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FEATURES

COVER STORY: Louisa Garrett Anderson and Flora Murray: Redefining gender roles in military medicine
Jenny M. Held, MD, and Don Nakayama, MD, MBA, FACS 11

The ACS Quality and Safety Program: Louisville hospitals participate in first site visits
Janet R. Chipman, MD, FACS; Jason W. Smith, MD, FACS; and J. David Richardson, MD, FACS 16

Profiles in diversity:
Surgeon leaders need to educate, elevate, and energize to create a culture of diversity: An interview with Dr. Julie Freischlag
Shubhada Dhage, MD, FACS; SreyRam Kuy, MD, MHS, FACS; and Amelia Grover, MD, FACS 20

Establishment of the American College of Surgeons Academy of Master Surgeon Educators
Ajit K. Sachdeva, MD, FACS, FRCSC, FSACME, and L.D. Britt, MD, MPH, DSc(Hon), FACS, FCCM, FRCSEng(Hon), FRCSEd(Hon), FWACS(Hon), FRCSI(Hon), FCS(SA)(Hon), FRCS(Glasg)(Hon) 26

Collected papers of the ACS Metabolic Surgery Symposium: Part V
Metabolic surgery in private practice
Alan C. Wittgrove, MD, FACS; Samer G. Mattar, MD, FACS; Shanu Kothari, MD, FACS; James Maher, MD, FACS; and Kelvin Higa, MD, FACS 31

Metabolic surgery: Procedures vary internationally
Mathias A.L. Fobi, MD, FACS, FACN, FICS; Michel Gagner, MD, FACS; and Kelvin Higa, MD, FACS 38
## COLUMNS

**Looking forward**

David B. Hoyt, MD, FACS

**Coding and practice management corner:** Modifier 51 or 59? How to correctly report multiple procedures

Jayme Lieberman, MD, FACS; Megan McNally, MD, FACS; and Jan Nagle, MS

**Dispatches from rural surgeons:** Rural surgery call coverage: Innovative locoregional solutions can fill the gap

Stephen Hiscock, MD, FRCSC, and Michael D. Sarap, MD, FACS

**From residency to retirement:** The Italian surgeons who helped build international relationships

Clemente Iascone, MD; Aldo Moraldi, MD; Antonio Cavallaro, MD, FACS; Antonio V. Sterpetti, MD; Luca Di Marzo, MD, FACS; and Sergio Stipa, MD, FACS

**ACS Clinical Research Program:** Preoperative smoking intervention techniques improve outcomes for lung cancer patients

Ivana T. Croghan, PhD; Judy C. Boughey, MD, FACS; and Linda W. Martin, MD, MPH, FACS

**A look at The Joint Commission:** Joint Commission reinstates individual physician mechanical thrombectomy volume eligibility requirement

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

**NCDB cancer bytes:** Current trends in prostate cancer: The role of brachytherapy

Robert K. Brookland, MD, FACR, FACRO, and Katherine Mallin, PhD

**NTDB data points:** Old, irregular, thin, and falling

Richard J. Fantus, MD, FACS, and Kusuma Nio, MD

## NEWS

ACS COT hosts inaugural Medical Summit on Firearm Injury Prevention

Call for nominations for 2019 Dr. Mary Edwards Walker Inspiring Women in Surgery Award

Call for nominations for ACS Secretary and Treasurer positions

CoC announces 2018 Outstanding Achievement Award recipients

Coming next month in JACS and online now

Chapter news

Luke Moreau and Brian Frankel

## SCHOLARSHIPS

Apply for Gerald B. Healy, MD, FACS, Traveling Mentorship Fellowship

International Guest Scholarships for 2020 available

Community Surgeons Travel Awards available for 2020

Apply for 2019 Claude H. Organ, Jr., MD, FACS, Traveling Fellowship

## MEETINGS CALENDAR

Calendar of events
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A number of American College of Surgeons (ACS) leaders have been working on standards for verifying and accrediting hospitals on the basis of surgical quality and patient safety. These standards are drawn from the principles outlined in *Optimal Resources for Surgical Quality and Safety*, also known as the Red Book. As part of this process, ACS Past-President J. David Richardson, MD, FACS; Clifford Y. Ko, MD, MS, MSHS, Director, ACS Division of Research and Optimal Patient Care; and I have been conducting site visits at hospitals throughout the country that have agreed to pilot test the program.

What the participating hospitals have learned
The article on page 16 of this issue of the *Bulletin* highlights how two hospitals in Kentucky—one an academic medical center, the other a community hospital seeking to improve outcomes—prepared for their site visits and what they learned from this experience. Both hospitals report that they gained insights into what steps they could take to improve quality and safety in their institutions.

Briefly, the health care professionals at the academic medical center realized early on that the institution needed a more consistent process for reviewing their cases and better coordination of all services involved in delivering surgical care. By looking at care delivery from a multidisciplinary perspective, the hospital was able to improve engagement from all stakeholders and to integrate them more effectively into the institution’s quality improvement culture. The medical center also developed a more effective process for using data to open discussions with outliers.

The community hospital found that although it had effective processes for managing outliers, it had inconsistent methods of case review to benchmark the performance among all surgeons. Several services had metrics for measuring performance against national standards, but several did not. Loop closure was often inconsistent, with no specific individual or group consistently responsible for follow-up. The hospital leaders also recognized the need for more coordinated communication across all specialties and services, as well as more resources devoted to quality improvement.

As many individuals involved in quality improvement have said, it’s a journey, not a destination.
The article on page 16 of this issue of the Bulletin highlights how two hospitals in Kentucky—one an academic medical center, and the other a community hospital seeking to improve outcomes—prepared for their site visits and what they learned from this experience.

**What we have learned**

Just as these institutions have learned a great deal about next steps in improving quality and safety, we have learned a lot about the value of the Red Book and what we can do to make it and the resultant standards and verification process more meaningful to the full range of health care institutions.

First, we have been informed which chapters of the Red Book are the most relevant to quality improvement leaders in hospitals. More specifically, they find the information pertaining to the following areas of greatest practicality:

- The surgeon's responsibility and leadership during the five phases of care: preoperative evaluation and preparation, immediate preoperative readiness, intraoperative, postoperative, and postdischarge

- The value and responsibilities of the Surgical Quality Officer

- The importance of standard case review and peer review processes

- Establishment of an operational infrastructure to ensure quality, safety, and reliability

- Development of rigorous credentialing and privileging protocols to ensure that staff surgeons are competent in the provision of optimal care

- Application of the principles of high reliability with a supportive infrastructure

- Disease management and multidisciplinary care

- Surveillance and use of the data to improve outcomes

**Next steps**

On these site visits, we have learned that some hospitals are performing some of these activities well, but no hospital does all of them well.

As many individuals involved in quality improvement have said, it's a journey, not a destination. Based on the experiences of the pilot sites, the College will continue to develop standards for verifying and accrediting health care centers that provide surgical care and to develop a second edition of the Red Book. We ask that surgeon champions continue to work with their hospital leadership to institute policies and practices that will lead to the provision of better quality and safer patient care and to consider having an ACS site visit.

The ACS also is looking to bring its other accreditation and verification programs in trauma, cancer, and bariatric surgery under the Red Book umbrella. In other words, the ACS is practicing what it preaches: Better coordination of activities and more inclusive teams that lead to better quality.

If we perform surgery using the concepts of integrated practice units and work together as teams with a focus on using data to address outliers, we will achieve the College’s core mission: To improve the care of the surgical patient and to safeguard standards of care in an optimal and ethical practice environment.

If you have comments or suggestions about this or other issues, please send them to Dr. Hoyt at lookingforward@facs.org.
Redefining gender roles in military medicine

Louisa Garrett Anderson and Flora Murray:

by Jenny M. Held, MD, and Don Nakayama, MD, MBA, FACS
In the early 20th century, women were trained as physicians with the intended purpose of taking care of female patients and children specifically. However, Louisa Garrett Anderson, MD—the daughter of the first woman surgeon in England, Elizabeth Garrett Anderson, MD—and her colleague, Flora Murray, MD, sought to change this practice.

With the onset of the first World War (WWI) in 1914, they founded the Women’s Hospital Corps (WHC), staffed entirely by women suffragists. With the support of their political allies at home and the French Red Cross, they established two military hospitals in Paris and Wimereux, France, on the Channel coast. The success of their endeavors received the attention of Lieutenant General Sir Alfred Keogh, Director General of the Royal Army Medical Corps (RAMC), who, as casualties began to flood the country from the war in France, asked Drs. Anderson and Murray to set up a facility in London, England, with the capacity to treat up to 1,000 patients. These two physicians established the Endell Street Military Hospital (ESMH), the only RAMC hospital entirely run by women physicians and staff.

Despite their lack of training in trauma and orthopaedics and with no previous experience in military medicine, they met the challenge of treating often horrific wartime casualties and returning battle-injured men to society. Drs. Anderson and Murray far exceeded expectations and earned Sir Alfred’s grudging praise. The success of the ESMH formed the foundation for future generations of women military physicians and surgeons.

Prior to WWI

Dr. Anderson qualified in medicine in 1900 at the London School of Medicine for Women (LSMW), the first British medical school to train women physicians. Its co-founders included Dr. Elizabeth Garrett Anderson and Elizabeth Blackwell, MD, the first woman to receive a medical degree in the U.S. Louisa Anderson practiced at the New Hospital for Women, which was also started by her mother. Less is known about Dr. Murray, who was four years older than Louisa Anderson. She began her medical studies at LSMW and completed her training in Durham, Scotland. Dr. Murray returned to London in 1905 as a medical officer and anesthetist. Both Drs. Anderson and Murray were ardent suffragettes and members of the Women’s Social and Political Union (WSPU), the leading militant organization campaigning for women’s
suffrage in the pre-war U.K. In fact, Dr. Anderson was imprisoned for a month for breaking the window of an anti-suffrage minister’s home in Kensington.\textsuperscript{1,3}

In 1912, Drs. Anderson and Murray co-founded the Women’s Hospital for Children in London. At that time, women physicians were barred from providing care to male patients. Their practices were limited to general practice and the inpatient care of women and children. The facility cared for otherwise underserved youths, but also provided training for women physicians in pediatrics, an educational opportunity otherwise restricted to men.

**WWI, WHC, and the ESMH**

The RAMC did not anticipate the flood of casualties from mechanized warfare and was caught unprepared, with inadequate numbers of surgeons and facilities to accommodate these patients. With its medical staff limited to men, the RAMC and its French counterparts sought assistance from any source.

Just six weeks after Great Britain’s entry into WWI on August 4, 1914, and with the arrival of the British Expeditionary Force in France three days later, Drs. Anderson and Murray and the WHC traveled to Paris with the intent of assisting in the care of the wounded, despite their lack of experience in treating men and their limited experience with military surgery. They were able to provide their own staff and funding with financial support from sympathetic supporters and medical suffragists.\textsuperscript{1,3} Drs. Anderson and Murray contacted the French government and offered to develop and support an autonomous surgical unit, staffed by women. The French Red Cross gave the WHC £2,000 to help open the makeshift hospital in the newly constructed Hôtel Claridge, which had been commandeered for their use.\textsuperscript{3} Just two months after their arrival in Paris, they were so successful that the RAMC asked that they open another hospital in Wimereux in the Pas-de-Calais, the first Women’s Hospital to be recognized by the Royal Army.\textsuperscript{1}

In a letter to her mother dated September 27, 1914, Louisa Anderson wrote, “I wish the whole organization for the care of the wounded...could be put into the hands of women. This is not military work. It is merely a matter of organization, common sense, attention to detail and a determination to avoid unnecessary suffering and loss of life.”\textsuperscript{3}
By Christmas 1914, the sheer number of casualties overwhelmed British facilities near the Western Front. The RAMC began to evacuate patients across the Channel to hospitals in England and to close inpatient facilities in France. The effort required large numbers of hospital beds to be installed at home. The success that Drs. Anderson and Murray achieved at the Hôtel Claridge and in Wimereux was well known, so Sir Alfred offered them the opportunity to open a large hospital in London with the capacity to house 500 to 1,000 beds. Drs. Anderson and Murray closed their facilities in France and established the ESMH at the former St. Giles Union Workhouse, Covent Garden. Once again, the staff, from surgeons to orderlies, were all women. Its proximity to the railway stations ensured that Endell Street was among the first to receive patients when convoys arrived in the country. Between 30 to 50 soldiers arrived daily; there were sometimes as many as 80. Each day, Endell Street surgeons performed as many as 20 operations. From May 1915 through October 1919, ESMH treated nearly 50,000 patients.1

Even though the hospital was part of the RAMC, Dr. Anderson, Dr. Murray, and the staff at Endell Street never received military commissions. They did, however, receive equal pay to RAMC physicians of equivalent rank: Dr. Murray with the honorary rank of Lieutenant Colonel and Dr. Anderson as an honorary Major. Neither physician, however, was a uniformed officer.4 Working at an RAMC facility and receiving pay from the Army, they were subject to military regulations, an arrangement that chafed women used to running their own hospitals. The RAMC provided insufficient financial support, leaving the two women on their own to raise money to recruit their own physicians (which eventually numbered 15, including surgeons, ophthalmologists, dentists, anesthesiologists, a bacteriologist, and a pathologist), and the necessary nonmedical support staff.4 Drs. Anderson and Murray adopted the motto of their political supporters, the WSPU: “Deeds, not words.” Marion Dickerman, an Endell Street nursing orderly, later remembered, “We had this drilled into us: you not only have got to do a good job, but you have got to do a superior job. What would be accepted from a man will not be accepted from a woman. You have got to do better.”1

To Drs. Anderson and Murray, “better” meant following a different model of care than the one used at
To Drs. Anderson and Murray, “better” meant following a different model of care than the one used at traditional military hospitals. While mastering the surgical tasks previously restricted to men, they also addressed patients’ emotional and psychological needs. They furnished the rooms with mattresses softer than those issued by the military, houseplants, and table lamps—simple amenities that were a welcome relief from the filth of life in the trenches. Musical performances entertained the soldiers, who were provided scheduled leisure activities, such as sewing and embroidery. Soldiers who were hesitant to be treated by “lady doctors” came to prefer the care they received at Endell Street. Those troops who had requested to be transferred to traditional facilities run by men often refused to leave Endell Street when their requests came through.¹

**After the War**

When ESMH closed its doors in October 1919, it was the longest-running temporary military hospital of the war and the only one organized and staffed entirely by women.² The building no longer exists, but the work accomplished within its walls has had a lasting impact. By providing exceptional care to wounded soldiers and meeting administrative challenges brought on by wartime scarcity, Drs. Anderson and Murray demonstrated that woman physicians were equal to their male counterparts. They broke the longstanding taboo of only men caring for men. They proved themselves the administrative and professional equivalent of male physicians.

The WHC and its Scottish counterpart, the Scottish Women’s Hospitals, emerged from the war with favorable public support. Although the British medical establishment would continue to yield its influence grudgingly, Dr. Anderson, Dr. Murray, and their colleagues set the stage for gender integration in medical schools, training programs, and all aspects of care—including the most gender-restricted field, military surgery, a specialty that only recently has started to yield. ♦

**REFERENCES**

The ACS Quality and Safety Program: Louisville hospitals participate in first site visits

by Janet R. Chipman, MD, FACS;
Jason W. Smith, MD, FACS;
and J. David Richardson, MD, FACS
In 2017, the American College of Surgeons (ACS) published *Optimal Resources for Surgical Quality and Safety*, which was co-edited by David B. Hoyt, MD, FACS, ACS Executive Director, and Clifford Y. Ko, MD, MS, MSHS, FACS, Director, ACS Division of Research and Optimal Patient Care. Commonly referred to as the Red Book, this manual was intended to serve as a guide for the development of quality and safety programs in U.S. hospitals.* It shares many common features with the optimal resource documents used in other ACS-recognized programs, including the well-established ACS Committee on Trauma Verification, Review, and Consultation Program.

*Optimal Resources for Surgical Quality and Safety* focuses on surgeon involvement in the five phases of care: (1) the preoperative preparatory phase; (2) the immediate preoperative readiness period; (3) the intraoperative phase; (4) the postoperative period; and (5) the postdischarge phase of care. Additional quality improvement recommendations include: appointing a surgical quality officer, who has the responsibility and authority to affect surgical quality improvement efforts in the institution; implementing a method for case review of outcomes with appropriate peer review; and ensuring broad institutional involvement. Additionally, the Red Book recommends that the hospital have an effective structure for privileging and credentialing surgical care professionals. In a high-volume hospital, benchmarking performance against recognized databases is a laudable goal. The aim of these efforts is to aid in the provision of infrastructure development to support hospitals in the creation of a culture focused on safety and high reliability.

After the release of the Red Book, a small committee of College Fellows convened to develop standards based on the principles outlined in the manual. The objective was to provide a mechanism by which hospitals could focus on their surgical quality efforts in an organized fashion. The ultimate goal of these standards was to develop a verification process that would encourage participation by a large number of hospitals with diverse characteristics; that is, both academic centers and community hospitals, including not only large private urban institutions, but smaller facilities in rural or suburban settings as well.

The authors of this article were involved in the initial planning phases of the verification program, in part because they represent different types of institutions. Dr. Smith is the quality officer at a 350-bed academic institution with a safety net role as a major part of its mission; Dr. Chipman is a designated surgical quality officer at a 500-bed, private tertiary hospital; and Dr. Richardson has held leadership positions within the College, including as ACS President (2015–2016), and has participated in various ACS quality efforts, in addition to having general knowledge about rural and community hospital care. The authors affirmed their commitment to this quality improvement process by engaging their institutional leadership with a plan for developing a hospital quality and safety program that generally conformed with the principles outlined in the manual and being among the first hospitals to undergo a verification site visit.

**University of Louisville Hospital**
The 350-bed University of Louisville Hospital, KY, provides trauma care for a broad catchment area of more than 2 million people and serves as a safety net hospital for urgent and elective surgery for the service area. The hospital has a long history of being an ACS-verified Level I trauma center. The hospital also has an accredited breast program, cancer program, and comprehensive stroke center. The hospital is an ACS National Surgical Quality Improvement Program.

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(ACS NSQIP®) participant. As a training institution, every surgical discipline has a morbidity and mortality (M&M) conference as required for accreditation, although the intensity of these reviews appeared to vary somewhat. Moreover, a fair assessment of these efforts might characterize them as “disciplinary silos,” in that they resulted in few coordinated efforts to improve quality, with the exception of a robust performance improvement process in the trauma program.

As the University of Louisville Hospital began this initiative, it was clear the surgical specialties needed better coordination of existing reviews under the aegis of the quality officer and better processes to involve nonsurgical disciplines, such as anesthesia, various medical services, and the emergency department. Examples of multidisciplinary coordination included efforts to manage conditions, such as gastrointestinal bleeding where more effective protocols were implemented, or the coordination of the ordering of anticoagulants in a postoperative patient with atrial fibrillation.

Many benefits were observed as the department of surgery initiated the upgraded quality program. Participation increased among the specialty surgical services, and they became much better integrated into the quality culture of the hospital. The process required tremendous coordination and emphasis on teamwork, especially in our preoperative assessment phase, requiring collaboration with the anesthesia department. An increased emphasis was placed on the use of data to decrease variability in care and improve clinical effectiveness.

The process of preparing for the site visit energized the staff—physicians and nonphysicians alike. We were proud of our review of problems in a traditional M&M format, but we were impressed that the structure of the Red Book process forced a discipline of review that may have previously been lacking. This process, though resource- and labor-intensive, allowed the quality program to move beyond the M&M conference.

The process provided several tangible benefits that could be considered self-serving, but were an offset to the time and resources required for the process. The opportunity to query the site visitors about their experiences and best practices regarding quality metrics was highly beneficial. The possibility for external validation of the merits of our quality and safety program was no small achievement for our safety net hospital, as quality issues had been raised previously when the hospital was part of another health care system. Although the University of Louisville Hospital does not have an active marketing program, the prestige of potential verification by the ACS for our safety initiative would lend credence to the importance of quality to the institution.

Baptist Health Louisville
Baptist Health Louisville, KY, is a 500-bed private hospital that is part of a large health care network in Kentucky and southern Indiana. It has an open medical staff of nearly 500, with a mixture of employed and private practice physicians. The hospital provides extensive tertiary surgical care with busy orthopaedic, cardiothoracic, and general surgical services. The institution participates in several quality databases, including an accredited program in bariatric surgery, the Society of Thoracic Surgery outcomes dashboard, and the ACS Commission on Cancer National Cancer Database. However, Baptist Health Louisville does not participate in a general surgical database.

The hospital has a surgeon who reviews potential quality issues, which emanate from queries from many sources. This surgeon then reviews the cases and refers them to a surgical patient care committee (PCC), which appropriately adjudicates the concerns raised. The PCC is a large, active group with specialty representation from all surgical disciplines. The PCC chair is a surgeon elected by the committee, and the leadership rotates annually. After chart review of myriad cases (including some with suboptimal outcomes), it appeared the process for detecting and managing outliers was robust,
and it was evident that disciplinary actions were taken as required.

As the surgical quality leaders in the hospital evaluated their process in preparation for the site visit, they made several observations. Although they were appropriately proud of their processes and ability to manage outliers, they had inconsistent methods of case review, which may have impaired their ability to raise the level of performance of all surgeons. In addition, several services had metrics for comparing their performance to national standards, but several did not. Loop closure was often performed when problems were identified; however, this process was frequently fragmented, without a person or group consistently responsible for the follow-up action. The hospital leaders recognized the need for a better means of communication, not only in problem areas, but also a system for raising awareness among the medical staff of problems or corrective actions that occurred. Participation in the quality and safety site visit appeared to energize the medical staff in this private hospital, as it did in the academic center five miles away.

**Discussion**

Two disparate hospitals in Louisville were proud to have been among the four initial institutions to have an ACS quality and safety site visit. As an observer during both visits, Dr. Richardson was struck by several common themes. The nonphysician leadership at both hospitals enthusiastically endorsed the process. In addition to any promotional value that might accrue from a positive verification visit, they were clearly committed to enhancing the culture of safety and quality. Leaders at both institutions appropriately believed the process for detecting outliers was in place, but embraced potential improvements in the ability to deliver consistent, excellent care across the board. The term “high reliability” can be a cliché, but there seemed to be a genuine desire to have a continuous improvement process in place to achieve that goal.

From a surgical staff perspective, it was rewarding to encounter more than 20 surgeons in each institution representing all disciplines sitting in a room after hours discussing quality. Clearly, the key is to maintain the commitment to improving quality and safety daily, but the surgeons in both hospitals appeared to realize this process is iterative and requires constant attention. Another positive common feature was the enthusiasm the entire process generated in the nonphysician professionals who deal with various aspects of the five phases of care, as well as the quality programs themselves. The experience provided other unstated value to both hospitals.

Both hospitals clearly embraced this endeavor, but undertaking a quality and safety site visit and the processes required for a positive outcome requires commitment across the institution. The process requires an enormous time commitment, even in a hospital with the appropriate elements in place. The expense of establishing an effective quality and safety program is real, particularly in a large facility. It also requires surgeon buy-in to have their results scrutinized. Merely having a committed surgical quality officer trying to lead a nonparticipatory surgical staff will offer little or nothing. The ACS has been the clear leader in the field of surgical quality, and our two institutions seek to be at the forefront of this new effort and demonstrate their willingness to embrace these quality efforts across the broad spectrum of surgical care.

After decades of experience with myriad ACS quality programs, Dr. Richardson is committed to the belief that not only are quality and safety initiatives inherently important, but that they may act as a talisman to confer protection from forces that may desire to impose “quality” standards without an understanding of what that term truly entails. The site visitors recognized the learning-curve nature of the Red Book process, and those from our two hospitals were grateful to be included in the formative stages of this evolutionary program. ♦
Surgeon leaders need to educate, elevate, and energize to create a culture of diversity:

An interview with Dr. Julie Freischlag

by
Shubhada Dhage, MD, FACS;
SreyRam Kuy, MD, MHS, FACS;
and Amelia Grover, MD, FACS
Editor’s note: This article is the first in a series of “Profiles in Diversity” developed by the American College of Surgeons (ACS) Committee on Diversity Issues. These interviews are published periodically and spotlight prominent surgeon leaders who promote the value of diversity and inclusion both in the ACS and among its members. The full audio of this profile is available on the Committee on Diversity Issues page at www.facs.org/about-acs/governance/acs-committees/committee-on-diversity-issues/profiles.

Julie Freischlag, MD, FACS, FRCSEd(Hon), is chief executive officer (CEO), Wake Forest Baptist Medical Center, and dean, Wake Forest School of Medicine, Winston-Salem, NC. In addition to her significant achievements in the field of vascular surgery, she has been a trailblazer as a surgeon leader and a strong advocate for diversity. Shubha Dhage, MD, and SreyRam Kuy, MD, MHS, both members of the ACS Committee on Diversity Issues, conducted this interview December 11, 2018.

Tell us about your journey as a surgeon leader.

I am a vascular surgeon. I went to Rush Medical School, Chicago, IL, and then trained at the University of California-Los Angeles (UCLA). I became chief of the vascular division at UCLA and then became the first woman chair of surgery at Johns Hopkins University, Baltimore, MD. At that time, I was only the fourth woman chair in the country of a department of surgery. I was the only division chief of vascular surgery in the country that was a woman. Now as CEO and dean at Wake Forest Baptist Health, I’m the only CEO physician who is a woman in the southeastern U.S. and am one of about 28 deans in the country who are women.

As a chair, I started really noticing the need to promote inclusion and diversity. Mainly because when you look at leaders in surgery, deans, and CEOs, the lack of diversity is pretty poignant—not only in terms of gender, but also race and background.

In our institution, we are looking for leadership that’s diverse. For me, diversity and inclusion mean raising a great pipeline of people who come through at all levels and then rise to lead. As a result of developing the pipeline, our leadership will become more diverse.

What does diversity mean to you and to your institution?

Diversity to me means excellence. When you look at businesses and corporations, diversity has been paramount to achieving excellence. It’s through diversity, through differences of opinion coming together to ultimately make the best decision. Personally, as a chairwoman, I came to appreciate that when I wanted to make a decision or come up with a new way to accomplish a task, getting a diverse group together was invaluable in getting to the right answer. I did have a few examples where I thought I had pretty good ideas and planned to make a decision by myself. But, if I stopped and incorporated a diverse team, we made a better decision with more depth and flavor than mine alone. This diversity can be created by including people of different specialties in surgery, age, gender, and whether they are residents or students or of a different ethnic background.

As CEO, every year I choose a theme that serves as a focus for the institution. Wake Forest encompasses 20,000 staff people, five hospitals, 500 primary care practitioners, a medical school, a physician assistant school, and a nurse anesthetist school. This year at Wake Forest, we have chosen diversity and inclusion as our theme because it’s so important. It’s important when you start making corporate and business decisions at an academic health center that you remember the diversity in your organization and the diverse community you serve. We make all of our decisions based on how we will best care for the people who live in western North Carolina together.
As you sit at a table or you sit with your team, you want to see a mosaic—you want to see different people with whom you interact each day.

It is a natural tendency to veer away from confrontation or diversity of ideas because sometimes people believe that makes decision making more complex and difficult. How do you overcome this challenge and encourage diverse discussions?

Most people think it’s difficult to be inclusive and diverse, and that challenge arises when people who have different beliefs enter into a conflict. Some people aren’t as fair as you would like them to be. I am somebody who loves everything to be fair. I think once you realize that your decision will be better if you take time to listen and bring in diverse views, you will find that you can’t even imagine making a decision without that diversity of opinion.

I will give you one example. I have been practicing for 30 years as a vascular surgeon. Just in the last five years, I have taken the opportunity to listen to a better way to take care of patients, which is by giving the patient a voice, too. I used to say, “You need to have a femoral popliteal bypass,” or “Your aneurysm just hit six centimeters, and I need to fix it.” In the past, I would just say, “We’re going to do this procedure, and what date would you like the surgery?” I’ve grown as a surgeon, and now I have learned instead to ask the patient, “Do you want your aneurysm fixed?” or “Do you want a bypass?” You listen to what they have to say. This approach is patient-centered, and it’s actually better for the patient. You can adapt to it. It does take a new mindset that you’re going to focus on the patient—his or her desires and wants. Then you alter your behavior and availability appropriately.

If you take clinical inclusion of the patient’s voice, and you can then take it to your office and other places to be more inclusive, I think that can help people decide that listening and inclusivity aren’t that hard. Actually, it takes a bit more time, but you make better decisions.

What are specific steps you can take as a leader to foster and implement a diversity initiative so that it doesn’t feel like a directive?

An example is when I started as chair of surgery at Hopkins. Initially, we interviewed resident candidates from five to eight schools, and we received a few hundred applications, mainly because people thought we only looked at a few schools to fuel our residency. The residency program director and I expanded the pool and interviewed students from different schools. As we did that, the diversity of the pool increased because people started to apply to our program from multiple states. We then set two more goals: to increase the number of women and international graduates. We added looking at gender because only 10 percent of our applicants were women. International graduates, who were amazing candidates, allowed us to appreciate how difficult it is to be born and raised in a foreign country and want to train in the U.S. The diversity of our residency expanded.

When I was at the University of California (UC) Davis as dean and vice-chancellor, we really were trying to increase our faculty diversity. We found that it was very hard. We decided we needed to tell our residents that we wanted them to stay. Only about 17 percent of all our residents stayed at UC Davis. We worked hard to let them know that they could fit in and that they could stay. This extended our diversity initiative to our medical students. For our student applicants, we implemented a second-look opportunity and looked to our more diverse faculty who could talk to them, interview them, and represent where they came from. It takes a long time to change the culture, especially if you’re lagging behind. Those initiatives are still a work in progress. Trying to get more diverse students, and then more diverse students to stay on as residents and faculty, builds the pipeline through a domino effect.

Culture change requires patience. You allow things to happen over time and it can take many years to see changes in diversity and inclusion take shape.
What would you recommend to those junior surgeons (students, trainees, faculty) who are looking to champion diversity at their institutions?

Understand that no matter where you are, wherever you sit, wherever you were born, whatever your experiences, we all need to pay attention to inclusion and diversity. As you sit at a table or you sit with your team, you want to see a mosaic—you want to see different people with whom you interact each day.

At Johns Hopkins, we did an exercise during our diversity training. There was a box of beads of different colors: white, brown, black, and yellow. The instructors said, “Take the beads out according to the color of the people you spend time with during the day.” We realized very quickly that probably 80 to 90 percent of those with whom we interact look like us. As you look at your immediate team, if a mosaic is what you want to look like, then you need to really stretch to make that happen.

Part of it is just being aware that people who look like you may think differently than you, too. There are generational differences. When you look at women surgeons, you see women in their 30s, 40s, and 50s practicing. In a practice, there may be surgeons who are of different generations.

How have you been affected by bias, and do you have any tips on how to manage it?

I was interviewing for surgery residency in 1979 in Los Angeles. The chairman welcomed all young men and said, “Oh, and one woman.” I was only the sixth woman to finish at UCLA. I was only the sixth woman to get her vascular certification. At my first two jobs, I was the only woman on the surgical faculty at the University of California-San Diego and UCLA. When I went to Milwaukee, WI, I was one of two women faculty members.

I think for me the part that was so hard was being the only woman. People really were watching you closely. I really felt that you had to perform in a very good way, not only to survive and make it, but also to allow someone else to come behind you. If you did not do a good job, they might not allow other women into the program. I was really worried about that. I don’t remember feeling that I experienced unconscious bias or issues. I did know when I interviewed at UCLA for residency they were graduating a woman chief resident that year. I realized that she survived, so I probably could survive.

I think there were issues when I was looking for chair of surgery jobs. I had a dean at a very prominent medical school tell me over the phone that I was terribly qualified, but he didn’t think that he could hire his first woman chair ever in the department of surgery. He didn’t think culturally that his team was ready for it. In 2002, I was offered a job as chair at another institution, and then the offer was rescinded two weeks later because they didn’t think that they could support a woman. They really felt it was gender-oriented and not based on qualifications. I ended up getting the job at Hopkins, where I did have a supportive dean. But I was the only woman clinical chair. It was very groundbreaking. Now, there are 22 women surgery chairs across the country.

I think we have to challenge leaders to have the backs of the diverse people they hire. If they can’t do it, then it would not be worth it. They have to have your back to make you successful.

In the *Journal of the American College of Surgeons*, I wrote about how I wanted to go to the University of California San Francisco. Twenty years later, a Fellow of the American College of Surgeons told me that there were three women resident applicants the year I applied. The chair decided not to rank any women that year. Sometimes people will do things, and they don’t even realize it. That’s why implicit bias training is important. It’s probably not overt bias but unconscious bias. We have implicit bias training for all our search committees and all our medical students.
I believe wherever you’re planted, even if things didn’t work out, you can end up blooming somewhere else.

What would you tell your 20-year-old self about the trajectory and your experiences with bias and diversity?

Well, I used to think that, when you were younger, if someone wasn’t treating you well, or if they weren’t listening to you, you really needed to fight for that position and you really needed to be very proactive; and I still think that’s somewhat true. So the way I used to describe it to 20-year-olds was that when a door was shut, you were supposed to beat down the door rather than go through a window, because you could hurt yourself. Now I feel what you need to do is to go through another door, and it actually does lead you to a better place.

That said, there still are things done to which you need to call attention. Now I think leaders really want to hear about it. Speak up, make sure people understand what you can do and what you want to do, then learn how to let people know that if they say or do something that’s offensive, even if there’s a hierarchy, you have an ability to say, “You offended me and I’m not feeling comfortable.” And I also tell people, “If you’re a bystander, you need to speak up and make sure people realize that what they’re saying or doing perhaps isn’t the best.”

I believe wherever you’re planted, even if things didn’t work out, you can end up blooming somewhere else.

What recommendations do you give an organization to continue to grow diversity?

The American College of Surgeons (ACS) has given me an incredible opportunity. I went to my first meeting in 1983, presenting at the Surgical Forum at Clinical Congress. I was fortunate enough to become a Governor through the Association of Veterans Affairs Surgeons. Then I was Secretary of the Board of Governors and then I became a Regent, which was amazing. I was the first woman Chair of the Board of Regents. It was all an incredible opportunity, and through that experience, I’ve watched the College grow in many ways. They started a Women in Surgery Committee, the Young Fellows Association, the Resident and Associate Society, and the Committee on Diversity Issues. I’ve seen so much inclusion, whether by gender or race or by specialty. I’ve been a member of many of the chapters because I’ve moved around the country, and they have been so great about including residents in their programs, as well as young surgeons, and really promoting diversity in that area.

It’s a very inclusive organization. I’ve seen such improvement just with having people find it easy to be part of the society and then also being able to participate on a local level or even on a national level.

It’s really wonderful as we’ve watched it grow. I can’t even tell you how important it has been to me to learn leadership skills, meet people, and be able to talk about all the things that go on in your life through the ACS.

Going back to the effective tools for managing bias and how we can think about instituting directives to fight implicit biases: although a lot of institutions are implementing programs, is there a false sense that they are actively working toward reducing bias and that there may be more effective ways to create cultural change?

When you talk about bias—implicit or not implicit—people get anxious. They worry that they’re doing the wrong things. We do worry that some people may back away from interacting with those individuals unlike themselves out of fear, especially with the #MeToo movement. Will women surgeons not have access to training programs, the ability to go to meetings, or have social interaction with other surgeons who are men? Are we going to be able to negotiate appropriate interactions and behaviors between
each other? We have a new diversity and inclusion vice-president at Wake Forest who is working with us and really looking at how we go forward. I think the training is very helpful, but I also think that you need to really make sure people know that every day their job is to work on inclusiveness, too.

We just created a new vision statement about who we are, and it was pretty inclusive. It says, “We are a preeminent learning health system.” That means we’re constantly learning—whether it’s our students, our staff, or faculty—we are always learning, and that promotes better health for all. Also, health is mental and physical. It’s our patients. It’s all of this through collaboration, excellence, and innovation. I think that’s the piece—to be collaborative, not judgmental, to go toward excellence, which is diversity, and to be innovative about how we do things.

I do a monthly video here where we tell stories and talk about things that are going on in the institution. It’s been really wonderful to have people get to know me and to understand what we are doing. We also feature stories about things that people have done that show great inclusion. I think that it’s day-to-day, person-to-person work, and learning to reach out your hand to that other person makes a difference every day.

What are the three key takeaways from our discussion that our readers can address to have a lasting impact on increasing diversity in their communities, institutions, and practices?

There are three things, which are as follows:

• Educate: You need to really create, enhance, and promote professional development and education. It means listening. Know your community, cultivate better educational programs to be more inclusive, and let people know what it looks like. What are the critical conversations? What kind of things can you do as a bystander to help people be included?

• Elevate: Develop pathways to make sure that all voices are heard. One thing we do here is have affinity groups for Native Americans, African Americans, veterans, and other underrepresented health care professionals. We have a staff counsel for all our staff, and they are really working to elevate each group so we hear from everyone. We survey our people quite frequently to know what’s going on, and in turn, they become more engaged and feel that they have a voice.

• Energize: You really need to motivate, inspire, and empower action. I was just at a leadership group meeting where I commented that it can’t be accomplished with diffusion. We have to have active transport. We really need to cultivate champions. We need to show inclusion in action through stories, and then I, as a leader, have to be totally accountable for what’s going on in my institutions. See something that needs to change, and make it happen.

Educate, elevate, and energize—these are the three things to do, and actually, all three of them will make you feel good about what you’re doing because you’re being active. ♦
Establishment of the
American College of Surgeons
Academy of
Master Surgeon Educators

by Ajit K. Sachdeva, MD, FACS, FRCSC, FSACME, and
L.D. Britt, MD, MPH, DSc(Hon), FACS, FCCM, FRCSEng(Hon), FRCSEd(Hon), FWACS(Hon), FRCSI(Hon), FCS(SA)(Hon), FRCS(Glasg)(Hon)
In October 2014, Ajit K. Sachdeva, MD, FACS, FRCSC, FSACME, Director of the American College of Surgeons (ACS) Division of Education, presented a proposal to the Board of Regents (B/R) to establish an ACS Academy of Master Surgeon Educators, and the B/R unanimously and enthusiastically approved this recommendation. A Steering Committee was then appointed by the Division of Education to provide the overall direction for this Academy, define the scope of activities of the Academy, and develop Standards and Criteria for induction into the Academy.

The Members of the Steering Committee of the ACS Academy of Master Surgeon Educators are listed in the sidebar on this page.

The Steering Committee pursued extensive background work that included a thorough literature review, interviews with leaders of other university-based academies, and surveys of various surgical specialties and national organizations. The Mission Statement for the Academy, and Goals of the Academy, as well as the Standards and Criteria for admission to this Academy were then defined and approved unanimously by the Committee. Specific Standards and Criteria were developed for each of the three categories of membership, which are as follows:

- **Member**
- **Associate Member**
- **Affiliate Member**

The Steering Committee determined that admission to the Academy would be a high honor and emphasized that individual Members would be required to contribute actively to the Goals of the Academy. Membership in the Academy would be open

ACS ACADEMY OF MASTER SURGEON EDUCATORS

STEERING COMMITTEE

**Co-Chair:** L.D. Britt, MD, MPH, DSc(Hon), FACS, FCCM, FRCSEng(Hon), FRCSEd(Hon), FWACS(Hon), FRCSI(Hon), FCS(SA)(Hon), FRCS(Glasg)(Hon)

**Co-Chair:** Ajit K. Sachdeva, MD, FACS, FRCSC, FSACME

Sir Murray F. Brennan, GNZM, MD, FACS

Haile T. Debas, MD, FACS, FRCSC

David B. Hoyt, MD, FACS

L. Scott Levin, MD, FACS

Leigh A. Neumayer, MD, MS, FACS

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

**Advisor**

Patrice Gabler Blair, MPH

**Staff**

Alisa Nagler, JD, MA, EdD

Linda K. Lupi, MBA

Susan Newman, MPH

ACS ACADEMY OF MASTER SURGEON EDUCATORS Inductees, John B. Murphy Memorial Auditorium, Chicago, 2018
to Master Surgeon Educators from across the surgical specialties. The Steering Committee approved unanimously the processes for submission of applications, comprehensive review of each application against the established Standards and Criteria, and the details of the review process.

In October 2017, the B/R unanimously approved the plan for recognition of individuals who would be inducted as Members and Associate Members at a special Induction Ceremony. Also in October 2017, the Academy’s Steering Committee hosted a Special Session at the annual ACS Clinical Congress in San Diego, CA, to describe the Mission and Goals of the Academy, and to share information on the Standards and Criteria for admission in each category of membership. Feedback from the ACS membership was sought. The session was well attended and attendees expressed tremendous excitement about the program. Many nationally renowned surgeon leaders voiced strong interest in the Academy during and after the Congress.

**Aim, Mission, and Goals of the Academy**
The Aim of this Academy is to recognize and assemble a cadre of Master Surgeon Educators of national and international renown who will work closely with the ACS Division of Education to advance the science and practice of avant-garde surgical education and training.

Developed by the ACS Division of Education, the Mission of the ACS Academy of Master Surgeon Educators is to play a leadership role in advancing the science and practice of education across all surgical specialties, promoting the highest achievements in the lifetimes of surgeons.

The Goals of the Academy are as follows:

- Define megatrends in surgical education and training
- Steer monumental advances in the field of surgical education and training
- Foster major innovation in surgical education and training and promote productive collaboration
- Develop cutting-edge faculty development and recognition models
- Underscore the critical importance of surgical education and training in the changing milieu of health care
- Serve as an advisory group to the Division of Education

**Selection of Members and Associate Members**
The application process for Members and Associate Members was formally launched in March 2018. Each application was assigned to two Members of the Steering Committee who were asked to rate the application against the specific Standards and Criteria for admission to the Academy in the two categories. Concrete steps were taken to avoid any real or even perceived conflicts of interest. The Steering Committee met in July 2018 at the ACS headquarters in Chicago, IL, to discuss all the applications and make final decisions regarding admission of the applicants to the Academy. The two Steering Committee Members assigned to review and evaluate each application shared their evaluations with the entire Steering Committee and...
the decision regarding the application was made by consensus within the Steering Committee.

The ACS received 183 applications for Membership and Associate Membership. Following the stringent peer-review process, 106 Members and Associate Members were selected. This initial cohort of Academy Members includes preeminent and renowned surgeon educators, including several current and past leaders of the ACS. The initial cohort of Associate Members includes many individuals who possess the potential to become Members in the future. The lists of the Members and Associate Members selected by the Steering Committee appear in Tables 1 (this page) and 2 (page 30), respectively.

Induction of Members and Associate Members

The formal Induction Ceremony of the selected Members and Associate Members took place October 3, 2018, at the historic John B. Murphy Memorial Auditorium in Chicago, IL. Each individual selected as a Member or Associate Member of the Academy was required to be present at this ceremony to be formally inducted. The few individuals who were unable to attend the 2018 Induction Ceremony will be inducted at the next Induction Ceremony on October 4, 2019.

Dr. Britt served as the Master of Ceremonies for this seminal event, and Drs. Britt, Sachdeva, and Hoyt officially recognized each Member during the induction process. Dr. Hoyt then welcomed the new Members and Associate Members into this Academy, and Dr. Sachdeva highlighted future plans for the Academy.

During the ceremony, 91 Members and Associate Members (36 Members and 55 Associate Members) were inducted. They hailed from 33 states and the District of Columbia. The inductees included individuals from seven countries, and one Member came from as far away as Australia. The Induction Ceremony was successful and generated incredible
enthusiasm and excitement. The vibrant energy in the room was palpable throughout the evening.

Activities of the Academy
Since the Induction Ceremony, the Academy has begun to pursue its ambitious agenda and audacious goals. Members and Associate Members of the Academy have been contacted and asked to share their suggestions regarding major projects that the Academy should consider pursuing. Many important suggestions and ideas have been shared by the Members and Associate Members, which will help in accomplishing the Academy’s far-reaching agenda and will steer the strategic directions of the ACS Division of Education. Active engagement of the Members and Associate Members and communication with other key stakeholders will be pivotal in the Academy reaching its full potential and positively affecting the entire House of Surgery for many years to come.

The cycle for 2019 Member and Associate Member applications to the Academy began in March. Also, this year the Academy will be accepting applications for Affiliate Membership along with applications for Membership and Associate Membership. Affiliate Members will include leaders from other professions beyond the House of Surgery, who support the Aim, Mission, and Goals of the Academy.

If you have thoughts and ideas that you would like to share regarding the Academy, e-mail the Academy at acsacademy@facs.org or visit facs.org/acsacademy.
Editor’s note: The Bulletin is publishing the collected papers from the Metabolic Surgery Symposium, which took place in August 2017 at the American College of Surgeons headquarters, Chicago, IL. This month’s articles focus on metabolic surgery in private practice and how metabolic surgery procedures vary internationally. Next month’s articles will focus on the role of the National Institutes of Health in the development of metabolic and bariatric surgery, and advocacy in action.
Private practitioners played a major role in the evolution of advanced laparoscopic and bariatric surgery training. Academic physicians were disinterested in addressing obesity and were confronted with the distressing outcomes that followed the intestinal bypass. The private sector, with its marked surgeon autonomy and innovative mindset, was far more ready to accept early reports describing the successful outcomes of the gastric bypass operation. In fact, many of the first pivotal peer-reviewed papers in bariatric surgery were written by private practice surgeons, and the first certified bariatric centers of excellence (COEs) were private practices. Private practice surgeons also took the lead in initiating widespread training in bariatric surgery under the aegis of the American Society for Metabolic and Bariatric Surgery (ASMBS), which was originally the American Society for Bariatric Surgery.

Ultimately, industry support of private practice training centers for bariatric surgeons decreased, and surgical fellowship training became centralized in universities. Diminishing reimbursement, the cost of accreditation, and exponential increases in private practice overhead also have contributed to growth stagnation in this sector. The biggest hurdle has been the lack of referrals by primary care physicians who remain unconvinced of the value of metabolic surgical treatment, even though its value is well...
supported in evidence-based outcomes. The challenges that face private practice and academic surgeons may differ, but the common mission of ensuring the population’s health and safety requires synergy, collaboration under the leadership and guidance of the ASMBS, and a major initiative to inform the public.

Prior to academic involvement in metabolic bariatric surgery, formal training was limited to apprenticeships, whereby an experienced surgeon would impart his or her knowledge during the course of several years to a junior surgeon. Without a uniform curriculum, knowledge was often more anecdotal than standards- and evidence-based. Without these guideposts, many surgeons performed the complex metabolic bariatric procedures with little intensive training. Ironically, it was sometimes industry-sponsored encouragement of suboptimally trained surgeons that led to poor outcomes, which inspired the leadership of the ASMBS to create the first accrediting body for bariatric surgery COEs (BSCOE), the Surgical Review Corporation (SRC). Once bariatric surgery possessed a mechanism for quality assessment and a vehicle for education and data collection, academic centers embraced it and recognized bariatric surgery for the specialty it is. Unfortunately, because most insurance companies still adhere to the outdated 1991 National Institutes of Health (NIH) consensus statement,1 metabolic surgery in private practice is still viewed limitedly as bariatric surgery; thus, insurance coverage is inappropriately tethered solely to the concept of body mass index, as opposed to the additional indications associated with the more encompassing term, metabolic surgery.2

The path to practicing bariatric surgery, a subspecialty of metabolic surgery, is a challenging one. This article addresses the following five topics regarding metabolic bariatric surgery within the private practice setting:

• Autonomy
• Research and innovation
• Education
• Accreditation
• Income

Surgical autonomy
Surgeons often select a career in private practice because of the autonomy it provides. The perception of independence in private practice is thought to facilitate broader opportunities and flexibility over the stages of a career. However, this independence also carries with it the responsibility of maintaining a small business and the additional burden that entails. Establishing and maintaining an office and its personnel, choosing partners, dealing with referral patterns, and contending with increasing overhead and diminishing reimbursement while competing with colleagues as well as hospitals and academic institutions is challenging. In today’s complex medical and economic environment, where managing a private practice is not part of formal surgical training, the virtues of autonomy may soon be only of historic importance.

In the early 20th century, an employed physician was considered unprofessional and denied membership in some professional organizations. The advent of managed care organizations, beginning in the late 1980s and early 1990s, in concert with increasingly complex administrative burdens, have driven many surgeons from practice ownership to employed positions. In 2001, 50.2 percent of U.S. general surgeons were self-employed. By 2009, the percentage decreased by 16.3 percent, with 66.1 percent employed3 (see Figure 1, page 34). Although surgeons and other health care professionals were initially disillusioned by managed care, this perspective has largely given way to an appreciation of the income and lifestyle stability this employment model provides, especially when physicians consider the increasing educational debt facing most medical graduates.

Unique to metabolic bariatric surgery is the need for lifelong follow-up of patients, including their nutritional and psychological support and the overhead expenses associated with data collection and reporting, insurance authorization, and supervision of the mandatory six- to 12-month weight-management program most insurers require. Although
many insurers cover few preoperative requirements, patients bear much of the remaining financial burden within the 90-day period after surgery, or it is withdrawn from the surgeon’s fee. Given the present economic environment, it is understandable that most surgical graduates choose employment over ownership.

**Shifts in practice ownership**

In June 2017, the American Medical Association (AMA) conducted a survey to categorize the different types of medical practices in the U.S. Survey response trends indicated that fewer than 50 percent of physicians had an ownership stake in their medical practice. In 2012, 53 percent had an ownership stake, and by 2016, 47 percent had an ownership stake. Of physicians younger than 40 years old, 65 percent are now hospital employees, whereas in 2012, only 51 percent were hospital employees. Surgical subspecialists had the highest ownership stake in their medical practice (59 percent), with emergency room physicians owning the lowest percentage (28 percent), and pediatricians employed at the highest percentage (58 percent). Hospital-owned practices remained stable from 2014 to 2016 at 33 percent.4

The survey also showed that 58 percent of physicians practice in small groups of fewer than 10 physicians per group, whereas only 14 percent of physicians practice in groups of 50 or more.4 These data on general trends in medicine reflect some of the challenges facing the private practice bariatric surgeon. Despite the fact that in private practice one can hire whom one wishes, work with whom one wants, refer patients to one’s specialist of choice, and care for patients in the manner one thinks is most appropriate, some of the original challenges remain, now coupled with new and significant ones.

**Research and innovation**

The conduct of research has undergone significant change due to industry- and government-imposed limitations and regulations. Even though most patient care data are produced in the private practice environment, industry is no longer willing to...
support private research initiatives at past levels, reducing the opportunity to generate peer-reviewed research articles. Over the years, advanced laparoscopic and bariatric training have evolved in the private practice arena, where much surgical innovation took place. The laparoscopic technique, for example, was initiated through a private bariatric surgery practice. It is clear that the more recent interest of academic institutions, by virtue of their resources and capabilities, has led to outstanding breakthroughs in our knowledge of adiposity-based chronic diseases, such as obesity, as well as to greater understanding of the physiological bases of our interventions.

**Education**

Until 1995, only a handful of academic centers performed and taught bariatric surgery. These institutions were located primarily in Iowa, Minnesota, Missouri, North Carolina, and Virginia. At that time, many academic centers were guilty of the same “fat bias” that is pervasive even today, which questions the validity of bariatric surgery. Until 2000, only a few hundred bariatric surgeons were practicing in the U.S., and the majority of these practitioners were in private practice. These surgeons operated and recorded their results, followed their patients, kept quality data, and educated and mentored new bariatric surgeons. Working together and understanding that it took a multidisciplinary team to assist in the care of the patient, they helped to gain hospital support for bariatric surgery and partnered with industry to support their educational and training missions. Many of the annual professional organization meetings were based initially on experience derived from private practice, and the first pivotal peer-reviewed evidence papers were authored by private practice surgeons. Private practice surgeons initiated the first certifications for centers of excellence, as well as widespread training using the ASMBS guidelines.

**Accreditation**

The ASMBS created the original bariatric surgery accrediting body, which was designed to certify centers based on experience, individual surgeon volume, and the ability of the facility to care for morbidly obese patients. In 2012, the ASMBS and the ACS merged their accreditation programs into a single program: the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP). This change was significant in that it required institutional support for data collection and the assignment of a leadership role to a bariatric surgeon. However, MBSAQIP reduces the autonomy of independent private surgeons by eliminating their ability to relocate their practice to another hospital, thus negating any option for professional strategic negotiation. It also fails to recognize the relationship between quality outcomes and procedure volume demonstrated by the evidence reported for many complex surgical procedures. In addition, the cost of accreditation, primarily the full-time equivalent employment metric required for data collection and reporting, is often cost prohibitive for individual private practices, especially in rural communities.

**Income**

Historically, physician reimbursement accrued in private practice was an important consideration for graduates choosing between an employment-, academic-, or ownership-based practice. In recent years, the overhead expenses and bureaucracy of ownership have skyrocketed, and the relatively balanced pendulum of income versus lifestyle has swung away from the realm of private practice. With an average medical school debt of $190,000 in 2016, a 30-year loan at 7.5 percent interest would actually cost more than $400,000. According to an ASMBS survey conducted in 2011, the mean compensation for all hospital-employed
The mean level of relative value units (RVUs) in which an incentive began above the base salary was 5,562 RVUs. For those surgeons who dedicate more than 80 percent of their time to bariatric surgery, the mean compensation was $445,314. The mean level of RVUs at which incentive began above the base was 6,003 RVUs. For private practice, the variation was greater, but for private practice owners, median income was $509,297, whereas for private practice nonowners it was $315,652. 

In addition to income issues for bariatric surgeons in private practice, insurance company payments often are delayed or denied, and their requirements change and are inconsistent, which leads to the need for more time and administrative effort. Government insurance and even some surgical specialty society regulations have become more challenging for the private practice surgeon. Recently, hospitals have purchased more practices and are, thus, in control of more patient lives. The private practice surgeon needs to be concerned about these issues and the diminishing referral patterns.

Survival of the bariatric surgery private practice

Over the years, bariatric surgery has become safer, better accepted, and more reliably performed. A large share of this work has been achieved through the private practice community. And, today, most metabolic and bariatric surgery cases continue to be performed in the private practice setting.

The private practice community in bariatric surgery has a rich past and a record of surgical excellence. Metabolic bariatric surgery patients have been, and continue to be, cared for extremely well within the private practice environment. It is important that our professional surgical societies

**REFERENCES**


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actively foster this practice category and its contribution to high-quality patient care. If the private practice model is to survive in the future health care arena, the challenges outlined herein must be addressed. ♦

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Obesity and diabetes are global epidemics, affecting millions of lives. Metabolic surgery, once primarily a U.S. procedure, has developed in most countries to treat the growing number of individuals afflicted with adiposity-based chronic diseases. In the U.S., exacting standards for acceptance of procedures established by the professional surgical associations along with stringent governmental and legal regulation of devices impose layers of restriction on development and testing of new operations. However, other countries have unique genetic and cultural differences that justify the modification of standard U.S. operations. For example, the Asian population is at a higher risk for development of diabetes at a lower body mass index than their American counterparts; at the same time, they have the added burden of a higher incidence of gastric cancer, rendering screening of the gastric remnant in a gastric bypass impractical. Thus, metabolic procedures must be devised to lessen this potential risk while providing a greater metabolic effect without excessive weight loss. Procedures must also be affordable and require less maintenance in countries where no public financial support exists. Less stringent procedural standards allow for innovations in surgical technique that benefit disease treatment and our understanding of the disease itself. All countries must address the ethics of permitting novel, yet potentially lifesaving, interventions. Since no single procedure is effective in all patients, the availability of a multitude of bariatric metabolic procedures from around the world enables surgeons to tailor treatment to the needs of the patient.
Background

Metabolic surgery involves operations and procedures to treat metabolic diseases, particularly type 2 diabetes mellitus (T2DM). These procedures entail operating on normal organs to effect changes that treat medical ailments. The most common metabolic operations at this time are bariatric procedures.¹

In the U.S., surgeons perform only a handful of operations in the armamentarium of bariatric metabolic surgery, some of which incorporate U.S. Food and Drug Administration (FDA)-approved implantable devices. The accepted bariatric procedures are Roux-en-Y gastric bypass (RYGB) (short limb, banded, distal, and long limb); sleeve gastrectomy (SG); biliopancreatic diversion with duodenal switch (BPD-DS); laparoscopic adjustable gastric banding (LAGB); gastric balloon implantation, vagal blockade (also known as vBloc); and percutaneous endoscopic gastrostomy tube for aspiration (also known as AspireAssist). These U.S.-approved operations have been discussed in other articles published in this series in previous issues of the Bulletin.

Internationally, however, many additional bariatric metabolic operations and devices are in use. This gap in offering these services and devices in the U.S. is attributable to the stringent constraints and lengthy trial and approval process of the FDA, as well as the high standards for acceptance set by professional surgical associations. These bodies pursue protection of patients vigorously, and a legal atmosphere surrounding medicine adds another layer of restriction to the use of new procedures and devices.

Other nations grant more freedom to perform new operations and procedures. The surgeon-patient relationship is less regulated and the legal atmosphere is more relaxed outside of the U.S., Canada, Australia, and the European Union (EU). Publication of outcomes determines acceptability of operations and procedures in the U.S., but in most of the rest of the world, peer-reviewed outcome publications are less frequently needed for surgical procedure acceptance. The U.S., Canada, Australia, and the EU make a clear delineation between experimental, investigational, and accepted operations and procedures, whereas in much of the rest of the world, these categories are less clearly defined. Economic and social restrictions also determine the use of operations and procedures that are not used in the U.S. Understanding some of the mechanisms of effectiveness of bariatric metabolic operations and the role of gut hormones has opened the field to the design of novel operations that take advantage of these mechanisms. This article focuses on metabolic operations that are commonly used internationally but not in the U.S.

OAGB and BGBP

One-anastomosis gastric bypass (OAGB), commonly called the mini-gastric bypass (MGB), is the third most common operation performed worldwide after SG and the short-limb gastric bypass (GBP). It is the second most performed operation in Spain, Italy, France, and India. Robert Rutledge, MD, FACS, first described the procedure in the U.S. in 1997, but the operation fell into disrepute and was poorly accepted because of a perceived high incidence of bile reflux and concern that it was associated with a high probability of Barrett’s esophagus and malignancy.²⁻³ The American Society for Metabolic and Bariatric Surgery (ASMBS) has not approved OAGB/MGB for lack of good clinical studies on bile reflux effects and scant long-term studies. Internationally, modifications have been made in the operation (for example, omega-loop GB, single-anastomosis GB, one-anastomosis GB), and the operation is now
commonly performed in Europe, the Middle East, and Asia-Pacific countries.\textsuperscript{4,8}

OAGB/MGB entails creating a long tubular pouch made on the lesser curvature of the stomach (see Figure 1, this page). The pouch is connected to a loop of jejunum at 150 to 250 cm from the ligament of Treitz using a wide, nonrestrictive anastomosis. This operation is relatively easy to perform because only one anastomosis is made at the level of the antrum of the stomach. The large Petersen’s defect is rarely closed in this operation, which is a source of concern for many surgeons. Weight loss is more rapid and slightly greater than with the standard RYGB, mostly because of a longer biliopancreatic limb. Studies comparing standard RYGB with OAGB/MGB achieve similar results. Use of a longer biliopancreatic limb yields a greater positive metabolic effect on T2DM and hyperlipidemia.\textsuperscript{7,9}

Options for revision with the OAGB/MGB, if indicated, and a lower incidence of internal hernias have been observed. (Although internal hernias after laparoscopic RYGB took more than a decade to become a real clinical problem, it has yet to be seen whether the same complication will develop with OAGB/MGB.) However, OAGB/MGB has been associated with bile reflux (as previously stated), marginal ulcerations, nutrient deficiencies, protein malnutrition, liver failure, and possible multiple organ failures. Advocates of this operation claim these concerns can be addressed by customizing the biliopancreatic limb to the weight and nutritional habits (vegetarian/nonvegetarian) of the patient.\textsuperscript{10} This suggests that the operation needs to be further refined before advocating its widespread use. Most long-term studies have not reported detailed nutritional examinations.

Some surgeons place a nonadjustable ring around the proximal gastric pouch in patients with a high BMI to enhance OAGB/MGB weight loss and weight-loss maintenance (see Figure 2, this page).\textsuperscript{11} The surgeons claim that placement of the ring addresses late weight regain and bile reflux. No long-term reports of the effectiveness of this modification have been published. The use of the loop gastroenterostomy in the OAGB/MGB has opened a new era of single-anastomotic operations in metabolic surgery.

**Sleeved GB**

The diverted OAGB/MGB, or sleeved GB (SGB), is a modified RYGB that evolved from converting an OAGB/MGB to an RYGB to address complications of bile reflux following OAGB/MGB. The afferent limb of the loop of the OAGB/MGB is transected just proximal to the gastroenterostomy and anastomosed to an 80-cm RYGB alimentary limb (see Figure 3, this
Some surgeons use this operation as a primary procedure because the weight-loss outcome is similar to that of the OAGB/MGB, without the concern of bile reflux. It is an easier GBP to perform because the small bowel does not have to be brought up close to the gastroesophageal junction, and thus, less tension is placed on the anastomosis. However, this modification may lead to a higher incidence of marginal ulceration as a result of the increased acid load from the larger gastric pouch.

BGBP

Like the OAGB/MGB, the banded gastric bypass (BGBP) operation was first described and used in the U.S. by the late John Linner, MD, FACS. Initial reports showed a high incidence of ring erosion, as Linner placed the band at the gastroenterostomy. Mathias A.L. Fobi, MD, FACS, FACN, FICS, a co-author of this article, modified the operation in 1986, placing the ring/band around the pouch, 2 cm above the gastroenterostomy, and reported a lower incidence of band erosion and better weight loss and weight-loss maintenance. The operation is essentially a standard RYGB with a 6–8 cm tubular pouch on the lesser curvature with a nonadjustable ring/band loosely placed 3–5 cm below the gastroesophageal junction and at least 2 cm above the gastroenterostomy (see Figure 4, this page). Unlike the standard GBP, the gastroenterostomy created is 2.0–2.5 cm instead of about 1.5 cm. The gastroenterostomy is formed using a Roux-en-Y with an 80-cm biliopancreatic limb and 80-cm alimentary limb. The location at which the ring is placed acts as the functional stoma of the operation. It is hypothesized that the ring enhances the restrictive mechanism of the gastric bypass operation, providing the effect of satiety when stretching of the gastroesophageal junction stimulates the vagus to relay a sense of fullness. This stabilized restricting outlet also reinforces behavior modification by requiring the patient to eat slowly and chew foods well before swallowing, even years after operation.

The BGBP is reported to provide more weight loss and better weight-loss maintenance in the intermediate to long term as compared to the regular RYGB. In a systematic review by O’Brien and colleagues, the weight loss and maintenance outcome are equal to that seen after the BPD-DS without the risks of protein-caloric malnutrition, intractable diarrhea, and foul odor. The reported complications after the BGBP include ring erosion, kinking at the point where the ring is placed, gastroesophageal reflux disease, and solid food intolerance requiring ring removal in some patients. There are many pre-fabricated, sterilized, and standardized ring devices in the international market for banding the GBP, but the FDA has approved none, which limits the

FIGURE 4.
FOBI-POUCH BGBP

FIGURE 5.
BSG

FIGURE 6.
SG WITH DJB
use of this operation in the U.S. The few surgeons who band the GBP in the U.S. either use a surgeon-fashioned ring or use the adjustable gastric band off label. The incidence of band-related complications is less than 10 percent. Band erosion, reported in less than 2 percent of patients, is treated with outpatient endoscopic removal, converting a BGBP to a standard RYGB. In most cases, a band or ring removal results in some weight regain.

BSG
The banded sleeve gastrectomy (BSG) is an SG that is banded with a nonadjustable ring placed loosely around the proximal sleeve 3–5 cm from the gastroesophageal junction (see Figure 5, page 41). This operation is based on the experience of banding the GBP. The sleeve in the BSG is less narrow than the one used in the standalone SG because the ring serves as the restrictive mechanism, which creates a lower likelihood of stricture and leak at the gastroesophageal junction. Reports indicate that banding the sleeve enhances weight loss and weight-loss maintenance, just as with the RYGB in the short term. Better diabetes control has been reported with the BSG in the short term, related to the enhanced weight loss. Complications reported with the BSG include ring erosion, kinking at the site of the ring, and solid food intolerance. As with the BGBP, complications of band erosion are treated with outpatient endoscopic band removal. Solid food intolerance is treated by either band/ring removal or revision of the operation to an RYGB. Concerns about increased reflux when banding the sleeve are unconfirmed. As with the BGBP, the absence of an FDA-approved ring device has limited the use of this operation in the U.S.

SG with DJB
The SG with duodenojejunal bypass (DJB) entails an SG with a Roux-en-Y duodenojejunalostomy (see Figure 6, page 41). The bypass of the duodenojejunal axis enhances the metabolic effects of the SG. This operation is popular in countries with a high incidence of gastric cancer. In these countries, GB is not advised because the regular bypassed stomach is not readily accessible to endoscopic evaluation. The outcome of this operation is better than with the SG, and about the same as with RYGB. In addition, incidents of dumping and marginal ulceration are reportedly less common. The incidence of nutrient deficiency is the same as with an RYGB. SG with a loop duodeno-jejunalostomy is a variant of the SG with DJB using a single anastomosis as in the OAGB/MGB (see Figure 7, this page). The outcome of this variant is the same as with the SG with DJB. Surgically, the SG with loop DJB is a simpler operation.
that places less tension on the alimentary limb. These operations are mostly performed in Japan, China, Taiwan, and Southeast Asia.

**SADI-SG and SADI**

Single-anastomosis duodeno-ileal bypass with sleeve gastrectomy (SADI-SG) and its variant, sleeve gastrectomy with single-anastomosis duodeno-ileostomy (SADI), is akin to the BPD-DS. It is an SG with a duodeno-ileostomy at a point 250 cm from the ileocecal junction (see Figure 8, page 42). First described by Sanchez-Pernaute and colleagues, and popularized by Torres, this operation is reportedly almost as effective as the BPD-DS in the short term, but with a lower incidence of diarrhea and protein malnutrition. The diabetic resolution is similar to that reported for BPD-DS, which is the highest resolution reported for any bariatric operation, including OAGB/MGB. This operation is increasing in popularity in the U.S. and is performed under institutional review board (IRB) protocol in many institutions, including academic centers. Use of the DS and its variants has increased by 50 percent in the last two years. As of the time of this submission, most surgeons make the duodeno-ileostomy at a point 300 cm from the ileocecal junction.

A variant of this operation, stomach intestinal pylorus-sparing surgery (SIPS), with a 300-cm limb instead of the 250-cm limb as in the SADI (but with a smaller-diameter gastrectomy [bougie size near 40 Fr, as opposed to 50 Fr in SADI]), is being used in U.S. clinical trials. Both operations are used primarily as a second-stage operation for SG when more weight loss or more T2DM control is indicated, or when the patient regains weight.

**SG with transit bipartition**

This operation entails an SG with a Roux-en-Y gastro-ileostomy from the gastric antrum at a point 250 cm from the ileocecal junction. Food ingested flows through both the gastroiliostomy and the pylorus into the duodenum and proximal jejunum (see Figure 9, page 42). This operation is designed to use the various mechanisms that we know are responsible for effective bariatric metabolic outcomes. The SG decreases ghrelin secretion by removing most of the gastric parietal mass. The flow of most food through the gastroiliostomy instead of through the pylorus minimizes foregut stimulation and enhances hindgut stimulation. Most importantly, nutrient deficiencies, usually a result of bypass of the duodeno-jejunal axis, are obviated or minimized. Minimal dumping occurs, and the incidence of diarrhea is lessened. The duodenum and papilla are accessible endoscopically. This operation is amenable to easy revision and reversal, as indicated.
The single-anastomosis sleeve with ileal bypass (SASI) is an SG with a loop transit bipartition instead of the Roux-en-Y gastroileostomy at a point 300 cm from the ileocecal junction. This operation was first described by Santoro in Chile as an SG with a bipartition (see Figure 9, page 42). Professor Tarek Mahdy, from the United Arab Emirates, has popularized this modification. Food that is ingested flows through both the gastroiliostomy and the pylorus into the duodenum and proximal jejunum (see Figure 10, page 43). This operation uses the various mechanisms known to result in an effective bariatric metabolic operation. The SG decreases ghrelin secretion by removing most of the gastric parietal mass. The flow of most food through the gastroiliostomy instead of through the pylorus minimizes foregut stimulation and enhances hindgut stimulation. Most importantly, nutrient deficiencies usually associated with bypass of the duodenojejunal axis are obviated or minimized. Dumping is minimal, and the incidence of diarrhea is less. The duodenum and papilla are accessible endoscopically. This operation is amenable to easy revision and reversal, as indicated. The outcome from this operation compares favorably with the
BPD-DS without the nutrient deficiencies and protein caloric malnutrition. Few long-term reports have been published on this operation. The procedure needs to be compared clinically with others and validated by additional surgical groups, especially with respect to ulceration and the patency of the anastomosis in the long term.

**SG with enteral bypass**
These operations entail an SG with a jejunojejunostomy using one of the following: 100 cm of jejunum anastomosed to the jejunum with 200 cm of bypassed jejunum from the ligament of Treitz (see Figure 11, page 43); a jejunoileostomy akin to the jejunooileal bypass with 100 cm of jejunum anastomosed to 200 cm of ileum (see Figure 12, page 43); or a side-to-side jejunoileal anastomosis 100 cm from the ligament of Treitz to the ileum at 200 cm from the ileocecal junction. These operations use the known mechanisms of restriction and ghrelin secretion reduction resulting from SG and the hindgut mechanism of ileal stimulation. The weight-loss effect and metabolic resolution of T2DM with these operations is better than with the SG and similar to what is reported with the short-limb GB, although internal hernias are a major concern over the long term. These operations are
technically simpler to perform than the short-limb GB. A question that remains is the incidence of bypass enteritis and subsequent liver failure after these operations.

DJB
The DJB is strictly a metabolic operation to control T2DM. It entails a transection of the duodenum beyond the pylorus with a duodeno-jejunostomy 100–200 cm from the ligament of Treitz (see Figure 14, page 44). Minimal weight loss is associated with this operation. The procedure is based on the foregut hypothesis of control of T2DM by bypassing the duodenojejunal axis. Rubino demonstrated the effectiveness of this procedure in controlling T2DM in rats, and Cohen reported use of the operation in humans with T2DM who are not obese.33,34 It is a common operation in the Asia-Pacific region, where T2DM is relatively common. In Brazil, surgeons have demonstrated that if the procedure is not combined with an SG, the metabolic results are insufficient. Hence, many surgeons no longer perform this operation.

II and II-SG
Ileal interposition (II) was described initially as a metabolic operation for T2DM because stimulation of the ileum by ingested foods results in release of glucagon-like peptide 1 (GLP-1), which enhances insulin sensitivity and control of T2DM. The original concept was proposed by Mason.35 Gagner and his colleagues performed original animal research with this operation and published outcomes of the first patients.36-38 De Paula popularized II operations for treatment of T2DM or for T2DM treatment in morbidly obese patients by adding the SG to the II (see Figure 15A–B, page 44). The reported outcomes for treatment of T2DM are similar to those reported with the standard GBP; however, the operations are technically demanding and entail multiple

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anastomoses. Although internal hernias (due to the multiple defects created) are routinely closed, their high incidence from potential leaks from several gastrointestinal anastomoses, and the prolonged operating times associated with internal hernias, have been the source of concern. Reported prospective evaluations of both operations are unavailable, though they are used internationally.

GP and BGP
Gastric plication (GP), first reported in the U.S. in the 1970s and repopularized in Iran by Talebpour in 1999, is an SG that is formed by plicating and/or infolding the greater curvature of the stomach vertically with nonabsorbable sutures after the omentum has been transected (see Figure 16A, page 45), as in the regular SG. No transection or resection of the bowel is involved in this operation.42-44 Because no staples are used, it is less expensive and can be performed in parts of the world where availability or affordability of staples is a problem. This operation results in anatomy similar to the SG and the laparoscopic adjustable banding operations. The main proponents of this operation claim that it saves costs as a result of not using stapling devices and the complete reversibility of the operation. We now know from multiple revision reports of GP to SG or GB that its reversibility is questionable and is no longer the main reason that this operation is performed. It requires the same amount of time as an SG and carries essentially the same risks (perforation, bleeding, and portal vein thrombosis). Banding the GP operation is akin to banding the GBP or SG (see Figure 16B, page 45).45 The band used with a SG is an adjustable band. Banding the plication is based on the experience with the BGB where the banded pouch enhances weight loss and weight-loss maintenance. The results are better than with only GP but less than with the surgically performed SG.

REFERENCES, CONTINUED

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Endobarrier

The Endobarrier is an endoscopic device used internationally but not in the U.S. (see Figure 17, page 45), although the manufacturer is located near Boston, MA. The procedure entails placing an endoluminal polymer sleeve of more than 30 cm, anchored with a metallic stent in the duodenum that allows food to bypass the duodeno-jejunal axis, as in the DJB or GB. It is strictly a metabolic procedure for treatment of T2DM. It uses the known foregut mechanism of bypassing the duodeno-jejunal axis, thus minimizing insulin resistance and enhancing GLP-1 secretion and controlling T2DM. Clinical trials in the U.S. are ongoing. The main concerns have been liver abscesses from the spikes of the metallic stent anchored in the duodenum and perforating it, as well as gastrointestinal bleeding. The device is being used internationally, with T2DM resolution reported as 60 to 74 percent at one to two years of follow-up. It remains to be seen whether the Endobarrier will be a good device to indicate whether surgical DJB will affect resolution of T2DM in a nonobese patient, as gastric balloons achieve similar results with fewer complications.

Conclusion

More operations, procedures, and devices for bariatric metabolic surgery are available internationally than in the U.S. because other countries have fewer regulatory and professional roadblocks to the use of new treatments. The plethora of available procedures is accompanied by concerns regarding safety and documentation. These innovations often lead to paradigm shifts in our understanding of both the physiology of our interventions and the disease process itself. Governmental oversight analogous to the FDA may not exist in some countries; however, ethical standards exist in all countries, although they differ from one another. For example, the Declaration of Helsinki, now in its seventh revision, is the most
respected set of ethical principles used to guide medical researchers in protecting patients enrolled in biomedical trials. The declaration opposes the ethics of placebo-controlled trials as purposefully withholding treatment from some individuals.\textsuperscript{40} However, countries such as the U.S., Canada, Australia, and Japan use the Declaration of Helsinki, as well as other ethical guides, and still use placebo-controlled trials.\textsuperscript{50} ♦

**Acknowledgments**

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Dr. Gagner declares speaker honoraria from Ethicon, Medtronic, Valeant, and Gore; and stock options from Transenterix.

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**REFERENCES, CONTINUED**


Modifiers enable surgeons to effectively meet payment policy requirements established by the Centers for Medicare & Medicaid Services (CMS) and other third-party payors. However, there continues to be confusion about when to report modifier 51 (Multiple procedures) or modifier 59 (Distinct procedural service) when the same surgeon performs multiple procedures in the same operative setting. This column reviews the correct use of modifiers 51 and 59.

Until 1996, multiple procedures were reported with modifier 51 appended to the second and subsequent American Medical Association (AMA) Current Procedural Terminology (CPT*) codes. In 1996, CMS implemented the National Correct Coding Initiative (NCCI) to control improper unbundling of codes for Medicare Part B services. These edits, which are updated annually, are based on coding conventions defined in the AMA CPT codebook, national and local payor policies, coding guidelines developed by national societies, and standard medical and surgical practices.

The NCCI Coding Policy Manual includes procedure-to-procedure (PTP) edits that define when two codes should not be reported together for the same operative session. The PTP edits have a Correct Coding Modifier Indicator (CCMI) assigned to each code pair as follows:

- A CCMI of “0” indicates the codes should never be reported together by the same provider for the same beneficiary on the same date of service. If they are reported on the same date of service, the column one code is eligible for payment, and the column two code will be denied.

- A CCMI of “1” indicates the codes may be reported together in defined circumstances, which are identified on the claim by the use of specific NCCI-associated modifiers. These modifiers include anatomic modifiers and modifiers for staged (58), repeat (76), and distinct (59) procedures.

In contrast, if there is no NCCI edit for a code pair, then modifier 51 is appended to the additional procedure code(s) with a global period of 000, 010, or 090 when multiple procedures are performed by the same surgeon in the same operative session. Do not append modifier 51 to add-on codes that have a “ZZZ” global assignment. Surgeons can expect to get reimbursed 100 percent for the first procedure and 50 percent for the second through fifth procedures per Medicare’s Multiple Procedure Payment Reduction (MPPR) policy. If more than five different procedures are performed, an operative report will need to be submitted for payment of all the procedures. This situation occurs most frequently when billing for trauma care.

Case examples
Following are some examples of clinical scenarios and correct coding.

Scenario 1
An accident victim undergoes debridement of a wound to the bone on the anterior lower right leg and debridement to the muscle on the posterior thigh of the same leg. Both wound sizes are less than 20 sq cm.
The debridement codes 11042 (debridement, muscle) and 11044 (debridement, bone) have a PTP edit because this code pair cannot be reported for debriding the same wound. However, the code pair has a CCMI of “1” in recognition of the fact that the debridements may be performed at separate distinct anatomic sites. Because there is an NCCI edit, these procedures would be reported as: 11044, 11042-59.

Scenario 2
A patient who had previous abdominal surgery presents with a large reducible recurrent incisional hernia. After extensive lysis of adhesions and excision of subcutaneous scar tissue, the incisional hernia is repaired using musculofascial flaps (component separation) and implantation of mesh. No NCCI edits apply to any combination of the procedure codes that will be reported. However, modifier 59 should be appended to the second instance of code 15734 (musculofascial flap) to indicate that it is a distinct and separate service. This operation would be reported as: 15734, 15734-59, 49565 (hernia repair), 49568 (insertion of mesh). Modifier 51 could be appended to 49565; however, most payors suggest not appending modifier 51 to any codes because coding software will automatically adjust payment for multiple procedures. No modifier is appended to code 46568 because it is an add-on service with ZZZ global assignment.

Scenario 3
A patient presents with multiple stab wounds to the abdomen. A laparotomy is performed, and a laceration of the small bowel is repaired. At a different section of the small bowel, the stab wounds required resection and anastomosis. An NCCI edit exists for 44602 (repair laceration of the small bowel) and 44120 (small bowel resection and anastomosis), and therefore, this operation would be reported as: 44602, 44120-59.

Scenario 4
A patient is unable to be liberated from a ventilator after an acute injury. A planned percutaneous tracheostomy (31600) and percutaneous endoscopic gastrostomy (43246) are performed in the same operative setting. Codes 31600 and 43246 do not have an NCCI edit, but the 31600 descriptor states “separate procedure,” and the NCCI manual states to append modifier 59 to the separate procedure code. In this case, it would be acceptable to report 31600-59, 43246-51; however, it also may be unnecessary because it is clear that the two procedures are not in an anatomically related region or through the same skin incision. Use of modifier 59 will be based on payor preference.

Learn more
It is important to keep up to date with changes in coding policies. More information about NCCI edits and the quarterly PTP edit updates are available at www.cms.gov/Medicare/Coding/NationalCorrectCodInitEd/Version_Update_Changes.html. Learn more about correct coding at an American College of Surgeons (ACS) General Surgery Coding Workshop. Physicians receive up to 6.5 AMA PRA Category 1 Credits™ for each day of participation. Find out more and register for a 2019 workshop on the ACS website at facs.org/advocacy/practmanagement/workshops. ♦
Providing surgical call coverage in rural areas of the U.S. and Canada is a constant struggle. With many small hospitals being covered by only one or two surgeons, issues related to lack of time for family and the inability to take time away from practice to learn new techniques leads to burnout and early retirement or an exodus to larger areas offering the opportunity for potentially better positions. The pool of rural surgeons is already at a crisis level, with many hospitals losing the capability to offer surgical services when their surgeon leaves or retires. Statistics also show that too few trainees will be available to fill these positions.

Research done by Julie Conyers, MD, MBA, FACS—a founding member of the American College of Surgeons (ACS) Advisory Council for Rural Surgery—revealed that the locum tenens market is a $21 billion business, with the companies taking 20 to 50 percent of their fees as profit and many times providing staff of variable quality. Dr. Conyers’ 2016 survey of approximately 1,000 surgeons via the ACS rural surgery listserv showed that nearly 50 percent of rural surgeons were on call every night or every other night; 20 percent had no coverage during the infrequent times they were away from their practice; and 62 percent said that locum tenens coverage would improve their quality of life, but costs to their facilities were the biggest barrier to providing locum tenens coverage. These findings were presented at the 2016 ACS Advisory Council for Rural Surgery annual meeting. Interestingly, when survey participants were asked, “In the right circumstance, would you consider working as a locum tenens surgeon?” more than 80 percent of urban and rural surgeons said they would consider work as a locum tenens surgeon. Surgeons older than age 50 were most receptive to the idea of working as a locum tenens surgeon, and more than 50 percent of that older group might consider doing full-time locum tenens work.

High-quality locum tenens surgical coverage can provide call relief for rural surgeons, especially if it can be arranged on a regular basis and by the same pool of surgeons. Rural hospitals, rural surgeons, and rural communities can benefit greatly from a well-developed locum tenens coverage arrangement. Two locum tenens systems, one in Canada and one in the U.S., are discussed in this article and may serve as templates for locoregional solutions for rural surgical call coverage.

**CAGS Rural Locum Tenens Project**

To help rural communities provide surgical care, the Canadian Association of General Surgeons (CAGS) has developed the Rural Locum Tenens Project. The goal of this program is to help provide locum tenens surgeons to rural areas in anticipation of creating more stable long-term surgical coverage. This program attempts to develop a team of six to eight surgeons who will provide regular locum tenens coverage to a rural community in one- to two-week time blocks.

The rural community of Thompson, Manitoba, was selected as a pilot site for the CAGS Rural Locum Tenens Project. Thompson is a community of 13,000 people and serves as the hub of northern Manitoba. At the time the project was initiated, Thompson was down to only one surgeon.

The Thompson project launched with advertisements describing the need for locum tenens surgeons on the CAGS website and in the CAGS monthly newsletter. A video also was created, which showed...
the area and community and highlighted the need for additional surgical coverage.

There was a brisk response of applicants for the locum tenens positions, and after more than 20 surgeons sent in their curriculum vitae, no further applications were accepted. Since the project began, two locum tenens surgeons have accepted full-time positions in Thompson. As a result of the Rural Locum Tenens Project in Thompson, the surgical care of patients of the community has improved significantly.

Several important points were learned as a result of this pilot project. At the time this project was initiated, licensure to practice surgery in Thompson required an in-person interview through the Manitoba Registrar, which created a barrier for locum tenens surgeons who were interested in the position. Subsequently, the CAGS has worked with the Manitoba Registrar to allow the interview to be conducted either by telephone or via Skype. It also became clear that the local health authority and the CAGS needed to collaborate. This partnership led to the development of a fact sheet for applicants containing important information regarding the locum tenens position and allowed for early identification of potential candidates for the positions.

Because of the success of the Rural Locum Tenens Project in Thompson, the CAGS has plans to expand this program to other remote rural areas in Canada that have had difficulty providing surgical care to the members of their communities.

**A locoregional solution in rural Ohio**

In the U.S., locoregional locum tenens solutions can alleviate the usual burdens of credentialing, licensure, and medical liability insurance coverage. A small independent surgical group providing services in Cambridge, OH, a town of 11,000 people in rural southeastern Ohio, has collaborated with the leadership of a small hospital in an adjoining county to provide locum tenens surgical coverage. The practice provides true general surgery services, including vascular, endocrine, and some thoracic surgery, and basic and advanced endoscopy.

Several years ago, the Cambridge group was approached by a small community hospital 30 miles away in Coshocton to help provide surgical services. The hospital’s two staff surgeons were both in the process of slowing down and retiring. The Cambridge group had four surgeons, which allowed the group to help the neighboring facility. The arrangement began with all members applying for full staff privileges at the outlying facility and then arranging their schedules so that someone from the group could provide call coverage for one or two days a week and one or two weekends per month. The two older surgeons on staff at Coshocton provided the rest of the call coverage.

This was all done through a direct relationship and arrangement between the Cambridge surgical group and the Coshocton hospital administration with no locum tenens company involved. The involvement of the Cambridge group as full surgical staff members facilitated the recruitment of two younger surgeons to replace the outgoing older surgeons without any interruption in surgical coverage for the facility during the transition. The involvement of the well-established and respected Cambridge surgical group in the region increased the volume of surgical and endoscopic procedures performed in the Coshocton facility. Their presence made it possible for the two new surgeons to cover the facility and still have time off for family and travel for continuing medical education (CME). Since all surgeons involved practiced in Ohio, credentialing and licensing of the Cambridge surgeons was simple for both parties.
The 60 million rural Americans, and even larger populations of rural Canadians, face a real problem with access to surgical services due to impending shortages of surgeons in these areas and a maldistribution of newly trained surgeons into surgical specialties in mostly urban areas.

The Cambridge surgeons were covered by their own liability policies because they were all credentialed as full-time staff at Coshocton, and the locum tenens services were considered work performed at a satellite office.

Collaboration with the local surgical group to provide locum tenens surgical services greatly benefited both the Coshocton hospital and the local facility in Cambridge. Because of the direct relationship between the group and the outlying facility, the Coshocton hospital could better afford the coverage without paying the exorbitant fees locum tenens companies charge. The hospital could also offer a fair daily stipend for the locum tenens work and allow the Cambridge surgeons to bill for their services, which they have done through their home office. This additional income makes this arrangement financially beneficial for the Cambridge surgeons.

Lastly, involvement in the outlying hospital and community resulted in many referrals to the Cambridge hospital for advanced laparoscopic and endoscopic cases. Other specialists in Cambridge, including oncologists, cardiologists, and pulmonologists, benefited from increased referrals from the outlying community as well. This locoregional system of providing surgical call coverage has been a definite win-win situation for the surgeons and hospitals of both communities.

Small facilities with solo or two-person surgical groups that are struggling to provide full-time surgical services can benefit from direct relationships with surgeons from neighboring facilities in their state or region. If locum tenens coverage can be arranged directly between hospital administrators and surgeons, without going through locum tenens companies, costs can be controlled, surgeons providing the locum tenens coverage can be more fairly compensated, and the local surgeons can have more time off for family and CME opportunities. If the facility only deals with board-certified Fellows of the ACS, then it also guarantees that care is provided by qualified surgeons, something not experienced in many cases when locum tenens is provided by a large company.

A similar approach to such a locoregional system of locum tenens surgical coverage might possibly be facilitated by state chapters of the ACS or by the largest health systems in the state, which probably are already affiliated in some way with most of the small rural hospitals in the region. Another mechanism to help connect small hospitals in need of locum tenens help might be an Internet-based site that matches rural hospitals with locum tenens surgeons and surgeons interested in doing locum tenens work. By promoting this system on a regional level, the sometimes difficult issue of obtaining the proper state medical license could be minimized.

**Conclusion**

The 60 million rural Americans, and even larger populations of rural Canadians, face a real problem with access to surgical services because of impending shortages of surgeons in these areas and a maldistribution of newly trained surgeons into surgical specialties in mostly urban areas. Rural surgeons bear a significant call burden that restricts their time away for family activities and educational opportunities. Innovative locoregional locum tenens solutions that provide quality locum tenens surgical coverage for rural communities at a reasonable cost can significantly improve the situations of rural surgeons, their hospitals, and their communities. ♦
The Italian surgeons who helped build international relationships

by Clemente Iascone, MD; Aldo Moraldi, MD; Antonino Cavallaro, MD, FACS; Antonio V. Sterpetti, MD; Luca Di Marzo, MD, FACS; and Sergio Stipa, MD, FACS

International relationships in medicine have played a significant role in scientific progress. The exchange of ideas derived from several cultural and historical backgrounds offers the possibility to view the same situation from different perspectives. Inevitably, this form of scientific collaboration often overcomes the limits of medicine and allows for the formation of personal connections.

In this column, the authors review the importance of international collaborations that have led to significant progress for surgical development in what is now known as the Sapienza University of Rome. This column briefly underscores the importance of international relationships between surgeons, with an emphasis on the Italian surgeons who contributed to this movement.

Sapienza University of Rome
The Sapienza University of Rome was founded in 1303 by Pope Boniface VIII, and in 1905 the university hospital, Policlinico Umberto I, opened with 1,000 beds. The first chief of surgery, Francesco Durante, MD, played a major role in the construction and organization of the hospital.

Dr. Durante graduated from the University of Medicine in Naples in 1866. In 1868, he went to work in Wien, Germany, with Theodor Billroth, MD, and then to Berlin to collaborate with Bernhard Langenbeck, MD, and Rudolf Virchow, MD. Dr. Durante followed Dr. Virchow and began treating patients from the Franco-Prussian War, working in an ambulance, and received a medal from the King of Prussia. Dr. Durante then moved to Paris, France, and London, U.K. In 1883, he returned to Rome as professor of surgery. In 1887, after a boat trip lasting 40 days, he went to the U.S. to present a paper at the International Medical Congress in Washington, DC. The paper described the first reported successful removal of a frontal meningioma. In this report, Dr. Durante hypothesized that the frontal lobes are active, disrupting previous thought, and that likely many cerebral functions, including emotions and feelings, which are at the basis of our behavior, are located in these lobes.

On this occasion, he visited several hospitals, including the Johns Hopkins Hospital, Baltimore, MD, which was under construction. Dr. Durante noted many details applied in building the hospital, which he later introduced in the construction of the new Policlinico Umberto I. One piece of knowledge he gathered from his international travels was the Langenbeck’s German surgical training system and aseptic surgical technique, which he introduced to his colleagues. Dr. Durante also hired a British nurse to head the nursing school in his hospital, introducing the Nightingale nursing system to Italy. He was a founder of the Italian Society of Surgery, and he wrote a three-volume textbook that represented the basis for surgical practice in Italy.

Dr. Harvey Cushing
Neurosurgeon and ACS Past-President Harvey Cushing, MD, FACS, after his surgical training at the Johns Hopkins Hospital, made a trip to Europe, visiting major medical centers. In Italy, he went to Pavia where he met Scipione Riva-Rocci, MD. Dr. Riva-Rocci had developed the mercury sphygmomanometer, but the instrument was rejected in Italy and the rest of Europe. Dr. Cushing took the instrument with him when he returned to Hopkins, which led to the practical
diffusion of the device in the U.S. The sphygmomanometer was then successfully reintroduced in Europe.

During his visit to Rome, Dr. Cushing met Dr. Durante and his assistant Roberto Alessandri, MD, who became chief of surgery at the University of Medicine, succeeding Dr. Durante in that role. Drs. Cushing and Alessandri, who continued to have a deep interest in neurosurgery, started a lifelong friendship. During World War I, Dr. Cushing worked in a hospital in Paris and Dr. Alessandri worked in an ambulance. Dr. Alessandri received a silver medal from the Italian Army.

Dr. Raffaele Paolucci
Dr. Alessandri’s successor as chief of surgery was Raffaele Paolucci, MD. Dr. Paolucci was a hero in World War I, receiving the golden medal from the Italian government, the U.S. Navy’s Distinguished Service Medal, and the Distinguished Service Order from the U.K. Royal Navy. He was a precise surgeon who sought to avoid any possible blood loss. He believed there was no substitute for a patient’s own blood and that disease could be easily transmitted during a blood transfusion. Other outstanding surgeons followed Dr. Paolucci as chief of surgery, including Pietro Valdoni, MD, who introduced cardiac surgery in Italy. All of them encouraged international relationships and the exchange of ideas. To spend some time in a foreign hospital, including the U.S., the U.K., France, or Germany, became routine for resident surgeons in Rome and at all Italian training programs.

Dr. Sergio Stipa
Sergio Stipa, MD, FACS, was one of the chiefs of surgery who was a great inspiration for developing international relationships between physicians. In 1965, Dr. Stipa spent one year at the Massachusetts General Hospital, Boston. He made long-lasting friendships with several of the chief residents and young staff members, including such luminaries as Gerald Austen, Ronald Malt, and David Skinner (all MD, FACS). He remained in close contact with Dr. Skinner.

Dr. Ronald Belsey
Dr. Belsey trained at St. Thomas Hospital and Brompton Hospital, London, working with pioneers of thoracic surgery, including J.E.H. Roberts, MBBS, and Tudor Edwards, MBBS. Norman Barrett, MBBS, had a major influence in molding Dr. Belsey’s interest in esophageal surgery. In 1936, Dr. Belsey spent one year as research fellow and assistant to Edward Churchill, MD, FACS, at Massachusetts General Hospital. Returning to the U.K., Dr. Belsey contributed to the development of one of the most important thoracic surgical centers in the U.K.—the Frenchay Hospital in Bristol.
He took the place of Robert J. Shaw, MD, FACS. Dr. Shaw enlisted in the U.S. Army in 1941 and served as chief of thoracic surgery at the Frenchay Hospital. Dr. Shaw later moved to the American Hospital of Paris, and Dr. Belsey succeeded him. After World War II, Dr. Shaw returned to the U.S., settling in Dallas, TX, where he established with Donald Paulson, MD, PhD, FACS, the largest and most important center for thoracic surgery in the world at Baylor University. Interestingly, during World War II, Dr. Churchill was the chief surgical consultant for the European and North African surgical theaters, and Michael DeBakey, MD, FACS, was his assistant for communicating with the surgeon general, Fred Rankin, MD, FACS, in Washington, DC.

Dr. Belsey continued a close collaboration with U.S. thoracic surgeons and operated several times in our hospital. The friendship between Drs. Skinner, Belsey, and Stipa was enduring. Dr. Belsey loved to go hunting and fishing, so he made many friends in Rome outside the field of surgery.

Creating ties
Dr. Stipa became a well-known esophageal surgeon. Dr. Stipa, assisted by two co-authors of this column, operated on Elio Toaff, head Rabbi of the Italian-Jewish community, performing an Ivory-Lewis esophagectomy for cancer of the middle esophagus, a procedure he learned from Dr. Belsey. A few years after the operation, Rabbi Toaff would lead a historical step in the brotherhood between the Roman Catholic Church and the Italian-Jewish community, meeting Pope John Paul II in the Great Synagogue of Rome. Rabbi Toaff survived the operation for almost 40 years in good general condition, dying two years ago at the age of 100. For this reason, several Jewish residents have trained alongside several surgeons from Palestine.

The international exchange of surgical knowledge and skills has led to a number of important advances in resident training and patient care. This column has underscored the role of Italian surgeons in this movement, and the authors are committed to ensuring its continued growth.

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Globally, patients who smoke cigarettes account for an estimated 60 million of the approximately 310 million operations performed annually.\(^1\) Compared with nonsmokers, smokers are at an increased risk for surgical complications (odds ratio = 1.2–1.6).\(^2\) In addition to the severe economic consequences,\(^3\) cigarette smoke decreases tissue oxygenation and aerobic metabolism, thereby impairing healing.\(^4\) Smokers have higher rates of wound infection and impaired wound healing, as well as other postoperative complications,\(^5\) including postoperative pulmonary complications and prolonged mechanical ventilation.\(^15,16\) These data are particularly relevant in patients undergoing pulmonary resection for suspicious nodules or proven malignancy.

Smoking cessation around the time of an operation can improve oxidative bacterial-killing mechanisms and inflammatory cell migration,\(^17,18\) as well as reduce the risk of surgical site infections.\(^4,19\) Short-term smoking abstinence improves oxygen availability to the vital organs,\(^19,20\) and prolonged smoking abstinence decreases the risk of pulmonary complications.\(^21\) This risk is time-related in that the longer the patient abstains from smoking prior to surgery, the lower the risk.\(^15,16\)

### Helping smokers kick the habit

Most smokers agree that quitting can be difficult, but many indicate that they want to quit eventually. Although counseling and medication are effective when used alone, U.S. Public Health Service guidelines indicate that a combination of both treatments is a more effective approach.\(^1\) Consequently, many large institutions have incorporated a tobacco dependence referral program into their oncology service. Nonetheless, many lung cancer patients continue to smoke preoperatively.

A diagnosis of cancer and preparing for surgery within a short timespan are both stressful events. This life-changing information can be a critical teachable moment, when patients truly internalize the importance of changing their habits, accelerate their motivation to quit, and rapidly push themselves through the stages of change.\(^4\) Alternatively, many patients believe that smoking will help them cope with this stress and therefore experience even greater difficulty or reluctance to quit. Knowing that smoking may increase complications in the short term, and pose ongoing health risks in the long term, may help shift the balance favorably toward smoking cessation.

The Alliance A211401 study was designed to determine how surgeons can improve smoking cessation rates in conjunction with preparing a patient for lung nodule resection and whether smoking cessation can be sustained postoperatively.

The first question is how much intervention, in the form...
FIGURE 1.
A211401 SCHEMA

Tobacco use will be assessed prior to registration, at randomization, and every six weeks during treatment and observation until 24 weeks after surgery.

*Surgical consult, randomization, and baseline visit must take place on the same day. The surgical consult must precede randomization and the no-smoking message must be delivered following randomization.

†Surgery must occur after the target quit date (TQD) defined at baseline and can be performed no sooner than 10 days after randomization and no more than 12 weeks after randomization.

of counseling and medication, is needed. Evidence has shown that major surgery for a smoking-related illness provides a significant and effective teachable moment.22 Telephone quitlines have been determined to be cost-effective and empowering to patients, in addition to being more convenient than face-to-face counseling, and have demonstrated real-world effectiveness.23 Quitlines are a free way for patients to talk to a specialist about smoking cessation. Quitlines can also be used to help patients remain smoke-free. The effectiveness increases if the health care professional initiates the connection between the patient and the telephone counselor.24 Although we know that some exceptional first-line medications are available for smoking cessation,25-28 some cancer patients may respond poorly to these drugs or simply may prefer not to add to their growing list of medications.

Is pharmacotherapy absolutely needed, or can messaging and telephone counseling be enough support to stop smoking? Does timing of smoking cessation matter? The ideal time for smoking cessation prior to surgery varies in the literature from one to 12 weeks, but does that mean that if you see a patient today who smokes and the operation is scheduled to be performed in two weeks, smoking cessation will be pointless? Absolutely not. Smoking cessation at any time is beneficial, but how beneficial in terms of reducing complications and improving quality of life? Especially with a cancer diagnosis, time from smoking cessation to surgical resection cannot be delayed for an excessive period of time. The Alliance A211401 study will address these questions.

Opportunities to participate
All participating patients will be advised to stop smoking by their surgical team and will be proactively connected to the National Cancer Institute’s (NCI) smoking quitline.
This life-changing information can be a critical teachable moment, when patients truly internalize the importance of changing their habits, accelerate their motivation to quit, and rapidly push themselves through the stages of change.

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(1-877-44U-QUIT). Patients will be randomized to either placebo or varenicline, also known as Chantix (see study schema, Figure 1, page 59). The study will evaluate the relationship between smoking cessation, postoperative complications, and duration of smoking cessation before surgery.

In this study, surgery should be performed at least 10 days after randomization to trials and within 12 weeks of randomization. The accrual goal is 626 patients who have lung cancer surgery and are followed for 24 weeks after the operation. The primary outcome will be the rate of surgical complications, as identified using American College of Surgeons National Surgical Quality Improvement Program (ACS NSQIP®) data. Secondary outcomes include quality of life, postoperative care (length of hospital and high dependency unit stay), and rates of smoking abstinence. All patients will have the option of enrolling in the correlative genetic study. Alliance A211401 is now recruiting participants. Refer to the study
Is pharmacotherapy absolutely needed, or can messaging and telephone counseling be enough support to stop smoking? Does timing of smoking cessation matter?

protocol—which can be found at https://clinicaltrials.gov/ct2/show/NCT02856581—for complete information on the trial design, treatment plan, and patient eligibility. For questions, contact Ivana T. Croghan, PhD, by e-mail at croghan.ivana@mayo.edu, phone at 800-845-7853, or fax at 507-255-0742; or Rachel Wills at rwills@uchicago.edu or 773-702-9814.

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Joint Commission reinstates individual physician mechanical thrombectomy volume eligibility requirement

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

As most vascular surgeons know, the number of mechanical thrombectomy procedures performed in the U.S. has steadily increased over the last few years. In response to this trend, The Joint Commission recently announced its decision to reinstate the individual mechanical thrombectomy volume eligibility requirement for its thrombectomy-capable stroke center (TSC) and comprehensive stroke center (CSC) certification programs.

As of February 1, all primary neurointerventionists—those health care professionals who routinely take calls to perform emergency mechanical thrombectomy—at facilities applying for TSC or CSC certification must meet the original volume criteria by having had 15 mechanical thrombectomies performed in the last 12 months, or 30 in the last 24 months.

Beginning August 1, revised volume criteria also will be effective for all physicians who perform mechanical thrombectomy at a hospital applying for TSC or CSC certification.

Debating the data
When the individual physician procedural volume and training eligibility requirements for mechanical thrombectomies in the TSC and CSC certification programs originally were implemented, The Joint Commission heard some concerns from its accredited institutions that requiring individual physicians to perform 15 mechanical thrombectomies per year was too demanding. Therefore, in October 2018, The Joint Commission suspended the requirements in order to review relevant data and have conversations with both stakeholders and an expert.
As additional data become available, however, The Joint Commission will continue to review the results with TAP members and revise the individual physician volume eligibility requirement as appropriate.
Prostate cancer is the most prevalent cancer in men who are nonsmokers, with an incidence of about 165,000 cases reported annually. Although most of these patients will die from other causes, given the sheer volume, the disease ranks second in cancer deaths among men—approximately 30,000 annually, which represents a steady decline from its peak in 1993. For all stages combined, the five-year survival rate is the highest of all cancers that affect men. Yet by age 80, it is the leading cause of cancer death in men.1

The etiology of most prostate cancer is unknown. Diets high in fat, calcium, and dairy may be risk factors. Increasing age is a risk factor, with the disease more common in men older than age 50. Autopsy series have found prostate cancer cells in 39 percent of men ages 70–79.2 Family history is relevant not just as a risk factor, but because of a correlation with aggressiveness. Men with two immediate family members with the disease have an increased likelihood of developing higher-risk cancer.3

Prostate cancer can present with symptoms or with an abnormal digital rectal examination, but it is most commonly detected by an abnormal elevation of the prostate-specific antigen (PSA) level. This ability to identify the cancer when asymptomatic offers both opportunities as well as challenges. As with most cancers, early detection can translate into improved survival rates. Nonetheless, many men are destined to die with, but not from, this cancer. It is therefore incumbent upon clinicians to address quality of life (QOL) considerations as well as survival.

Staging and options for management
The American Joint Committee on Cancer Eighth Edition Cancer Staging Manual classifies the disease into one of four stage groups, with subdivisions based on three criteria: anatomic extent (tumor-node-metastasis categories), PSA level, and grade.4 These factors, along with life expectancy, form the basis for deciding how to best approach a patient’s prostate cancer.

Options for management of nonmetastatic disease include active surveillance (AS), surgery, and radiotherapy with or without androgen deprivation therapy (ADT). Treatment decisions must account for logistics, convenience, cost, QOL, and personal preferences in light of the equivalence in survival with radiotherapy and surgery.5

Great progress has been made in all areas of management. AS has found increasing support for patients with very low, low, and favorable intermediate-risk disease and is now the preferred approach for very low-risk patients with a life expectancy of 10 to 20 years.6 With advanced robotic techniques, the radical prostatectomy (RP) has largely shifted from an open to a minimally invasive procedure. And with radiation therapy, the conventional means of delivering external beam radiation therapy (EBRT) have been replaced first with three-dimensional conformal radiation therapy or even more sophisticated technologies that use image guidance and intensity modulation. Whether given with standard doses, moderately, or extremely hypofractionated schedules, higher biologically effective doses are now given with less toxicity.

Current trends in prostate cancer: The role of brachytherapy

by Robert K. Brookland, MD, FACS, FACRO, and Katherine Mallin, PhD

BT
The radiotherapeutic approach that perhaps offers the ability to be given in the highest doses
in the most conformal fashion is interstitial brachytherapy (BT). Prostate BT is a procedure in which radiation is delivered directly into the gland. In the U.S., this procedure is most commonly done with a low dose rate (LDR) approach using iodine-125, along with other sources, such as palladium-103 and cesium-137, offering alternatives with increasingly shorter half-lives. Alternatively, temporary high-dose rate implants can be accomplished with iridium-192.

The advantage of LDR BT is the ability to deliver an entire course of therapy in a single 60- to 90-minute procedure with minimally invasive techniques. Little time is lost from work and other routine activities. BT can be offered to patients if the gland does not exceed 60 cc to minimize the risk of the pubic arch interfering with optimal placement of the interstitial needles, and should be avoided in patients with significantly lower urinary tract symptoms (for example, an International Prostate Symptom Score greater than 15).

The use of BT as monotherapy is supported by the National Comprehensive Cancer Network guidelines for patients with very low, low, and favorable intermediate-risk disease. In higher risk cases, it is most often given as a boost to EBRT. Nonetheless, some data support its use as monotherapy. Jackson and colleagues studied 4,496 men with a favorable subset of high-risk disease; that is, men with a Gleason score of 8, T1c or T2a, and a PSA <10 ng/mL. Compared with EBRT, patients receiving BT, with or without EBRT, had longer overall survival rates.\(^7\)

With the publication of the Androgen Suppression Combined with Elective Nodal and Dose Escalated Radiation Therapy (ASCENDE-RT) trial,\(^8\) a brachytherapy boost (BB) following EBRT now has been supported in a randomized prospective trial for patients with intermediate- and high-risk cancer. This study found that the nine-year disease-free survival rate increased from 62 percent for patients not receiving a BB to 83 percent for patients receiving a BB. Although short-term side effects increased in the BB group, by six years the health-related QOL was similar, favoring the LDR BB group.\(^9\) Another advantage of a BB is that it allows for the total duration of ADT to be reduced from two to three years, as indicated for patients treated with EBRT alone, to as little as one year.\(^10\)

### Comparing the data
Both retrospective and prospective data are available to assess QOL outcomes using BT. In a wide sweep of the available published literature on comparative studies for QOL, Lardas and colleagues found no significant urinary toxicity at five years for patients receiving BT.\(^11\) Data in the North Carolina Central Cancer Registry showed that when 1,141 men in a prospective cohort were compared on the basis of QOL after RP, EBRT, and BT, each treatment had distinctive patterns of adverse effects, but by two years, the mean scores were similar in most domains.\(^12\)

With excellent survival and QOL outcomes, cost considerations are relevant. To compare direct costs of prostate treatment in newly diagnosed patients, Wilson and colleagues used the CaPSURE (Cancer of the Prostate Strategic Urologic Research Endeavor) registry and performed a longitudinal analysis of 4,553 men treated for prostate cancer. The study
FIGURE 1.
RADIATION MODALITY BY STAGE AND DIAGNOSIS YEAR, NCDB

was for 1995–2004 and revealed that the least costly treatment was BT, intermediate was RP, and most costly was EBRT.\(^{13}\)

In a resource-limited environment, has a shift to this less costly treatment occurred given the impressive survival and QOL outcomes? More than 1.5 million patients were analyzed in a National Cancer Database (NCDB) query for prostate cancer patients treated from 1998 to 2010. BT usage peaked in 2002 at 16.7 percent, then steadily declined to a low of 8 percent in 2010. Patients with intermediate- or high-risk cancer, increased comorbidity, and increased year of diagnosis were less likely to receive BT.\(^{14}\)

Glaser and colleagues reported on 113,719 cases in the NCDB treated from 2004 to 2013 with intermediate- or high-risk cancer. Use of BB decreased from 33.1 percent in 2004 to 12.5 percent in 2013 for intermediate-risk patients and from 27.6 percent to 10.8 percent for high-risk patients. However, patients getting a BB had higher survival rates.\(^{15}\)

Safdieh and colleagues identified 89,413 low-risk patients treated from 2004 to 2012 abstracted from the NCDB. A decline was noted in both academic and nonacademic facilities, with the use of BT decreasing from 62.9 percent in 2004 to 51.3 percent in 2012.\(^{16}\)

**Our analysis**
Because of this discrepancy, and to carry the analysis closer to the present, the NCDB data from 2004–2016 were analyzed. The authors identified 1,028,470 patients with stage I and II prostate cancer. The data were aggregated into two groups. The first included
stages I and IIA, men typically well-suited for BT alone. The stage IIB patients were separately reviewed given the potential benefit of using a combination of EBRT with a BB.

In the lower-risk group, slightly more patients were treated with BT rather than EBRT in 2004 (15.1 percent versus 14.2 percent). By 2016, only 5.1 percent were treated with BT, one-third the 2004 levels. Patients treated with EBRT, however, were 14.2 percent with no change during the years studied. The stage IIB patients also experienced a decline in the reliance on BT. Patients getting EBRT with a BB decreased from 6.3 percent to 3.2 percent, whereas patients treated with BT alone dropped from 5.8 percent to 2.1 percent. At the same time, use of EBRT alone increased from 17.5 percent to 19.3 percent (see Figure 1, page 66).

**Conclusion**

Several explanations have been offered to rationalize this decline in the use of brachytherapy, including decreasing expertise and fewer training opportunities. For example, Orio and colleagues found the percentage of academic practices performing BT decreased from 80 percent in 2004 to 65 percent in 2012, while the percentage in nonacademic practices declined from 75 percent to 55 percent in the same time frame. Academic and nonacademic practices performing at least 53 cases per year were few and decreased to 1.5 percent and 2.7 percent, respectively.

The economic incentives also favor EBRT over BT. Dutta and colleagues performed what they described as a time-driven and activity-based study of 29 patients with prostate cancer treated at a single institution. The economic incentives also favor EBRT over BT. The use of BT as monotherapy is supported by the National Comprehensive Cancer Network guidelines for patients with very low, low, and favorable intermediate-risk disease.

### REFERENCES


*continued on next page*
As newer technologies have paved the way for earlier detection, better treatment options, and more cures, we also must continue to reduce overtreatment, unnecessary side effects, and avoidable costs.

REFERENCES, CONTINUED

Old, irregular, thin, and falling

by Richard J. Fantus, MD, FACS, and Kusuma Nio, MD

A mericans are living longer than ever. A periodic chartbook published by the Federal Interagency Forum on Aging-Related Statistics predicted that the eldest U.S. residents—individuals ages 85 and older—would be the most rapidly growing age group in this nation. This population numbered 3 million in 1994, just more than 1 percent of the population. Today, this group numbers 6.7 million. By 2050, 19 million U.S. residents are expected to fall into this category.*

Oral anticoagulants are one of the most frequently prescribed medications in the elderly. The most common indications for the use of anticoagulants are atrial fibrillation (AF), valvular heart disease, and venous thromboembolic disease. Indeed, the prevalence of AF increases significantly with age. Data from the anticoagulation and risk factors in atrial fibrillation (ATRIA) study have shown that 9 percent of patients ages 80 years or older have AF. Only about 15 percent of all strokes in the U.S. were attributed to AF, but these numbers increase to 36 percent in patients who are older than age 80.†

One of the challenges we face as medical providers is weighing the benefits of anticoagulation therapy against the risks associated with falls. It is evident that elderly patients who would benefit the most from anticoagulation also are at the highest risk for falls.

One study showed an unadjusted annualized hospitalization rate of 0.47 percent among anticoagulated patients with AF. The study identified 72 intracranial and 98 major extracranial hemorrhages occurring in more than 15,300 people per year among coumadin users. What is more striking, perhaps, is the fact that 76 percent of patients with intracranial hemorrhage had severe disability or died as a result. Of these patients, 71 percent had intracerebral hemorrhage. Among the survivors, 61 percent had major functional disability. Of those patients

who survived to be discharged, seven died within 30 days.‡

To examine the occurrence of patients ages 80 or older on anticoagulants in the National Trauma Data Bank® (NTDB®) research admission year 2017, medical records were searched using the International Classification of Diseases, Tenth Revision Clinical Modification codes. Specifically searched were records for patients ages 80 and older and records containing a comorbid conditions field entry of 31 (anticoagulant therapy). A total of 36,033 records were found; 32,847 records contained a discharge status, including 10,208 patients discharged to home, 6,245 to acute care/rehab, 13,070 were sent to skilled nursing facilities, 1,119 were discharged to hospice; 2,205 died (see Figure 1, this page). Of these patients, 59 percent were women; they were on average 86.7 years of age; had an average hospital length of stay of 5.6 days, an intensive care unit length of stay of 4.1 days, an average injury severity score of 9.2; and were on the ventilator for an average of 4.8 days. The most common mechanism of injury (greater than 91 percent) in this group was as a result of falls.

As the U.S. population continues to become older with an associated increase in the incidence of irregular heart rhythms treated with blood thinners, a simple fall may result in life-threatening injuries.

Throughout the year, we highlight these data through brief reports that are published monthly in the Bulletin. The NTDB Annual Report can be found on the American College of Surgeons website as a PDF file at facs.org/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.

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

Representatives of 43 professional medical and injury prevention organizations and the American Bar Association met February 10–11 for the inaugural Medical Summit on Firearm Injury Prevention. Hosted by the American College of Surgeons Committee on Trauma (ACS COT), the summit brought together national health care and legal leaders committed to reducing firearm-related deaths, injuries, and disabilities. The purpose of the conference was to foster an inclusive and collegial dialogue on how to work together to identify opportunities for the medical community to reach a consensus-based, apolitical approach to firearm injury prevention, with a focus on understanding and addressing the root causes of firearm violence while making firearm ownership as safe as possible.

Distinguished guest speakers from the fields of trauma surgery, emergency medicine, pediatrics, mental health, and community health addressed the breadth of issues that contribute to the escalating public health problem. Summit attendees identified opportunities to collaborate in the areas of research, education, and targeted injury prevention initiatives. Using a public health framework, attendees engaged in collegiate discussions to build consensus on actionable items for firearm injury prevention that the group could support as a unified voice.

As a next step, actionable items from the summit will be compiled by the planning committee and soon will be disseminated to attendees for their organizations’ further internal consideration.

Proceedings from the inaugural Medical Summit on Firearm Injury Prevention will be published and publicly released this spring. View a complete listing of the organizations that participated in the summit at facs.org/media/press-releases/2019/mfipsummit2019.
Call for nominations for 2019
Dr. Mary Edwards Walker
Inspiring Women in Surgery Award

The American College of Surgeons (ACS) Women in Surgery Committee (WiSC) has announced the call for nominations for the this year’s Dr. Mary Edwards Walker Inspiring Women in Surgery Award, which will be presented at Clinical Congress 2019 in San Francisco, CA. The award will be presented in recognition of an individual’s significant contributions to the advancement of women in the field of surgery.

The award is named in honor of Mary Edwards Walker, MD, for her exemplary inspiration as the first female surgeon employed by the U.S. Army and the only woman to receive the Medal of Honor, the highest U. S. Armed Forces decoration for bravery. After the U.S. Civil War, Dr. Walker devoted her life to supporting women’s suffrage and was a frequent lecturer on health care, temperance, and women’s rights. Most notably, Dr. Walker was unwavering in her commitment to service to her country and the surgical profession, and repeatedly excelled in the face of significant adversity. Through Dr. Walker’s example of perseverance, excellence, and pioneering behavior, she paved the way for women surgeons of today.

Nominees must have demonstrated a commitment to the advancement and inspiration of women in surgery and be members of the ACS, either in active practice or retired. Members of the WiSC are ineligible for this award. The awardee is expected to attend Clinical Congress 2019 to accept the award in person.

All nominations must be accompanied by the following documents:

- A letter of nomination outlining how the nominee has contributed to the advancement of women in the field of surgery
- An up-to-date curriculum vitae (CV) of the nominee
- Self-nominations are acceptable and should include a letter of reference

The letter of nomination and CV should be e-mailed to Carol Christian at cchristian@facs.org by May 31, 2019.

The awardee will be notified of his or her selection by June 30. The award will be presented at Convocation Sunday, October 27. The awardee also will be recognized at the WiSC reception Monday, October 28, and will be a guest of the WiSC at the Association of Women Surgeons dinner that follows the reception.

Questions can be submitted to cchristian@facs.org. More information about the award, including past winners, is available on the ACS website at facs.org/about-acs/governance/acs-committees/women-in-surgery-committee/edwards-walker.
Congratulations!
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“Being a Fellow of the American College of Surgeons is representative of the pinnacle of being a surgeon. It represents a level of ethics, skill, and leadership within the surgical community. It presents opportunity—to interact with people around the country, to learn more, and to participate in efforts that shape our discipline and the practice of surgery.”

—Don Jay Selzer, MD, FACS

*Pay your $20 Resident membership dues online, and then log into the Associate Fellow application to update your contact information, provide board certification status, and add your hospital and academic appointments. As a current Resident member, the Associate Fellow application fee ($75) will be waived, and you will not need to provide documentation verifying your completion of a surgical residency.
The 2019 Nominating Committee of the Board of Regents (NCBR) will be selecting nominees for the positions of Secretary and Treasurer of the American College of Surgeons (ACS). The deadline for submitting nominations is May 6, 2019.

Position responsibilities
The responsibilities of these two positions are as follows:

- The Secretary shall oversee the minutes of the annual meetings of the members, give notices in accordance with the provisions of law and the Bylaws of the ACS, keep the records and corporate seal, and perform such other duties as may from time to time be assigned by the Board of Regents. The Secretary has the co-responsibility with the Executive Director to provide such oversight.

- The Treasurer shall oversee, in conjunction with the Chief Financial Officer, the funds of the College under the supervision of the Finance Committee and shall make such reports to the Finance Committee, the Executive Committee of the Board of Regents, and the Board of Regents as may be required. The Treasurer will attend the meetings of the Board of Regents and will have a reporting relationship to both the Finance Committee and the Executive Director. The College shall purchase a bond or insurance coverage to ensure the faithful performance of the duties of the office of Treasurer. In the absence or inability to act as the Treasurer, the duties of the Treasurer shall be performed by such person and in such manner as the Finance Committee may direct.

Criteria for consideration
The NCBR will use the following guidelines when considering potential candidates:

- Nominees must be loyal members of the College who have demonstrated outstanding integrity and medical statesmanship, along with an unquestioned devotion to the highest principles of surgical practice.

- Nominees must have demonstrated leadership qualities that might be reflected by service and active participation on ACS committees or in other components of the College.

- Members of the NCBR recognize the importance of achieving representation of all who practice surgery.

- The College encourages consideration of women and other underrepresented minorities.

All nominations must include a letter of recommendation, an up-to-date curriculum vitae, and a personal statement from the candidate detailing ACS service and the name of one individual who can serve as a reference. Any attempt to contact members of the NCBR by a candidate or on behalf of a candidate will be viewed negatively and may result in disqualification. Applications submitted without the requested information will not be considered.

Submit nominations to secretarystandtreauser nominate@facs.org. If you have questions, contact Lynese L. Kelley, Director of Leadership Operations for the NCBR, at lkelley@facs.org or 312-202-5203.
CoC announces 2018 Outstanding Achievement Award recipients

The Commission on Cancer (CoC) of the American College of Surgeons has granted its 2018 Outstanding Achievement Award (OAA) to a select group of 24 accredited cancer programs throughout the U.S. The OAA designation is presented to exceptional CoC-accredited programs that have met the criteria for all seven commendation-eligible CoC standards, and have achieved compliance with the remaining 27 standards that are required for accreditation.

The award is intended to accomplish the following:

• Recognize those cancer programs that achieve excellence in providing quality care to cancer patients
• Motivate other cancer programs to work toward improving their level of care
• Facilitate a dialogue between award recipients and health care professionals at other cancer facilities for the purpose of sharing best practices
• Encourage honorees to serve as quality care resources to other cancer programs

“These cancer programs currently represent the highest quality of cancer care,” said Lawrence N. Shulman, MD, FACP, Chair of the CoC. “Each of these facilities has committed itself to continuous quality assessment and improvement and has proved that this approach yields the high-quality cancer care that all of our patients should expect.”

The CoC acknowledges these programs for their efforts to provide high-quality cancer care and to demonstrate accountability and a strong commitment to CoC accreditation. View more information about and a complete list of OAA winners on the CoC web page at facs.org/quality-programs/cancer/coc/info/outstanding/2018. ♦

Coming next month in JACS and online now

Clinical value of hernia mesh pathology evaluation

Negin Fadaee, AA; Laura Mazer, MD; Rajeev Sharma, MD; Isabel Capati, RN, BSN; Bonnie Balzer, MD, PhD; and Shirin Towfigh, MD, FACS, report in the May 2019 issue of the Journal of the American College of Surgeons (JACS) that there is no clinical value in submitting mesh specimens for microscopic surgical pathology evaluation, regardless of clinical indication for mesh removal, and they determined that no clinical claims can be made based on pathology findings from explanted mesh. Meanwhile, microscopic evaluation does incur additional cost to the consumer. The authors recommend explanted mesh be submitted for gross examination only for documentation purposes in the medical records.

This article and all other JACS content is available at journalacs.org. ♦
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Domestic and international chapters of the American College of Surgeons (ACS) met in the last several months to host a variety of activities, including annual meetings, award presentations, advocacy days, and more. Following are highlights and photos from these programs.

**Idaho Chapter:** Hosted the Annual Regional Meeting of the Idaho, Montana-Wyoming, and Utah Chapters January 25–27 in Sun Valley, ID. Speakers focused on issues that surgeons face in the Mountain West region of the U.S. Ronald V. Maier, MD, FACS, FRCS(Hon), FCS(HK)(Hon), 2018–2019 ACS President, attended the meeting and gave an update of the status of the College and a talk about the value of U.S. trauma systems.

Left photo: Julio Vasquez, MD, FACS, Idaho Chapter Immediate Past-President (left), and Dr. Maier.

Bottom photo: Johnny Green, MD, FASCRS, FACS, Idaho Chapter President; Adam Deutchman, MD, FACS, Past-Governor; Bill Morgan, MD, FACS, Idaho Chapter Past-President; and Dr. Vasquez.

**Florida Chapter:** Approximately 40 attendees convened January 29–30 in Tallahassee for two Advocacy Days. With a total of 17 legislative visits and five participating societies, key issues discussed with lawmakers included the redress of regulations on opioids (H.B. 21) and scope-of-practice expansion.
Southern California Chapter: Annual Scientific Meeting January 25–27, in Santa Barbara. J. Craig Collins, MD, FACS (right), 2019 Chapter President, thanks Ninh T. Nguyen, MD, FACS, FASBMS, for his service as 2018 President.

Tennessee Chapter (TNACS): TNACS and the Tennessee Committee on Trauma (TNCOT) February 5 hosted the 2019 Advocacy Day/Stop the BleedTM event in Nashville. More than 50 legislators and staff members received training in bleeding control, and legislators were asked to support legislation requiring bleeding control kits in all Tennessee public schools.

Kuwait Chapter: Kuwait Association of Surgeons Conference, November 21–23, 2018, Kuwait City. Dr. Maier and Salman Al Sabah, MBBS, FACS, Kuwait Chapter Governor, with members of the Kuwait Sword Dance Troupe, which performed at the conference.
Northwestern Pennsylvania Chapter: November 28, 2018, networking event for ACS members in the region. Paul Malaspina, MD, FACS, Northwestern Pennsylvania ACS Governor (above, sixth from left), gave a brief update on ACS activities and encouraged attendees to get involved with the local chapter.

Louisiana Chapter (LA-ACS): Gazi Zibari, MD, FACS, is the 2019 recipient of the LA-ACS Charles Lester Black Humanitarian Award, which recognizes an LA-ACS member who has dedicated a significant amount of time to humanitarian medical outreach activity and capacity building abroad.

Connecticut Chapter: Chapter leaders testified at the State Capitol on February 11 in opposition to proposed legislation prohibiting hospitals from charging trauma activation fees.

Photo (from left): Alan Meinke, MD, FACS, Chapter President; Ronald Gross, MD, FACS; David Shapiro, MD, MCHM, FACS, Chapter Treasurer; Kathleen LaVorgna, MD, FACS, Chapter Governor-at-Large; and Gary Kaml, MD, FACS.
The Surgical History Group (SHG) of the American College of Surgeons (ACS) is calling for abstract submissions for Clinical Congress 2019, which will take place in San Francisco, CA, October 27–31, 2019.

Now in its fifth year, the SHG invites surgeons, residents, Fellows, and medical students to submit abstracts for consideration in this year’s dedicated poster session. **Topics should be of historical significance to the field of surgery or surgical subspecialty**, including medical discoveries, technology, techniques and treatment methods, events, and the personalities that shaped the field of surgery as we know it.

SUBMIT YOUR ABSTRACT BY MAY 31, 2019

For more information, visit facs.org/about-acs/archives/shg.
The American College of Surgeons (ACS) is accepting applications through May 15 for the inaugural Gerald B. Healy, MD, FACS, Traveling Mentorship Fellowship. Colleagues and friends of Dr. Healy, Past-President of the ACS, Past-Chair of the Board of Regents, and an Honorary Fellow of the Royal College of Surgeons and the Royal College of Surgeons in Ireland, have established funding for the annual mentoring fellowship program in his honor.

Mentorship is one of the hallmarks of academic and professional success. This program is intended to help young surgeons develop new ideas, innovative approaches, and well-informed attitudes about safety, quality, and professionalism via visits to successful mentors.

The Gerald B. Healy Traveling Mentorship Fellowship will be used to visit and engage with one or more successful mentor(s). The award, in the amount of $5,000, will cover the recipient’s travel and per diem costs and subsidize lost revenue from days away from clinical duties.

**Application requirements**

Applicant requirements are as follows:

- Applicants must be U.S./Canadian Fellows or Associate Fellows of the ACS and hold an academic rank no higher than associate professor.

- Mentors must be U.S./Canadian Fellows of the ACS or, if in a nonsurgical (microbiology, anatomy, and so on) or nonmedical (business, law, and so on) field, be appropriate for the research and education needs of the applicant.

- Applications must consist of the following items, to be e-mailed to the Scholarships Administrator at scholarships@facs.org as a single PDF document:

  - A one- to two-page essay describing why the applicant is interested in participating in this program

  - A joint statement from the mentor and mentee about their commitment to the relationship, including a description of the anticipated plan for the mentorship and approximately how the funds will be used

  - A brief curriculum vitae (10 or fewer pages) of the applicant and biosketch of the mentor

**Awardee responsibilities**

The recipient will submit reports as requested to the College for submission to the Bulletin of the American College of Surgeons, detailing their experience and lessons learned, and preserving such thoughts about the week for the edification of future generations of surgeons.

A financial report also will be provided at the end of the award period; the traveling fellow may use the funds to subsidize travel and per diem for mentor visits, or to replace lost revenue from clinical duties. The latter purpose is taxable.

Applications are due by May 15. A single traveling fellow will be selected, and all applicants will be notified of the outcome of the selection process by June 30.

Visit the Gerald B. Healy, MD, FACS, Traveling Mentorship Fellowship webpage at facs.org/member-services/scholarships/special/healy for more information. Questions also may be submitted to scholarships@facs.org. ♦
International Guest Scholarships for 2020 available

The American College of Surgeons (ACS) offers International Guest Scholarships to young surgeons from countries other than the U.S. or Canada who have demonstrated strong interests in teaching and research. The scholarships, in the amount of $10,000 each, provide the scholars with an opportunity to visit clinical, teaching, and research activities in the U.S. and Canada and to attend and participate fully in the educational opportunities and activities of the ACS Clinical Congress.

This scholarship endowment was originally provided through the legacy left to the College by Paul R. Hawley, MD, FACS(Hon), former College Director. More recently, gifts from the family of Abdol Islami, MD, FACS; the Stavros Niarchos Foundation; and others to the International Guest Scholarship endowment have enabled the College to expand the number of scholarship awards.

The scholarships provide successful applicants with the privilege of participating in the College’s annual Clinical Congress in Chicago, IL, in October 2020, with public recognition of their presence. They will receive gratis admission to selected postgraduate courses plus admission to all lectures, demonstrations, and exhibits, which are an integral part of the Clinical Congress. Assistance will be provided in arranging visits to various clinics and universities of their choice following the Clinical Congress.

Requirements for applicants and awardees
To qualify for consideration by the selection committee, all of the following requirements must be fulfilled:

• Applicants must be graduates of schools of medicine who have completed their surgical training.

• Applicants must be 35–50 years old on the date that the completed application is filed.

• Applicants must submit their applications from their intended permanent location. Applications will be accepted for processing only when the applicants have been in surgical practice, teaching, or research for a minimum of one year at their intended permanent location, following completion of all formal training (including fellowships and scholarships).

• Applicants must have demonstrated a commitment to teaching and/or research in accordance with the standards of the applicant’s country.

• Early careerists are deemed more suitable than those who are serving in senior academic appointments.

• Applicants must submit a fully completed application form provided by the College on its website at web2.facs.org/scholarshipsinternational. The application and accompanying materials must be submitted in English. Submission of a curriculum vitae (CV) only is not acceptable.

• Applicants must provide a list of all their publications and must submit, in addition, three complete publications (reprints or manuscripts) of their choice from that list.

• Preference may be given to applicants who have not already experienced training or surgical fellowships in the U.S. or Canada.

• Applicants must submit independently prepared letters of recommendation from three of their colleagues. One letter must be from the chair of the department in which they hold an academic appointment or a Fellow of the ACS residing in their country. The chair’s or the Fellow’s letter is to include a specific statement detailing the nature and extent of the teaching and other academic involvement of the applicant. Letters of recommendation should be submitted by the person making the recommendation.
The online application for m is structured to assist the Scholarship Selection Subcommittee and to assist the applicant in submitting a structured CV.

• The International Guest Scholarships must be used in the year for which they are designated. They cannot be postponed.

• Applicants who are awarded scholarships will provide a full written report of the experiences provided through the scholarships upon completion of their tours.

• An unsuccessful applicant may reapply only twice and only by completing and submitting a new application together with new supporting documentation.

    Completed applications for the International Guest Scholarships for the year 2020 and all the supporting documentation must be received online prior to

July 1, 2019, for an applicant to receive consideration by the selection committee. All applicants will be notified of the selection committee’s decision in November 2019. Applicants are urged to submit their completed applications and supporting documents as early as possible to provide sufficient time for processing.

Questions about and application materials for this scholarship should be sent to kearly@facs.org. ♦

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The International Relations Committee of the American College of Surgeons (ACS) has announced travel awards for international surgeons. These awards, in the amount of $4,000 each, provide international surgeons with the opportunity to attend and participate fully in the educational activities of the annual ACS Clinical Congress. They are proposed to specifically assist surgeons who work in community or regional hospitals or clinics in countries other than the U.S. and Canada, or who are from poorly resourced academic departments of surgery in poorly resourced countries. A new award has been established, honoring Gomasha and Abduwahab Al-Foraih, to commence in 2020. Another Community Surgeons Travel Award has been donated through the generosity of the Doctors Duremdes family, designated for Filipino surgeons, which gives preference to meritorious applications from Iloilo Province, Panay Island, and non-urban Philippine communities.

Each awardee will receive gratis registration to the annual Clinical Congress and to one available postgraduate course held during the conference. Assistance will be provided to obtain preferential housing in an economical hotel in the host city for Clinical Congress, which in 2020 will take place in Chicago, IL.

**Applicant and awardee requirements**

Requirements for applicants and awardees are as follows:

- Applicants must be graduates of schools of medicine who have completed their surgical training.
- Applicants must be 30–50 years old on the date that the complete application is filed.
- Applicants must show evidence of commitment to high-quality surgery, to surgical teaching, and to improving access to surgical care in their community.
- Applicants must submit a fully completed application form provided by the College on its website at web2.facs.org/scholarshipsinternational. The application and accompanying materials must be submitted in English. Submission of a curriculum vitae only is not acceptable.
- Preference will be given to applicants who have not already experienced training or surgical fellowships in the U.S. or Canada.
- Applicants must submit independently prepared letters of recommendation from three of their colleagues. One letter must be from the chair of the department in which they hold a clinical or academic appointment or from a Fellow of the ACS residing in their country. The chair’s or the Fellow’s letter is to directly address the applicant’s commitment to high-quality surgery, surgical teaching, and improving access to surgical care locally. Letters of recommendation should
These awards, in the amount of $4,000 each, provide international surgeons with the opportunity to attend and participate fully in the educational activities of the annual ACS Clinical Congress.

be submitted by the persons making the recommendations.

• The Community Surgeon Travel Awards must be used in the year for which they are designated. They cannot be postponed.

• Awardees are expected to provide a written report upon their return home, specifically focusing on the value of the visit to the awardee and the potential beneficial effect to patients in the country of origin.

• Unsuccessful applicants may reapply only twice and only by completing and submitting a new application together with new supporting documentation.

In order to qualify for consideration by the selection committee, all of the requirements must be fulfilled.

All applications for the year 2020 and all the supporting documentation must be received by the International Liaison prior to July 1, 2019, in order for an applicant to receive consideration by the selection committee. Supporting materials and questions should be directed to the International Liaison at kearly@facs.org or via fax at 312-202-5021.

All applicants will be notified of the selection committee’s decision in November 2019. Applicants are urged to submit their completed applications and supporting documents as early as possible in order to provide sufficient time for processing.

Apply for 2019 Claude H. Organ, Jr., MD, FACS, Traveling Fellowship

The family and friends of the late Dr. Claude H. Organ, Jr., have established an endowment through the American College of Surgeons (ACS) Foundation to provide funding for an annual fellowship to be awarded to an outstanding young surgeon from the Society of Black Academic Surgeons, the Association of Women Surgeons, or the Surgical Section of the National Medical Association. The fellowship, in the amount of $5,000, enables a U.S. or Canadian Fellow or Associate Fellow under age 45 who is a member of one of the aforementioned societies to attend an educational meeting or make an extended visit to an institution of his or her choice, tailored to his or her research interests.

Past awardees have used their fellowships to develop their careers in creative ways. The 2018 fellow, Fabian M. Johnston, MD, FACS, is developing clinical partnerships for research (such as clinical trials, translational research, and qualitative studies) to improve the lives of patients with peritoneal surface malignancies, who would otherwise be committed to only palliative therapies. He plans to establish a research network between U.S. and European allies in the fight against these diseases, beginning in Basingstoke, U.K.

The full requirements for the Claude H. Organ Traveling Fellowship are posted at facs.org/member-services/scholarships/special/organ. The deadline for receipt of all application materials is June 1, 2019, with decisions to be made by August 2019. Questions and application materials should be submitted to the attention of the ACS Scholarships Administrator at kearly@facs.org.
Three Insurance Coverages That Can Benefit Every Surgeon.

1. Group Term Life Insurance
   - 10-, 15- or 20-Year Level Term
   - and/or Traditional Term Life

2. Group Disability Income
   - Long-Term Disability
   - Short-Term Disability

3. Supplemental Group Coverage
   - Accidental Death & Dismemberment Insurance

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Call Toll-Free: 1-800-433-1672 (M–F 8:00 a.m.–5:00 p.m. CT)
Apply Online 24/7: www.acs-insurance.com
## Calendar of events

*Dates and locations subject to change. For more information on College events, visit [facs.org/events](https://facs.org/events) or [facs.org/member-services/chapters/meetings](https://facs.org/member-services/chapters/meetings).

### APRIL

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<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Location</th>
<th>Contact Details</th>
</tr>
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<tbody>
<tr>
<td>Virginia Lobby Day</td>
<td>April 3</td>
<td>Richmond, VA</td>
<td>Susan McConnell, smcon <a href="mailto:nell@ramdocs.org">nell@ramdocs.org</a>, <a href="http://www.virginiaacs.org">www.virginiaacs.org</a></td>
</tr>
<tr>
<td>Lebanese Chapter</td>
<td>April 6</td>
<td>Beirut, Lebanon</td>
<td>Dr. Ahmad Zaatari, <a href="mailto:zaatari@gmail.com">zaatari@gmail.com</a></td>
</tr>
<tr>
<td>Egypt Chapter</td>
<td>April 6–8</td>
<td>Cairo, Egypt</td>
<td>Dr. Mohey Elbanna, <a href="mailto:esbs.egypt@gmail.com">esbs.egypt@gmail.com</a>, <a href="http://www.egyptianchapter-acs.com">www.egyptianchapter-acs.com</a></td>
</tr>
<tr>
<td>Texas Lobby Day</td>
<td>April 11</td>
<td>Austin, TX</td>
<td>Janna Pecquet, <a href="mailto:janna@southtexasacs.org">janna@southtexasacs.org</a></td>
</tr>
<tr>
<td>Indiana Chapter</td>
<td>April 12–13</td>
<td>Carmel, IN</td>
<td>Tom Dixon, <a href="mailto:dixonest71@gmail.com">dixonest71@gmail.com</a>, <a href="http://www.infacs.org">www.infacs.org</a></td>
</tr>
<tr>
<td>Japan Surgical Society</td>
<td>April 18–20</td>
<td>Osaka, Japan</td>
<td>JSS Secretariat, <a href="mailto:jss2019@congre.co.jp">jss2019@congre.co.jp</a></td>
</tr>
<tr>
<td>California Lobby Day</td>
<td>April 24</td>
<td>Sacramento, CA</td>
<td>Christina McDevitt, <a href="mailto:nccacs@att.net">nccacs@att.net</a></td>
</tr>
<tr>
<td>Minnesota Lobby Day</td>
<td>April 26</td>
<td>St. Paul, MN</td>
<td>Janna Pecquet, <a href="mailto:janna@mnsurgicalsociety.org">janna@mnsurgicalsociety.org</a></td>
</tr>
<tr>
<td>Qatar Chapter</td>
<td>April 26</td>
<td>Doha, Qatar</td>
<td>Dr. Hiba Abdel Aziz, <a href="mailto:habdelaziz@hamad.qa">habdelaziz@hamad.qa</a></td>
</tr>
<tr>
<td>Bangladesh Chapter</td>
<td>April 26–27</td>
<td>Dhaka, Bangladesh</td>
<td>Dr. Murtuza Choudhury, <a href="mailto:qchoudhury@yahoo.com">qchoudhury@yahoo.com</a></td>
</tr>
<tr>
<td>1st Annual Illinois Surgical Conference</td>
<td>April 26–28</td>
<td>Chicago, IL</td>
<td>Nathalia Granger, <a href="mailto:ngranger@facs.org">ngranger@facs.org</a></td>
</tr>
<tr>
<td>New York Lobby Day</td>
<td>April 30</td>
<td>Albany, NY</td>
<td>Babette Grey, <a href="http://www.nycofacs@yahoo.com">www.nycofacs@yahoo.com</a></td>
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### MAY

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<tbody>
<tr>
<td>Wisconsin Lobby Day</td>
<td>May 1</td>
<td>Madison, WI</td>
<td>Terry Estness, <a href="mailto:wisurgical@att.net">wisurgical@att.net</a>, <a href="http://www.wisurgicalsociety.com">www.wisurgicalsociety.com</a></td>
</tr>
<tr>
<td>Minnesota Surgical Society, a Chapter of the ACS</td>
<td>May 3–4</td>
<td>Red Wing, MN</td>
<td>Janna Pecquet, <a href="mailto:janna@mnsurgicalsociety.org">janna@mnsurgicalsociety.org</a></td>
</tr>
<tr>
<td>North and South Dakota Chapters</td>
<td>May 3–4</td>
<td>West Fargo, ND</td>
<td>Leann Benson, <a href="mailto:leann@ndmed.com">leann@ndmed.com</a></td>
</tr>
<tr>
<td>Italy Chapter</td>
<td>May 4–5</td>
<td>Pisa, Italy</td>
<td>Giuseppe Nigri, <a href="mailto:giuseppe.nigri@uniroma1.it">giuseppe.nigri@uniroma1.it</a>, <a href="http://www.facsitaly.org">www.facsitaly.org</a></td>
</tr>
<tr>
<td>Missouri Chapter</td>
<td>May 4–5</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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### FUTURE CLINICAL CONGRESSES

- **2019**
  - October 27–31 | San Francisco, CA
- **2020**
  - October 4–8  | Chicago, IL
- **2021**
  - October 24–28| Washington, DC
“It’s all here. It covers every piece we need to institute a culture of quality in our hospitals—the five phases of care and what you need to do in each of them, how to run an M&M conference, credentialing and privileging, mentoring and coaching—and it tells me how to do it in a way I can understand. It’s a surgical book. It’s brief and to the point.”

— James W. Fleshman, MD, FACS, FASCRS

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We have the road map.

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San Francisco is famous for its eclectic Victorian architecture.

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facs.org/clincon2019