are present in a dog’s mouth, and although only a handful can cause infections,
More than 60 different kinds of bacteria are present in a dog’s mouth, and although only a handful can cause infections, those bacteria that do are serious and can include rabies, pasteurella, methicillin-resistant staphylococcus aureus, and tetanus. If one sustains a dog bite, immediately wash with soap and water and seek medical attention if the wound is severe or at risk for rabies (that is, if the offending dog is unknown, appears to be sick, or has an unknown vaccination status).

Throughout the year, we will be highlighting these data through brief monthly reports published in the Bulletin. The NTDB Annual Report 2015 is available on the ACS website at facs.org/quality-programs/trauma/ntdb. In addition, information is available on our website about how to obtain NTDB data for more detailed study. If you are interested in submitting your trauma center’s data, contact Melanie L. Neal, Manager, NTDB, at mneal@facs.org.

Acknowledgement
Statistical support for this article was provided by Chrystal Caden-Price, Data Analyst, NTDB.

REFERENCES
Surgeons who take 90-second breaks to perform a variety of stretching exercises during procedures may be doing themselves—and their careers and patients—a big favor. That's the conclusion of a study conducted by Adrian E. Park, MD, FACS, FRCS, chair of surgery at Anne Arundel Medical Center (AAMC), Annapolis, MD, and professor of surgery, Johns Hopkins University School of Medicine, Baltimore, MD.*

In the study, published online ahead of print in the *Annals of Surgery*, Dr. Park and his colleagues reviewed the pain, fatigue, and the physical and mental performance of 66 surgeons and operating room (OR) staff during their performance of nearly 400 operations at four medical centers—AAMC; Mayo Clinic, Rochester, MN; Carolinas Medical Center, Charlotte, NC; and the University of Louisville Medical Center, KY. The researchers recorded the surgical procedure and its duration, along with the level of surgeon pain before and after each procedure. They also measured the level of pain at the end of the operating day. Surgeons who took 90-second pauses reported improvements in their physical and mental well-being.

**TSMBs improve surgeon and patient safety**

The researchers asked participants to perform a series of "targeted stretching micro breaks" (TSMBs) every 20 to 40 minutes while maintaining sterile technique. The TSMBs involved five structured exercises, including neck flexion, extension, and lateral rotation; backward shoulder rolls with chest stretch; upper back and hand stretch; low back flexion and extension with gluteus maximus squeezes; and forefoot and heel lifts for lower extremity and ankle stretches.

“While the impact of TSMBs on patient safety remains to be defined,” Dr. Park said, “we

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know that addressing ergonomic risk will enhance surgeons' productivity, well-being, and endurance, which are all factors that help maximize patient safety in the operating room.

Most study participants (57 percent) reported that TSMBs resulted in improvements in their physical performance, and 38 percent reported improved mental focus. Surgeons also reported significantly reduced pain scores when they used TSMBs intraoperatively. Importantly, 87 percent of the participants said they want to incorporate TSMBs into their ORs.

Longstanding interest in ergonomics

Dr. Park is not a newcomer to ergonomic issues. He has experienced his profession’s occupational hazards—and knows firsthand about the neck, back, and head pain that often follow hours in the OR, particularly as surgeons perform increasingly complex surgical procedures.

“I have been aware for a long time that in providing the best outcomes for our patients, surgeons often compromise our own health and well-being. I’ve gone around the country talking to other surgeons about ergonomics for many years now,” Dr. Park said. He recalls his own surprise when he first began to experience physical pain after leaving the OR. “I was a young, sports-oriented guy who was enthusiastic about laparoscopic procedures. My patients clearly benefited from the procedures, but surgeons need to start looking out for their own well-being as well.”

Indeed, the procedures that benefited his patients left him with pain and numbness. “Both of my wrists have been operated on,” he said. “Surgeons have no problem complaining about all kinds of things related to their work, but the one thing they don’t complain about is their own physical well-being.” Dr. Park said. “I’m not sure why that is. There may be a certain altruism underlying it, or they may be concerned about the effects their complaints might have on their referral base.”

That attitude may be changing. According to Dr. Park, more surgeons have begun to take the first step to address the problem—admitting that one exists. “We’re starting to make it all right to talk about this,” he said. “Whenever I speak before groups about this, I hear so many testimonials. People tell me they’re glad I brought this up because pain has incapacitated them and limited their surgical practice. “We’re looking at a pandemic of surgical injury,” Dr. Park added. The solution most likely lies in a multi-pronged effort. “We’re trying to communicate that this is not just a surgeon’s issue.” He pointed out that the issues have ripple effects on health policy planners, hospital administrators, insurance companies, and patients. “We are facing a growing delta between anticipated workload for surgeons and static or declining surgical workforce over the next decade,” Dr. Park said. Shortened careers as a result of physical pain and injuries clearly exacerbate the problem.

“There was a flurry of interest in this topic when laparoscopic surgery first came out, and there was some redesign of handsets, but interest seems to have waned,” Dr. Scott-Conner said. “I have had ergonomic problems over the years, and I’m wondering if this topic is due for some additional study.”

“We need more research and funding in this area, and we need new technological advances informed by the research,” he said. “The amount of understanding of our workspace is still so minimal.”

Coping
How do surgeons cope with the physical pain of practicing? “They often take steps to change positions during procedures, adjust the surgical field, or take short breaks. There have been cases of surgeons taking extended breaks from their jobs,” Dr. Park said. Sometimes the pain leads to overmedicating and substance abuse. A study published in the May 2013 Journal of Addiction Medicine indicated that of health care professionals, surgeons have among the highest risk for substance abuse.§ Most commonly, however, surgeons simply try to ignore the pain, he said.

They may not be able to continue ignoring it. Many surgeons are discussing the physical toll they experience as a result of their jobs. Carol Scott-Conner, MD, PhD, FACS, professor emeritus of surgery at the University of Iowa Carver College of Medicine, Iowa City, opened a discussion earlier this year in the online ACS Communities regarding ergonomics. “I am interested in learning whether ergonomic issues are prevalent among general surgeons,” she wrote. “I originally postulated that women might be more vulnerable: smaller hands in general, differently sized bodies, different ‘carrying angle,’ for example. Acknowledging that this is not a women’s problem, per se, but can affect anyone whose body does not fit the standard mold, I thought I would start here.” She posted this inquiry first to the Women Surgeons Community and then to the General Surgery Community.

Dr. Scott-Conner’s comment generated a barrage of responses, as surgeons shared their common experiences with the pain and discomfort that often accompany their time in the OR.

“There was a flurry of interest in this topic when laparoscopic surgery first came out, and there was some redesign of handsets, but interest seems to have waned,” Dr. Scott-Conner said. “I have had ergonomic problems over the years, and I’m wondering if this topic is due for some additional study.”

Results from several recent surveys point to the same general conclusion; surgeons face occupational hazards in the OR. The University of Texas MD Anderson Cancer Center, Houston, for example, recently conducted a survey of the workplace injuries suffered by oncologic surgeons. The researchers concluded that ergonomic issues in the OR are serious and that surgeons may need the assistance of ergonomic experts to improve their posture to avoid lower back injuries. These results are in line with Dr. Park’s concerns about ergonomic stress in the OR, but he urges his colleagues to continue studying the issues—and to continue the discussion. ♦

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ACS-Military Health System Partnership focuses on surgeon readiness and sustaining trauma systems

Surgeon readiness is a priority for the Military Health System Strategic Partnership American College of Surgeons (MHSSPACS) as the collaboration enters its second year of a three-year agreement, according to M. Margaret (Peggy) Knudson, MD, FACS, MHSSPACS Medical Director. Dr. Knudson is professor of surgery, University of California, San Francisco, and a trauma surgeon at San Francisco General Hospital and Trauma Center.

Dr. Knudson is the lead author of an article in the *Journal of the American College of Surgeons* that outlines the partnership’s work since its launch in October 2014 and the goals it continues to pursue.*

**Development of a course**

One of the MHSSPACS’ major focuses is the development of a curriculum for a pre-deployment course, which responds to concerns that the next generation of deployed military surgeons may lack the intensive trauma training required to care for troops injured in combat or victims of mass casualty events. When the Iraq and Afghanistan conflicts began, fewer than half of the surgeons deployed for the first time had received trauma-specific training. Most surgeons were within a year or two of completing their surgical residency training, and many had yet to achieve certification from the American Board of Surgery. At present, no standard surgical preparation is available to military surgeons who are being deployed, and most military surgeons are based at military health care facilities, which do not routinely provide training in trauma care.

“I see this course as being very applicable, not only to a military surgeon who’s being deployed, but it might be useful for a surgeon preparing for a humanitarian mission in an austere environment. They would need to know techniques that are a little different than those we use in training general surgeons right now,” Dr. Knudson said.

To initiate this process, a group of military surgeons with deployment experience will begin to compile a list of the skills and the knowledge base the surgeons consider essential for their colleagues facing deployment. A project manager/educator on staff, in turn, will develop a survey of all surgeons deployed in the last 15 years, Dr. Knudson said. Respondents will be asked to rank these skills in order of importance and frequency of use. Based on this blueprint, the Education Committee of the MHSSPACS will develop both curricula and methods for assessment.

“Our goal is to develop a course that will include both didactic and hands-on technical skills that will serve as the basis for predeployment preparation. If a surgeon being deployed cannot pass a certain skills station or fails a portion of the written exam, we will have the ability to provide the needed education,” Dr. Knudson said.

**Between conflicts**

The partnership’s second goal centers on ensuring that the military trauma system developed during the wars in Iraq and Afghanistan remains intact between conflicts. The Joint Trauma Theater System, established at the start of these wars, spans three continents and includes five levels of trauma center care, an aircraft-based intensive care unit, a trauma data registry, clinical practice guidelines, and a weekly worldwide performance improvement conference. The system produced the lowest wartime case fatality rate ever recorded, decreasing from 20 percent in 2005 to well below 10 percent in 2013, despite an increasing injury severity rate. This system has since evolved into the Joint Trauma System Defense Center of Excellence (JTS DoE). This entire system could disappear, however, unless

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“Our goal is to develop a course that will include both didactic and hands-on technical skills that will serve as the basis for predeployment preparation. If a surgeon being deployed cannot pass a certain skills station or fails a portion of the written exam, we will have the ability to provide the needed education,” Dr. Knudson said.

steps are taken to preserve it. The Systems Committee of the ACS Committee on Trauma is scheduled to perform a formal review of the JTS DoE in order to assist in the identification of the elements necessary to sustain the JTS DoE between military conflicts.

Ongoing research
Research is the MHSSPACS’ third objective, according to Dr. Knudson, who noted the importance of research into matters that cannot be studied in a war zone. To boost the research arm of civilian trauma centers, Dr. Knudson joined colleagues at the National Trauma Institute and the newly formed Coalition for National Trauma Research to secure funding for 16 trauma research studies with grants from the Department of Defense (DoD). The authors noted that, despite being the second most expensive public health issue in the U.S., no research institute at the National Institutes of Health is dedicated to traumatic injury, and few non-DoD federal dollars are available for related research. Through the Combat Casualty Care Research Program, the DoD is the major funder of trauma research.

“The MHSSPACS will propose the value of a National Trauma Research Institute sustained by a more sizable, reliable, and enduring appropriations by both the DoD and non-DoD sources for trauma and injury research,” the authors wrote. Learn more about the MHSSPACS at facs.org/military.

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Drs. A. Brent Eastman, Michael Sinclair named UCSF Alumni of the Year

A. Brent Eastman, MD, FACS, a general, vascular, and trauma surgeon from San Diego, CA, and a Past-President of the American College of Surgeons, was one of two Fellows who received the University of San Francisco (UCSF) Medical Alumni Association’s 2016 Alumni of the Year awards at the 50th reunion of the UCSF School of Medicine. Michael C. Sinclair, MD, FACS, Allentown, PA, a retired cardiothoracic surgeon, mountain climber, and author of a memoir, *No Regrets, No Apologies*, also was honored. Alumni Association president Yao Heng, MD, San Francisco, presented the awards to the two 1966 alumni at an April 9 dinner with UCSF Medical School dean Talmadge King, Jr., MD.

Dr. Eastman is a former corporate senior vice-president and chief medical officer of Scripps Health, N. Paul Whittier Endowed Chair of Trauma at Scripps Memorial Hospital, La Jolla, and clinical professor of surgery-trauma at the University of California, San Diego. He is a founder of the San Diego County Trauma System, which is now in its 32nd year and regarded worldwide as a model for trauma care.

Dr. Eastman’s efforts in trauma took him around the world. He was part of a team that cared for thousands of evacuees after Hurricane Katrina in New Orleans, LA, in 2005, and assisted earthquake victims in Haiti in 2010. He has assisted in the development of extensive trauma systems internationally, including throughout India. In addition, he was a visiting surgeon at the U.S. military hospital in Landstuhl, Germany, where he provided care to soldiers injured in the Iraq and Afghanistan wars.

Dr. Sinclair has volunteered for a number of international humanitarian missions in Croatia, Guatemala, Jordan, Pakistan, Libya, and Nigeria and is currently on a two-year tour to provide surgical care and training in Rwanda.

The Alumni of the Year award is regarded as the highest honor bestowed by the UCSF Medical Alumni Association. Each year, alumni from all classes nominate fellow classmates who have demonstrated dedication to the principles of a physician, made significant contributions to medicine, and provided community service.

Coming in July in *JACS*, and online now

*Surgical training in the United States: Is it time for a paradigm shift?*

William C. Chapman, MD, FACS, in the presidential address at the 2015 annual meeting of the Western Surgical Society, talks about the major shift in general surgical training over the last 20 years, and what are likely changes in surgical training in the future.

This article and all other *JACS* content is available at www.journalacs.org.
Dr. Julie Ann Freischlag inducted into Royal College of Surgeons of Edinburgh

Julie Ann Freischlag, MD, FACS, vice-chancellor for human health sciences; dean, University of California (UC) Davis School of Medicine; and Past-Chair, American College of Surgeons Board of Regents, was inducted into the Royal College of Surgeons of Edinburgh (RCSEd) on April 22.

For more than 15 years, Dr. Freischlag has led education and training programs at medical schools in her role as professor and chair of surgery and vascular surgery departments. Dr. Freischlag also has more than 25 years of experience leading patient care services as chief of surgery or vascular surgery.

Dr. Freischlag currently oversees UC Davis Health System's academic, research, and clinical programs, including the School of Medicine, the Betty Irene Moore School of Nursing, the 1,000-member physician practice group, and UC Davis Medical Center, a 619-bed acute care hospital. Before joining UC Davis, she served as professor and chair, surgery department, and surgeon-in-chief at Johns Hopkins Medical Institutions, Baltimore, MD. At Johns Hopkins, she led initiatives to expand research, add specialty clinical services, improve patient-centered care and patient safety, redesign the surgical training program, and enhance academic career paths for faculty.

Established in 1505, the RCSEd is among the world's oldest surgical organizations, and admittance into its fellowship is based on professional prominence. With a worldwide membership, the RCSEd pursues excellence and advancement in surgical and dental practice via education, training, and examinations.

Becker’s Hospital Review names Dr. Ko as one of 50 patient safety experts

For the second consecutive year, Becker’s Hospital Review has identified Clifford Y. Ko, MD, MS, MSHS, FACS, as one of 50 experts leading the field of patient safety in the U.S. Dr. Ko is Director, American College of Surgeons National Surgical Quality Improvement Program (ACS NSQIP®), and Director, ACS Division of Research and Optimal Patient Care. He also is a colon and rectal surgeon and professor, University of California, Los Angeles (UCLA) Schools of Medicine and Public Health; Robert and Kelly Day Chair in Surgical Outcomes, UCLA; and a research affiliate, RAND Corporation.

The 2016 edition of the Becker’s Hospital Review list includes individuals at national organizations, universities, and health care systems who are working to improve patient safety. This fourth edition includes the names of advocates, professors, researchers, administrators, and health care providers who have won awards, published articles, spoken out, and led initiatives to reduce medical injuries and ensure patient safety. The Becker’s Hospital Review editorial team considered nominations and selected leaders through an editorial review process.

Alaska Chapter hosts its first lobby day
Members of the Alaska Chapter of the American College of Surgeons (ACS) convened January 27 in Juneau for their first lobby day. Frank D. Sacco, MD, FACS; Thomas J. Knolmayer, MD, FACS; and Danny R. Robinette, MD, FACS, participated—a long with Mark Johnson, Past-Director of Alaska’s Department of Health and Human Services (DHHS) and longtime trauma advocate—in a busy day of meetings at the capital.

Previous Alaska Chapter advocacy efforts were successful in increasing the number of certified trauma centers in the state from five to 16 (of 24) hospitals. That program will likely be defunded, however, due to the state’s projected budget deficit of $4 billion. Hence, the lobby day participants focused their meetings largely on funding for trauma and trauma team activations in the face of a budget crisis. More specifically, the surgeons sought state approval for Medicaid to pay for trauma team activations as well as regulatory guidelines requiring commercial insurers to do so as well. The visits were well-received, and future plans include meeting with DHHS to explore these possibilities.

Nevada Chapter elects new officers
The ACS Nevada Chapter announced its newly elected officers at a meeting on March 30 in Las Vegas. Outgoing Chapter President Annabel Barber, MD, FACS, led the meeting and announced the roster of new chapter officers: Deborah A. Kuhls, MD, FACS, Camille Spenner, Chapter Director; and Drs. Kuhls, Barber, and Baynosa.
President; James Dylan Curry, MD, FACS, Vice-President; and Jennifer L. Baynosa, MD, FACS, Secretary/Treasurer. Michael D. Alvarado, MD, FACS, delivered the keynote address on Preoperative Multidisciplinary Considerations for HER2+ Breast Cancer. Approximately 30 chapter members, including residents, attended the meeting.

**North Texas Chapter Annual Meeting focuses on surgeon engagement**

The North Texas Chapter of the ACS met February 19–20 at the Cityplace Conference Center in Dallas. The theme of this year’s meeting was Engaging the Practicing Surgeon. The chapter increased efforts to make the meeting more interactive. Highlights included the following:

- The Harry M. Spence Memorial Lecture: A History of the American Board of Surgery: Vignettes from the Certifying Exam, presented by J. Patrick Walker, MD, FACS
- American College of Surgeons Update, presented by Patricia L. Turner, MD, FACS, Director, ACS Division of Member Services
- Ethics Lecture, by Susan Hawk, Dallas District Attorney
- Tumor board meeting
- Town Hall Meeting with the Texas ACS Governors
- Robert S. Sparkman Memorial Lecture: Politics and the Surgeon: 2015, given by Stuart Spitzer, MD, Texas state representative

The chapter meeting included a Resident Paper Competition. Award winners were as follows:

- **Best Overall Paper**: Bridging Disparities in Colorectal Cancer Screening in the Indigent Population, presented by Katherine Dowd, BS, Texas Tech University Health Sciences Center, Amarillo
- **Best Trauma Paper**: Creation of a Decision Aid for Goal-Setting after Geriatric Burns: A Study from the Prognostic Assessment of Life and Limitations after Trauma in the Elderly [Palliate] Consortium, presented by Erica Hodgman, MD, University of Texas Southwestern, Dallas
- **Best Oncology Paper**: Does the Robot Make a Difference? Oncologic Resection in Laparoscopic versus Robot-Assisted Transhiatal Esophagectomy, presented by Jeffrey Watkins, MD, Methodist Dallas Medical Center
- **Best Poster**: Prospective Evaluation of [Post-Traumatic Stress Disorder] and Depression in Orthopaedic Injury Patients with and without Concomitant Traumatic Brain Injury, presented by Jaicus Solis, MD, Baylor University Medical Center, Dallas

For its next annual meeting, the North Texas Chapter will join the South Texas Chapter and host the Texas ACS Meeting February 23–25, 2017, in Austin.
Florida Chapter hosts annual meeting in Tampa

The Florida Chapter of the ACS held its Annual Meeting May 6–7 at the University of South Florida’s Center for Advanced Medical Learning and Simulation (CAMLS), Tampa. Practicing surgeons, researchers, residents and fellows, and students representing all subspecialties were in attendance. The latest developments and current trends in open, minimally invasive, and robotic surgery were discussed and on display for interactive assessment by the attendees. Featured topics included the incorporation of robotics into thoracic surgery, recognition and remediation of deficiencies in operative performance, and prevention of medical errors. Several attendees then participated in the annual Surgical Residents Jeopardy. Attendees took full advantage of the advanced training facilities at CAMLS by participating in a surgical workshop featuring six hands-on skills stations. Meeting attendees also had the opportunity to attend the keynote lecture on Total Parenteral Nutrition (TPN) presented by Stanley J. Dudrick, MD, FACS, who is often called the father of TPN.

In addition, the Florida Chapter was proud to sponsor the attendance of three surgical residents from the state at the ACS Leadership & Advocacy Summit, April 9–12, in Washington, DC. The three residents in attendance were Jun Tashiro, MD, MPH, Jackson Memorial Hospital Surgical Training Program; Wei Wei Zhang, MD, University of South Florida (USF), Tampa; and Francesca Maria Dimou, MD, USF. They were joined by a large chapter delegation, which included more than 25 members. Summit attendees met with their legislators to discuss a range of issues that affect surgical care.

Portugal Chapter offers special session at Sociedade Portuguesa de Cirurgia XXXVI

The Portugal Chapter of the ACS hosted a special session at the Sociedade Portuguesa de Cirurgia XXXVI, which took place March 3–6 in Figueira da Foz. The society’s Nacional Congresso is the organization’s premier event, attended by most surgeons in Portugal. This year, approximately 550 surgeons and residents attended the Congresso, with nearly 200 participating in the two-hour
panel session hosted by the Portugal Chapter. At present, most hospitals in Portugal do not have dedicated trauma or emergency care surgeons. During the special session, the “old” and “new” standards for the nation’s emergency departments were revisited. The panelists also discussed how to address the fact that many surgeons in the country are near the end of their careers and that too few surgeons are being trained to replace them.

Presenters at the Portugal Chapter session at the Nacional Congresso included ACS Governor Paulo da Costa, MD, PhD, FACS, who spoke on the shifts in the emergency department (ED) model; Pedro Moniz Pereira, MD, FACS, who talked about training the next generation of surgeons; and José Guilherme Tralhão, MD, PhD, FACS, who addressed changing surgical paradigms. The session also included a discussion about the role of the general surgeon in the ED. Júlio Fortunato Leite, MD, PhD, FACS, provided the surgeon’s perspective; Jose Manuel Maia da Costa, MD, FACS, described the Guidelines of the Colégio da Especialidade; and Margarida Ferreira, MD, MSc, a third-year general surgery resident at Hospital Garcia de Orta, Lisbon, spoke on The Vision of Residents.

Four new international communities introduced in February

Four new online ACS Communities with an international focus launched in February. The communities include members from Latin America and the Caribbean (Region 14), Europe (Region 15), Asia and Australia/New Zealand (Region 16), and the Middle East (Region 17). ACS Members who reside in a country within a particular region are welcome to join or create new conversations within that community. Topics of discussion in these communities have run the spectrum from questions about specialty surgery to notices for international regional meetings.

The ACS Communities keep members connected year-round via computer, tablet, or smartphone. For more information on the ACS International Communities for Regions 14–17, contact Connie Bura, Associate Director, Division of Member Services, at cbura@facs.org.

Governors host Speed Networking Session at Clinical Congress

The ACS Board of Governors Chapter Activities Domestic and International Workgroups will host a fast-paced Speed Networking Session at Clinical Congress 2016. This educational and social event will take place 3:00–5:00 pm, Tuesday, October 18 at the Walter E. Washington Convention Center, Washington, DC.

Join chapter officers, executive staff, and ACS Governors for this unique opportunity to accelerate your learning experience through concise roundtable talks on a spectrum of topics of importance to domestic and international chapters. Bring plenty of business cards and begin to build lasting connections with chapter leaders from around the world.

For more information, contact Jennifer Connelly, CAE, Manager, Domestic Chapter Services, at jconnelly@facs.org or 312-202-5737.
National Doctors’ Day Donor and Honoree Listing

John V. Agapian, MD, FACS, in honor of John Fildes, MD, FACS, FCCM

Roberto V. Barresi, MD, FACS, in honor of Keith W. Millikan, MD, FACS, and Theodore J. Saclarides, MD, FACS

Steven E. Briggs, MD, FACS, in honor of William M. Stone, MD, FACS

Ruth L. Bush, MD, FACS, in honor of Vivian Gahtan, MD, FACS, and JoAnn M. Lohr, MD, FACS

Jeffry D. Cardneau, MD, FACS, in honor of Linda M. Graham, MD, FACS, and Louis M. Messina, MD, FACS

Barton M. Clements in honor of Robert D. Smink, Jr., MD, FACS, Alexander Uribe, MD, FACS, Keuk Y. Yum, MD, FACS, and Elijah M. Dudney, MD

Barbara L. Dean in honor of Gerald B. Healy, MD, FACS

Duane W. Densler, MD, FACS, in honor of Hiram C. Polk, Jr., MD, FACS

Joseph B. Fuller, MD, FACS, in memory of Jerome M. Silver, MD, FACS

Matthew J. Hyser, MD, FACS, in honor of R. Scott Jones, MD, FACS

Christine Joslin in memory of C. Rollins Hanlon, MD, FACS

Brian J. Kaplan, MD, FACS, in honor of Fabrizio Michelassi, MD, FACS

Andreas I. Karachristos, MD, FACS, in honor of Daniel T. Dempsey, MD, FACS, and John M. Daly, MD, FACS

Richard J. King, MD, FACS, in honor of Robert N. Cooney, MD, FACS

Sarah B. Klein in honor of Yeu-Tsu Margaret Lee, MD, FACS

Shanu N. Kothari, MD, FACS, in honor of Kenric M. Murayama, MD, FACS

Mark Kuhnke, MD, FACS, in memory of Alan G. Birtch, MD, FACS, and David S. Sumner, MD, FACS

Mark Kuhnke, MD, FACS, in honor of J. Roland Folse, MD, FACS

John B. Lalonde, MD, FACS, in memory of Della Barrett Lalonde

Richard A. Lynn, MD, FACS, in honor of William Silen, MD, FACS

LaMar S. McGinnis, Jr., MD, FACS, in memory of E. J. Polk, MD, PhD, FACS, and Josephus Luke, MD, FRCS
The ACS Foundation is pleased to thank the donors who have made a National Doctors’ Day tribute gift in honor or memory of their mentors and proudly recognizes the honorees for their commitment to mentoring the next generation of surgeons.

Mary H. McGrath, md, mph, facs, in honor of Lawrence W. Way, md, facs
Chayanin Musikasinthorn, md, facs, in honor of Bradley D. Wong, md, facs
John M. Pendleton, md, in honor of L.D. Britt, md, mph, facs
Meira M. Pernicone, md, facs, in honor of Donald C. McIlrath, md, facs
Danny R. Robinette, md, facs, in honor of Margaret M. Dunn, md, facs
James F. Ross, md, facs, in honor of Allan R. Downs, md, frsc, facs, and Robert J. Blanchard, md, frsc, facs
James F. Ross, md, facs, in memory of Karl Riese, md, frsc, facs
Hilary A. Sanfey, mb, bch, facs, in honor of Patricia J. Numann, md, facs
William F. Sasser, md, facs, in honor of Robert E. Berry, md, facs, and Thomas J. Francel, md, facs
Catherine Schermer, md, facs, in honor of Ned Z. Carp, md, facs
Elizabeth M. Schmidt, md, facs, in honor of John D. Saletta, md, facs
Lisa M. Schomogyi, md, facs, in honor of Gregory J. Jurkovich, md, facs
Kenneth W. Sharp, md, facs, in memory of John L. Sawyers, md, facs
Timothy R. Shaver, md, facs, in honor of Peter J. Barcia, md, facs
Angela M. Soto-Hamlin, md, facs, in memory of G. Thomas Shires, md, facs
Michael R. Starks, md, facs, in honor of Michael Curci, md, facs
Joel Stevens, md, facs, in honor of LaSalle D. Leffall, Jr., md, facs
Amilu Stewart, md, facs, in memory of William Waddell, md, facs
Pasithorn Amy Suwanabol, md, in honor of Karim Alavi, md, facs, and Justin Maykel, md, facs
Patricia L. Turner, md, facs, in honor of L.D. Britt, md, mph, facs
Thomas S. Vates III, md, facs, in memory of Judson G. Randolph, md, facs
The American College of Surgeons (ACS) is pleased to offer the George H. A. Clowes, Jr., MD, FACS, Memorial Research Career Development Award for 2017—made possible through the generosity of The Clowes Fund, Inc., of Indianapolis, IN. This award, consisting of a stipend of $45,000 for each of five years that is non-renewable thereafter, supports the research of a promising young surgical investigator. The closing date for receipt of completed 2017 applications and all related documents is August 1, 2016.

The criteria for selection of the recipient of this award are as follows:

• The award is restricted to a Fellow or an Associate Fellow of the ACS who has completed an accredited residency in general surgery within the last seven years (exclusive of 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. 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 and requesting approval of funding from another source.

• The administrator (dean or fiscal officer) and the head of the applicant’s department or administrative unit must approve the application. This approval must include a commitment to continuation of the academic position and facilities for research throughout the period of the award. In addition, the approval should specify that at least 50 percent of the applicant’s time will be spent conducting the research proposed in the application. This percentage may run concurrently with the time requirements of NIH or other accepted funding.

• The applicant must submit, in addition to the application form, an NIH-style biosketch, a detailed research plan of up to eight pages in length, and a proposed budget for the five-year period of the award. The applicant also is required to submit a cover letter of no more than one page describing his or her career objectives, how these career objectives will be achieved, and how the research protocol furthers the applicant’s career development. The ACS Scholarships Committee requires an annual written narrative and financial progress report from the recipient; annual renewal will be based on these reports.

• While holding the award, the recipient is required to attend the Clinical Congress of the ACS; the 2017 recipient will be expected to attend the 2018, 2020, and 2022 Clinical Congresses and present reports to the Scholarships Committee and its guests.

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

The application form must be completed online and may be posted on the ACS website at facs.org/member-services/scholarships/research/acsclowes. Contact the Scholarships Administrator at scholarships@facs.org for additional information.
Health Policy Scholars for 2016 selected

A total of 17 surgeons have been selected to serve as Health Policy Scholars and participate in the Leadership Program for Health Policy and Management, June 12−18 at the Heller School for Social Policy and Management, Brandeis University, Waltham, MA.

Each scholarship includes attendance at the weeklong intensive course, followed by a year’s service in a health policy-related capacity to the American College of Surgeons (ACS) and the surgical specialty society cosponsoring the awardee.

This year’s scholars are as follows:

- ACS Health Policy Scholar for General Surgery: SreyRam Kuy, MD, MHS, Louisiana State University, Shreveport
- ACS Health Policy Scholar for General Surgery: Subhasis Misra, MB, BS, MS, FACS, Texas Tech University Health Sciences Center School of Medicine, Amarillo
- ACS/American Association of Neurological Surgeons Health Policy Scholar: Kimon Bekelis, MD, Dartmouth-Hitchcock Medical Center, Lebanon, NH
- ACS/American Academy of Otolaryngology–Head & Neck Surgery Health Policy Scholar: Alex J. McKinlay, MD, FACS, Darnall Army Medical Center, Fort Hood, TX
- ACS/American Association for the Surgery of Trauma Health Policy Scholar: Saman Arbabi, MD, FACS, Harborview Medical Center, Seattle, WA
- ACS/American Pediatric Surgery Association Health Policy Scholar: David P. Bliss, Jr., MD, FACS, Children’s Medical Center, Dallas, TX
- ACS/American Surgical Association Health Policy Scholar: Eileen M. Bulger, MD, FACS, University of Washington, Seattle
- ACS/American Society of Breast Surgeons Health Policy Scholar: Alyssa D. Throckmorton, MD, FACS, Baptist Medical Group, Nashville, TN
Each scholarship includes attendance at the weeklong intensive course, followed by a year’s service in a health policy-related capacity to the ACS and the surgical specialty society cosponsoring the awardee.
ACS announces 2016 Oweida Scholarship recipient

The Executive Committee of the American College of Surgeons (ACS) Board of Governors has selected the recipient of the 2016 Nizar N. Oweida, MD, FACS, Scholarship of the ACS—Chayanin Musikasinthorn, MD, MPH, FACS, a general and trauma/critical care surgeon, Gallup Indian Medical Center, NM. Dr. Musikasinthorn is a commissioned officer of the U.S. Public Health Service and provides surgical services to members of the local First Nation population, the Navajo people.

The scholarship will enable Dr. Musikasinthorn to attend Clinical Congress 2016, October 16–20 in Washington, DC, to enhance her ability to provide quality surgical care to patients. She will give a presentation at the Scholarships Committee meeting and the Rural Surgery Forum at Clinical Congress.

The Oweida Scholarship was established in 1998 in memory of Dr. Oweida, a general surgeon from a small town in western Pennsylvania. The $5,000 award subsidizes attendance at the annual Clinical Congress, including Postgraduate Course fees.

The Oweida Scholarship provides young surgeons who practice in rural communities with the opportunity to attend the Clinical Congress and benefit from its educational experiences. It is awarded annually.

The requirements for this award are posted to the College website at facs.org/member-services/scholarships/special/oweida. The application deadline for the 2017 Oweida Scholarship is December 15, 2016.
# Calendar of events

*Dates and locations subject to change. For more information on College events, visit www.facs.org/events or http://web2.facs.org/ChapterMeetings.cfm.

## JUNE

<table>
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<th>Chapter</th>
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<tbody>
<tr>
<td>Missouri Chapter</td>
<td>June 3–5</td>
<td>Lake Ozark, MO</td>
<td>Denise Boland, <a href="mailto:missourichapterACS@gmail.com">missourichapterACS@gmail.com</a>, <a href="http://www.moacs.org">www.moacs.org</a></td>
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<tr>
<td>Alabama Chapter &amp; Mississippi Chapter</td>
<td>June 9–11</td>
<td>Point Clear, AL</td>
<td>Lisa Beard, <a href="mailto:info@alabamaacs.org">info@alabamaacs.org</a>, <a href="http://www.alabamaacs.org">www.alabamaacs.org</a> and <a href="http://www.mschap-acs.com">www.mschap-acs.com</a></td>
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<tr>
<td>Oregon Chapter &amp; Washington Chapter</td>
<td>June 9–12</td>
<td>Sunriver, OR</td>
<td>Harvey Gail, <a href="mailto:harvey@spiremanagement.com">harvey@spiremanagement.com</a>, <a href="http://www.oregonchapteracs.org">www.oregonchapteracs.org</a> and <a href="http://www.wachapter.org">www.wachapter.org</a></td>
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<td>Rhode Island Chapter</td>
<td>June 10</td>
<td>Providence, RI</td>
<td>Megan Turcotte, <a href="mailto:mturcotte@rimed.org">mturcotte@rimed.org</a>, <a href="http://www.riacs.org">www.riacs.org</a></td>
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<tr>
<td>Brooklyn-Long Island Chapter</td>
<td>June 14</td>
<td>Garden City, NY</td>
<td>Teresa Barzyz, <a href="mailto:acsteresa@aol.com">acsteresa@aol.com</a>, <a href="http://www.bliacs.org">www.bliacs.org</a></td>
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## JULY

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<tr>
<td>Portugal Chapter and ACS Europe Region 15 Meeting</td>
<td>June 16–18</td>
<td>Lisbon, Portugal</td>
<td>Paulo Matos de Costa, <a href="mailto:paulomatoscosta@gmail.com">paulomatoscosta@gmail.com</a></td>
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<tr>
<td>Nigeria Chapter</td>
<td>July 8</td>
<td>Nnewi, Anambra</td>
<td>Stanley N. C. Anyanwu, <a href="mailto:sncanyanwu@yahoo.com">sncanyanwu@yahoo.com</a></td>
</tr>
<tr>
<td>South Carolina Chapter &amp; North Carolina Chapter</td>
<td>July 15–17</td>
<td>Myrtle Beach, SC</td>
<td>Debbie Shealy, <a href="mailto:debbie@scmanet.org">debbie@scmanet.org</a>, <a href="http://www.scfacs.org">www.scfacs.org</a> and <a href="http://www.ncfacs.org">www.ncfacs.org</a></td>
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## AUGUST

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<tr>
<td>Georgia Society of the ACS, Day of Trauma and Annual Meeting</td>
<td>August 19–21</td>
<td>Savannah, GA</td>
<td>Kathryn Browning, <a href="mailto:gasacs@gmail.com">gasacs@gmail.com</a>, <a href="http://www.georgiaacs.org">www.georgiaacs.org</a></td>
</tr>
<tr>
<td>South Carolina Chapter &amp; North Carolina Chapter</td>
<td>July 15–17</td>
<td>Myrtle Beach, SC</td>
<td>Debbie Shealy, <a href="mailto:debbie@scmanet.org">debbie@scmanet.org</a>, <a href="http://www.scfacs.org">www.scfacs.org</a> and <a href="http://www.ncfacs.org">www.ncfacs.org</a></td>
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## FUTURE CLINICAL CONGRESSES

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<tr>
<td>2016</td>
<td>October 16–20</td>
<td>Washington, DC</td>
<td>ACS NSQIP staff, <a href="mailto:nsqipconference@facs.org">nsqipconference@facs.org</a>, <a href="http://www.acnsqipconference.com">www.acnsqipconference.com</a></td>
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<tr>
<td>2017</td>
<td>October 22–26</td>
<td>San Diego, CA</td>
<td>ACS NSQIP staff, <a href="mailto:nsqipconference@facs.org">nsqipconference@facs.org</a>, <a href="http://www.acnsqipconference.com">www.acnsqipconference.com</a></td>
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<tr>
<td>2018</td>
<td>October 21–25</td>
<td>Boston, MA</td>
<td>ACS NSQIP staff, <a href="mailto:nsqipconference@facs.org">nsqipconference@facs.org</a>, <a href="http://www.acnsqipconference.com">www.acnsqipconference.com</a></td>
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