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ACS Bulletin

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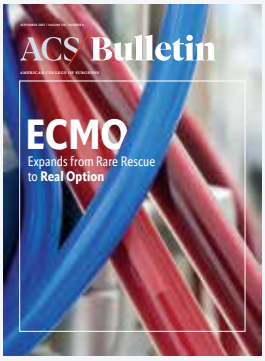

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An Essential Conference and Opportunities to Support Surgical Excellence

Patricia L. Turner, MD, MBA, FACS
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THERE IS MUCH TO VALUE about the American College of Surgeons, from our commitment to clinical excellence to the ways in which we recognize and celebrate outstanding colleagues. At this time of year, many of us look with anticipation to our annual meeting, the Clinical Congress.

In fact, this conference precedes the founding of the ACS in 1913. The meeting remains one of the largest conferences of surgeons in the world and is an important place for us to access educational opportunities, present cutting-edge research, and enjoy camaraderie with colleagues.

This year, Clinical Congress will be held in Chicago, Illinois, from October 4 to 7. Please make a point to attend the new Windy City Welcome Reception, held immediately after Convocation on the evening of Saturday, October 4. This opening social event for all attendees and their families will highlight Chicago cuisine and culture and offer everyone a chance to network.

The conference will begin the next day with the Opening Ceremony and the Martin Memorial Lecture, this year presented by **David J. Skorton,** MD, president and CEO of the Association of American Medical Colleges. Thematic sessions on artificial intelligence, quality, and education will follow that day, as will a wide range of Named Lectures, panel discussions, and networking events over the course of the conference.

Additional offerings will include the new Resident and Associate Society Lounge, a place for early career surgeons to connect in the Exhibit Hall, and a reception on Sunday afternoon to honor **Ajit K. Sachdeva,** MD, FACS, FRCSC, FSACME, who will retire from his role as Senior Vice President, Education on October 31, 2025. (Dr. Sachdeva will continue leading the Academy of Master Surgeon Educators through September 2026.)

ACS Foundation

While at Clinical Congress this year, please visit the ACS Foundation booth. Every member should know about its vital work advancing our mission of healing all with skill and trust.

When the ACS was a new organization, philanthropic generosity was crucial to our first efforts in quality improvement, research, and support for our colleagues. In recent years, ACS fundraising has continued to help fund some projects that advance surgical excellence but lack the potential to generate self-sustaining revenue. The ACS Foundation has helped fund extraordinary achievements since 2005, including research and mentoring scholarships, travel awards, and ACS Stop the Bleed courses, which have engaged more than 5 million people in more than 170 countries since 2016.

Philanthropic giving helped ensure that the Excelsior Surgical Society, our home for active-duty and retired military surgeons, could convene an important meeting this year. The group was founded in Rome, Italy, at the close of World War II, and met there again this February in recognition of its 80th anniversary. The event also commemorated the 10-year anniversary of Excelsior being a part of the ACS. Generous donations ensured active-duty military surgeons could attend.

In addition, gracious donors have helped fund specific projects this past year. A gift of $510,000 from a long-standing industry donor, Coloplast Corporation, helped the ACS maintain the Ostomy Home Skills Kit, an interactive simulation program for patients and caregivers to learn and practice skills for postoperative ostomy care. As a result, kits with practice equipment, instructional materials, and self-assessment are available now at a very low cost.

Particularly notable was a $1 million gift from **Peter and Marshia Carlino** to fund the Surgical Adhesions Improvement Project. The project launched with a summit last September, in which surgical adhesions experts from around the world helped create a workgroup now pursuing multiple research studies. The Carlino Family has donated an additional $300,000 to fund laboratory research on adhesions.

Our most outstanding donor is **Pon Satitpunwaycha,** MD, FACS, a retired general surgeon from Seattle, Washington, who practiced in Houston, Texas, for many years. This year, he added a $2 million donation to his long history of donations to the ACS. Dr. Pon (as he is called) is the most generous individual donor in the history of our organization, having donated cumulatively more than $5 million. His previous gifts have funded educational and mentoring programs that have positively impacted thousands of surgeons and surgical trainees in more than a dozen countries. (See pages 62–63.)

With the entire ACS, I am sincerely grateful to Dr. Pon, the Carlino Family, Coloplast Corporation, and all our donors. The impact of our Foundation reminds me why I, too, have been a Foundation donor for years: giving is a crucial element of extending our impact.

When you visit the Foundation booth at Clinical Congress next month, please ask about the scalpel lapel pin. You may see that many surgeons wear the pin proudly to demonstrate their commitment to advancing the profession through philanthropic giving. Please visit the booth and Foundation Board members and staff.

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- Identify an area of particular interest and establish a new offering.
- Join our Scalpel Pin Circle.
- Join the Mayne Heritage Society, which facilitates planned giving. Learn more at *plannedgiving.facs.org*.
- Give in person at Clinical Congress and other ACS conferences.

Register for Clinical Congress Now

Clinical Congress registration is now open. You can explore this year's program planner today. Sign up at *facs.org/clincon2025.*

Dr. Patricia Turner *is the Executive Director & CEO of the American College of Surgeons. Contact her at executivedirector@facs.org.*

Register for Clinical Congress here.

The 2024–2025 ACS Foundation Annual Report is now available.

ECMO

Expands from Rare Rescue to Real Option

Tony Peregrin

With the expanded use of extracorporeal membrane oxygenation (ECMO) in diverse clinical settings—specifically, general surgery and trauma—challenges have emerged regarding patient selection, cost considerations, and effective strategies for initiating an ECMO program.

TRADITIONALLY, ECMO HAS BEEN USED to treat severe cardiac and pulmonary conditions, including acute respiratory distress syndrome (ARDS), cardiogenic shock, and patients awaiting a heart or lung transplant. Today, this life-support intervention also is applied to other critical scenarios such as patients in cardiac arrest and individuals suffering from pulmonary embolism or other causes of severe respiratory arrest (e.g., COVID-19).

Organized into two primary configurations, venoarterial (VA) and venovenous (VV), the ECMO circuit facilitates the flow of venous blood to an external oxygenator, adding oxygen and removing carbon dioxide before returning the blood to an artery or vein. VV ECMO allows the patient's lungs to essentially "rest," while VA ECMO provides additional blood pressure support.

"There was a time when general surgeons would not even consider learning about ECMO," said Faisal Aziz, MD, MBA, FACS, chief of the Division of Vascular Surgery at Pennsylvania State University in University Park. "In this day and age, the least we can do for our general surgery patients is know the indications and contraindications for ECMO—and understand it is an extreme form of resuscitation that is available for carefully selected patients."

Determining Contradiction Criteria for ECMO Therapy

ECMO has been used exclusively as a measure of last resort in intensive care units (ICU), and while this intervention has a wide range of applications today, selecting which patients could benefit most from this treatment continues to be a topic of rigorous discussion.

OR team prepares to transport a critically injured patient requiring ECMO support for severe lung injury. *(Credit: Eileen M. Bulger, MD, FACS, Medical Director, Trauma Education Programs)*

Patient selection typically involves the assessment of several factors, including severity of organ failure, reversibility of the condition, and general prognosis. Because VA and VV ECMO perform such different functions, indications for ECMO vary depending on whether VA or VV support is being considered and are typically applied when conventional approaches are deemed insufficient.

Contraindications to ECMO—which outlines situations where ECMO therapy could be harmful to the patient—are not absolute and thus differ by center and are dependent on patient-specific factors. Because ECMO does not fix the heart or lungs (and only rests those organs while they recover) the most common contraindication is irreversible heart or lung failure that will not get better even if the organ is allowed to rest. As such, contraindications can include untreatable underlying conditions, uncontrollable bleeding or severe coagulopathy, and devastating neurological injury, among other conditions.

When an individual is cleared of any potential contraindications and is identified as a viable candidate for ECMO, this life support system can provide the patient with temporary support while the affected organ either rests and recovers or as a bridge to a more permanent solution such as an organ transplant.

"When I was in medical school, we were essentially told that ECMO only works in children and has very limited role in adults," said John W. Scott,

Research suggests that initiation of ECMO within 24 hours of when the patient meets ECMO criteria leads to improved survival rates and enhanced functional status, particularly for individuals suffering from ARDS or cardiogenic shock.

MD, MPH, FACS, medical director of ECMO at Harborview Medical Center in Seattle, Washington. "Over the past decade and a half, we've seen a bit of an ECMO renaissance due to the realization that it really does help people—if you choose the right patients and if you get on it early. Now, when we consider which populations stand to benefit from ECMO, I would say there isn't a patient population that absolutely doesn't, as long as we find the right indications and act early."

The integration of artificial intelligence (AI) into ECMO management could help identify patients who best qualify for this intervention with algorithms that analyze large datasets, including patient histories and laboratory results.

"AI is proving itself to be very good at predictability models," said Dr. Aziz. "I do believe that if we have algorithms built in place, we can pick up on those patients who are heading toward decompensation. I think, as we head toward the future, we will have more protocols that will help us determine early on which patients will benefit from ECMO."

A study conducted in 2023 underscores the potential of AI to revolutionize how ECMO could be administered in the future. Researchers assessed the ECMO Predictive Algorithm (also known as ECMO PAL) which was trained and validated using a retrospective cohort of 18,167 patients from the international Extracorporeal Life Support Organization (ELSO) registry. ELSO is a nonprofit, international group established in 1989 that tracks ECMO patient outcomes.

The study authors noted that the ECMO PAL algorithm—the first AI-powered ECMO survival score to predict in-hospital mortality based on a large international patient cohort—demonstrated "high generalizability across ECMO regions and outperformed existing widely used scores."[1]

While AI could drive significant advancements in ECMO patient management, Dr. Aziz emphasized the need for continuous data validation to achieve optimal performance and effectiveness.

Early ECMO Initiation and Team Approach

Research suggests that initiation of ECMO within 24 hours of when the patient meets ECMO criteria leads to improved survival rates and enhanced functional status, particularly for individuals suffering from ARDS or cardiogenic shock.

"For a while, some have viewed ECMO as something of an expensive and risky last resort, and so they would wait until the lungs or heart were too far gone to benefit from ECMO," explained Dr. Scott. "But because the benefit of ECMO is its ability to rest the lung or support a failing heart, you should be thinking about initiating ECMO as soon as your patient meets criteria. The sooner that ECMO gets involved, the more likely you are to see organ recovery."

Timely execution of ECMO—specifically after cardiopulmonary resuscitation (CPR) has failed to restore oxygenation and circulation—also is essential. "If the indications for ECMO are after CPR, which has failed for a prolonged period of time, say 30 to 40 minutes, those patients are not likely to have a good outcome," said Dr. Aziz. "On the other hand, if you look at a select group of patients where ECMO was performed earlier, specifically before the cardiac arrest has happened, they generally have better outcomes. I think if patients who are extremely sick have a bad outcome, it's not because of ECMO, it's because of the time point when ECMO was started."

Successful ECMO programs typically engage in a multidisciplinary approach that can include surgeons, intensivists, perfusionists, ECMO specialist nurses, palliative care services, and other consulting specialists that play an essential role in the decision to administer this rescue therapy as early as possible for properly vetted patients.

A retrospective review of adult ECMO patient charts at Massachusetts General Hospital in Boston examined mortality rates before and after 2014, when a multidisciplinary approach to ECMO

was launched. Prior to that year, patients were treated independently by intensivists with specific training for this intervention.

A total of 279 charts was reviewed, and survival to discharge for patients before the team-based approach was formalized at this institution was 37.7% compared to a survival to discharge of 52.3% between 2014 and 2017.[2]

"I am very proud of the highly collaborative approach that we take at Harborview Medical Center. Every time we consider putting a patient on ECMO, we discuss the case briefly on a just-in-time group call with all of our ECMO faculty. Because there's always some nuance and there's always intricacies, it would take decades to acquire all of the necessary expertise for these highly complex patients," said Dr. Scott. "But our system means that we can quickly, in one call, determine if the patient meets the criteria for ECMO, talk through any patient-specific details, and get things going for a rapid and smooth cannulation."

Emerging Role of ECMO in Trauma Care

ECMO is a rescue therapy that provides temporary support for select trauma patients, particularly for individuals with severe lung injuries, ARDS, or those suffering from severe trauma-related cardiopulmonary failure (e.g., massive pulmonary embolism).

However, some view the use of this modality in the trauma setting as somewhat controversial, largely due to high costs and limited resources, and the potential for complications related to anticoagulation.

"The science is there. Current evidence supports that trauma centers should offer ECMO to appropriate patients—it is often a lifesaving intervention," said Dr. Scott, a trauma surgeon. "It doesn't matter if the patients are suffering from traumatic brain injury (TBI) or if they are at risk of hemorrhaging; these no longer qualify as absolute contraindication. While patient selection remains important, essentially all injured patients with ECMO indications can benefit significantly from this intervention."

One of the main barriers to ECMO use in trauma, according to Dr. Scott, is the perceived lack of data. He cited a systemic review published in 2023, that examined 36 observational studies with 1,822 patients, including studies with a focus on TBI patients.[3]

"The overall survival rate for trauma patients with TBI who went on ECMO was 66%, and that is right in line with ECMO survival rates for non-trauma patients," Dr. Scott said. "I think it's key for people to realize that trauma patients on ECMO are not at an increased risk for poor outcomes."

The authors of the systemic review also noted the benefits of this modality for this cohort, asserting that, "ECMO is now considered beneficial for severely traumatized patients, improving prognosis, and serving as a valuable tool in managing trauma-related severe cardiorespiratory failure, hemorrhagic shock, and cardiac arrest."[3]

Another barrier to ECMO use in trauma patients is the increased risk of bleeding associated with anticoagulation, although innovations in ECMO technology and anticoagulation have made this approach more feasible for these individuals.

"The reasons most people don't want to put a trauma patient on ECMO tend to focus on bleeding risks, and yet, the data show that a trauma patient who gets ECMO does better than a trauma patient who needs ECMO and doesn't get it. Just as an injured patient with a pulmonary embolism may

"I think ECMO portability is a big game changer because it fits in the helicopter, it fits in the ambulance, and now patients who were 'too sick to travel' can get the care they need."

Dr. John Scott

need anticoagulation, most trauma patients tolerate lower-dose anticoagulation with ECMO. And for those who cannot be anticoagulated, there is increasing experience that shows it is safe to run VV ECMO without anticoagulation as long as the flow rates aren't too low," Dr. Scott said.

Portable Devices as Bridge to Critical Care Support

While traditional ECMO systems can be cumbersome and unwieldy, typically occupying a large footprint at the patient's bedside, portable systems allow enhanced ambulation with a single cannulation site. One of the most transformative benefits of these smaller circuits is the ability for well-trained staff to administer this therapy in the field or in resource-challenged settings.

"I think ECMO portability is a big game changer because it fits in the helicopter, it fits in the ambulance, and now patients who were 'too sick to travel' can get the care they need," explained Dr. Scott. "We have all of our cannulation equipment and our pump in a backpack and a wagon, and we can quickly drive down the road to another hospital to cannulate the patient, and then we take the ambulance back to our hospital once they are on VV ECMO."

Interfacility transport is a primary advantage of mobile ECMO therapy because it enhances timely access to centers with advanced capabilities and expertise.

"As surgeons, we cannot live in an isolated world. We have to keep ourselves updated, especially with advancements like portable ECMO," urged Dr. Aziz. "The traditional ECMO machines are huge, with big tubes attached to big machines, which makes transporting a patient a nightmare—especially if you are putting someone in a helicopter. If something disconnects, especially when you are in the air, it could be fatal. While portable ECMO is not ideal, it certainly makes the transport process easier and safer."

It also is pertinent to note that, while mobile ECMO services enhance interfacility transport, they also increase access within the center itself by providing cardiac and respiratory support outside the ICU, allowing some patients to receive a computed tomography scan or magnetic resonance imaging services.

Currently, limited data exist on patient outcomes related to portable ECMO therapy; however, more programs across the US are investing in this mobile rescue intervention.

In a survey published in 2024, researchers examined US programs registered with ELSO. According to the survey, it is estimated that 63 out of 274 adult ECMO centers offer mobile ECMO services. The following are two examples of centers that have provided yearslong portable ECMO therapy with promising results.[4]

The Penn Lung Rescue Program in Philadelphia, which includes portable ECMO services, has transported more than 700 patients since its inception in 2014.[5] The program is managed by Penn Medicine, an academic medical center that comprises the University of Pennsylvania Health System and the Perelman School of Medicine at the University of Pennsylvania in Philadelphia. The survival rate for patients who received mobile VV ECMO has exceeded the ELSO average since the program began, according to Penn Medicine administrators.

The University of Utah Health in Salt Lake City, one of the only academic medical centers in the state, also has an ECMO program that includes portable ECMO systems. In an article published in 2022 in the *Journal of Clinical Medicine,* study authors affiliated with the university concluded the following: "Developing an in-hospital, primed, and portable VA ECMO program resulted in increased clinical volume with equivalent patient survival despite a sicker cohort of patients. We conclude that more rapid deployment of VA ECMO may extend the treatment eligibility to more patients and improve patient outcomes."[6]

Insights for Achieving Sustainable ECMO Program Success

The provision of ECMO services can cost as much as $73,000 per patient, according to a recent survey, although those expenditures can vary by institution and the care required to treat individual cases.[7] Expensive equipment and a specialized team of physicians, surgeons, nurses, and perfusionists are the primary factors driving these costs.

"I think the biggest issue, in terms of getting buy-in from hospital administrators to start an ECMO program, is the budget," said Dr. Aziz. "How do we justify starting this program? Do we have enough resources? One important thing to consider is that hospital billing typically goes up when the case mix index (CMI) goes up. When patients are on ECMO, it generally adds to the CMI. You may need to acquire more resources in the beginning as you launch the program, but once it is place it has the potential to increase hospital reimbursements."

In other words, implementing an ECMO program can be a financially sustainable endeavor, not to mention its potential to generate a halo effect through referrals and transfers to billable critical care services such as cardiovascular services, trauma, and neonatology.[8]

"All the things it takes to build a successful ECMO program are the same things needed to build a successful trauma program," added Dr. Scott. "Trauma programs are so well-suited to develop ECMO programs because multidisciplinary collaboration across the entire hospital and using data to drive quality improvement are in a trauma program's DNA. The same patient-centered, team-based, and data-driven approach that underlies successful trauma programs is a perfect platform upon which to build an ECMO program."

Further research regarding the development of standardized guidelines for ECMO treatment, and strategies to optimize cost effectiveness are essential for achieving hospital leadership support and expanding these programs across the US.

"If you are taking care of patients who are sick enough to have indications for ECMO, then I hope you're part of a program that is able to get this lifesaving intervention to them when they need it," Dr. Scott said. "There are a lot of creative ways to do this, but it starts with people opening their minds and looking past some of the outdated beliefs about this treatment that aren't actually backed by data. Don't let a failure of imagination hold you back from giving your patients the lifesaving care that they need."

Tony Peregrin *is the Managing Editor of Special Projects in the ACS Division of Integrated Communications in Chicago, IL.*

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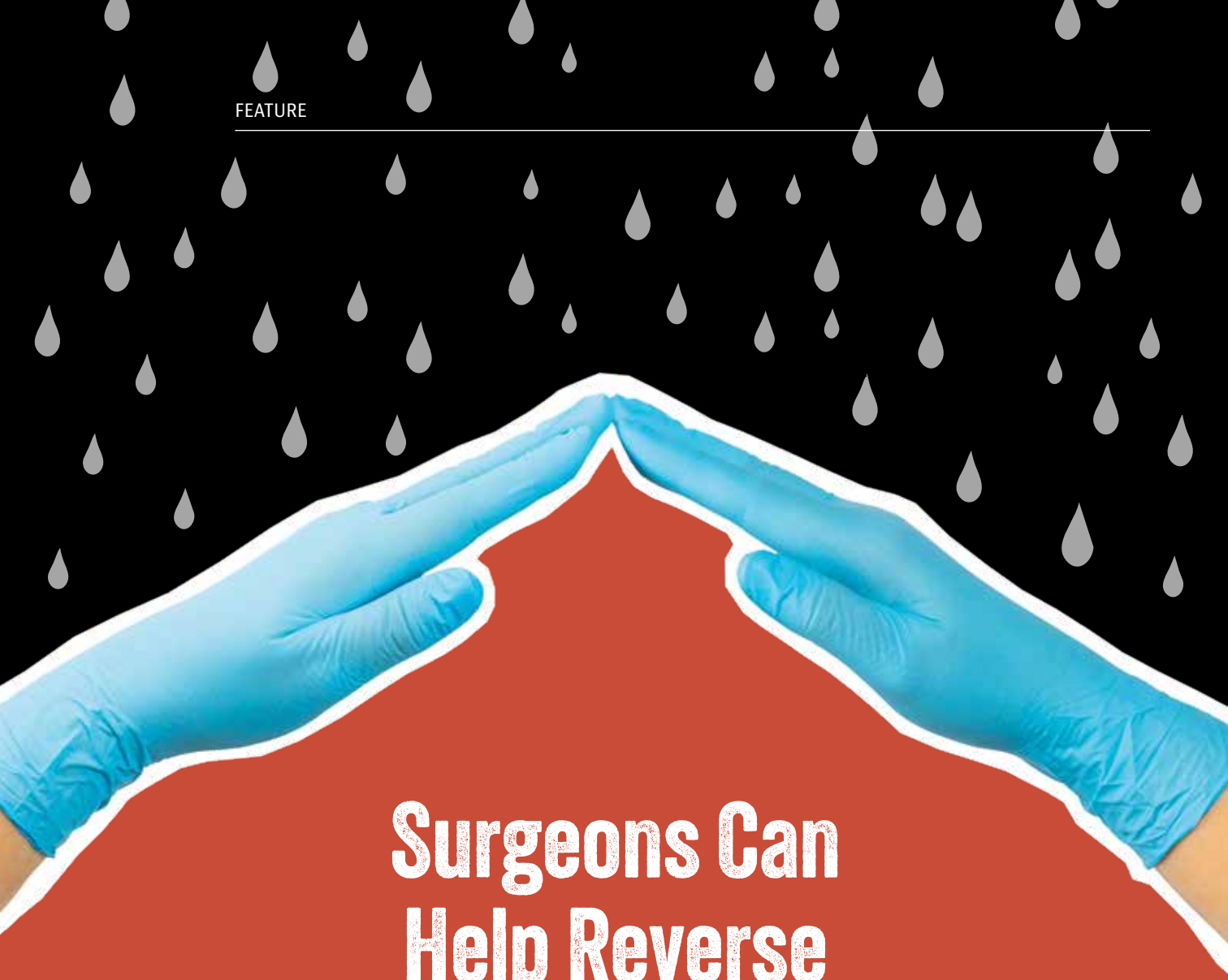


Surgeons Can Help Reverse

DISTURBING TRAUMA TREND

Jim McCartney

Trauma has become the leading cause of death in Americans age 50 years and younger, with the largest increases in trauma deaths over the past 2 decades noted among baby boomers and millennials.[1]

FROM 2000 TO 2020, there was a 91% increase in trauma mortality in the US, rising to 268,926 deaths, and far outpacing the 17.8% population growth during that same time. Although motor vehicle mortality rates fell, deaths due to firearm-related injury, poisoning, and falls rose.[1] In 2017, for the first time in modern US history, firearm-related deaths surpassed motor vehicle crash deaths.[2]

"Rates of penetrating trauma, gun violence, and stab wounds are going up," said Megan Quintana, MD, FACS, a trauma surgeon at George Washington University Hospital in Washington, DC. "We saw a huge increase in our hospital after COVID—a lot of hospitals did—and it hasn't returned to pre-COVID rates."

Globally, an estimated 4.4 million people annually die from unintentional or violence-related injuries, one in three from road traffic injuries. For individuals aged 5-29 years, three of the top five global causes of death are related to trauma.[3]

"As infectious disease mortality has declined, trauma—particularly firearm violence and injury—has assumed a growing share of youth mortality," said Joseph V. Sakran, MD, MPH, MPA, FACS, a trauma surgeon at Johns Hopkins Medicine in Baltimore, Maryland. "In the US, rising youth trauma is fueled by high firearm access, increasing mental health challenges, and systemic gaps in prevention and trauma care."

Young Americans (1-19 years) are 18 times more likely to die from trauma than their peers in comparable high-income countries, due to a higher incidence of firearm and motor vehicle crash deaths in the US.[4]

Surgeons have long been leaders not only in treating trauma victims, but also in helping develop trauma systems, shape public policy, launch community and prevention programs to improve trauma outcomes, and/or help prevent or reduce trauma. Emerging science highlights the critical role clinicians play in prevention efforts.[2] But much more needs to be done, and surgeons are urged to double down on their efforts inside and outside of the trauma bay.

New Source of Trauma

A growing cause of trauma injury among young people is the increased use of micromobility devices, such as e-scooters and e-bikes. Contusions, abrasions, fractures, and even deaths have spiked due to the ubiquitous availability of these vehicles.[5]

"Micromobility devices are a huge problem and are only getting worse," Dr. Quintana said.

Given the nature of these "grab-and-go" devices, riders typically do not wear helmets and may know little about how and where to safely operate the vehicles, she said, arguing that these devices need to have their own injury codes to generate the data needed to address the problem through injury prevention, education and, potentially, regulations.

"Golden Hour"

"Trauma care must happen at a system level because of the nature of trauma, its unexpectedness, its devastation, its time dependence, and its multifaceted impact," said L. J. Punch, MD, FACS, a trauma surgeon and medical director of Power4STL, a nonprofit organization committed to reducing the impact of trauma in the St. Louis, Missouri, region.

The "golden hour" is the time during which prompt medical intervention following a severe injury significantly improves survival chances and reduces long-term complications. It has played a crucial role in the evolution and function of trauma systems.

"Patients with life-threatening injury have the highest survival chances when they receive definitive surgical care within the first 60 minutes of injury," Dr. Sakran said. Rapid assessment and interventions, such as airway management, hemorrhage control, and fracture stabilization during this window of time, can reduce death.

The term "golden hour" was popularized by a trauma surgeon named R. Adams Cowley, MD, FACS, founder of the University of Maryland Shock Trauma Center in Baltimore. He also developed an organized approach to trauma care that included a network of trauma centers, transport services, and enhanced communication that made Maryland

A second-year medical student at George Washington University School of Medicine and Health Sciences in Washington, DC, teaches Stop the Bleed techniques to international high school students.

a standalone model for delivering trauma care, Dr. Punch said.

The US trauma system grew out of a military-civilian medicine partnership. Its continued development, including creating verification requirements necessary for various levels of trauma centers, has been guided by the ACS Committee on Trauma (COT), among other organizations.

Yet, the full potential of a national trauma system with seamless sharing of data, best practices, and continuous improvement across military and state-based civilian systems has yet to be realized. The development of a US trauma system remains a patchwork of care with limited federal ownership.[6]

In an effort to ensure standardized, high-quality trauma care for all, surgeons are leading the effort to create a National Trauma Emergency Preparedness System (NTEPS) that would establish a trauma care infrastructure to manage the daily injured population in the US along with mass casualty events.[7] Read more about the role of surgeons in supporting an NTEPS in the May 2025 *Bulletin* article, "All Surgeons Can Help Advance a National Trauma and Emergency Preparedness System."

"Building trauma systems—from the state level up to a national framework like NTEPS—creates a more standardized, equitable emergency care network. This network ensures that patients get the right care, in the right place, at the right time—ultimately helping to prevent avoidable deaths," Dr. Sakran said.

In addition, Dr. Sakran and Dr. Quintana support the COT's work on Regional Medical Operation Command Centers (RMOCCs).

"RMOCCs embody a civilian adaptation of military coordination frameworks," Dr. Sakran explained. "By managing patient movement, aligning resources, and connecting critical care partners across the region, RMOCCs form the backbone of a resilient trauma response system."

Filling the Gap in Post-Trauma Care

Surgeons are leading the effort to fill another gap in the trauma system—the lack of outpatient care after trauma patients leave the hospital.

"They have a 'minor injury' physically, so they don't need inpatient stay, but then there's frequently no dedicated aftercare in the outpatient setting," Dr. Punch said.

According to Dr. Quintana, one example of this gap in the system is a low rate of return to clinical care for people who are discharged from the emergency department. In addition, patients often lack the knowledge or financial resources to pursue follow-up care, including physical therapy.

"The overall system is failing our patients," she said.

Also, between 60% to 70% of people with "minor" gunshot injuries are sent home but do not return to work for physical or mental health reasons, Dr. Quintana shared.

"There's a gap between the tremendous lifesaving care happens in the trauma center and the feeling of abandonment that comes when someone leaves the hospital," Dr. Punch said, adding that patient-centered spaces for outpatient trauma are needed to provide care and track the long-term outcomes of trauma care.

"We need to not just save someone's life, but to make sure they heal," he said. "That is how we prevent and reduce some of the trauma we're seeing in youth."

Bullet-related injury affects the physical, emotional, social, and spiritual aspects of not only the patient but the people who love them, Dr. Punch explained. Sometimes the physiological, emotional, and social response to trauma can be worse than the physical injury—which is why care should extend to others besides the trauma patient.

This type of care is the focus of the Bullet Related Injury Clinic (BRIC) in St. Louis, Missouri, founded by Dr. Punch in 2020. The BRIC bridges care between emergency services and long-term trauma recovery for those suffering from bullet-related injury and includes support for guardians and caregivers.

BRIC was initially set up to treat the pain and wounds of people discharged from the emergency department on an outpatient basis. Now it's a "wraparound holistic care center in which the predominant service that's provided is actually mental well-being care," Dr. Punch said.

The clinic has had more than 2,000 referrals, 950 successfully enrolled and treated patients, more than 200 bullet removals, and more than 5,500 visits.

Education Is Critical

Trauma care education includes programs such as the ACS Advanced Trauma Life Support® (ATLS®) program, which teaches physicians and other care providers a systematic, concise, safe approach for treating trauma patients. Community-focused education programs, such as ACS Stop the Bleed, also play an essential role in trauma care training.

"The ACS suite of education programs that informs community members, first responders, community surgeons, academic surgeons, and others on best practices has saved millions of lives," Dr. Punch said.

Through the Stop the Bleed program, surgeons have empowered individuals to respond to bleeding emergencies, teaching basic bleeding control techniques like applying pressure, packing wounds, and using tourniquets.

"There's a medical component and a first-responder component that have revolutionized the management of bleeding, which is the leading preventable cause of trauma-related death," Dr. Punch explained.

In July, the program reached the milestone of equipping 5 million people worldwide to help control bleeding and bridge the gap between injury and professional medical help.

Surgeons also get involved in multidisciplinary education efforts within their own hospitals, Dr. Quintana noted. For instance, she helped create a trauma skills curriculum for her hospital, including hands-on skills and discussions of traumatic brain injury, damage control resuscitation, thoracotomies, chest trauma, and other topics.

Innovations and Trauma Survival Rates

Damage control resuscitation (DCR), the use of whole blood, refined massive transfusion protocols, and hemostatic agent advances have transformed trauma care, according to Dr. Sakran.

DCR—emphasizing early balanced blood products, permissive hypotension, and rapid hemorrhage control—targets the lethal triad of acidosis, hypothermia, and coagulopathy. Multiple studies demonstrated that when correctly applied, DCR significantly improves survival without increasing blood usage. Likewise, whole blood transfusion is associated with better outcomes compared to standard component therapy. Cohort studies report improved survival rates with whole blood–based resuscitation strategies, including reduced 24-hour and 30-day mortality.[8]

When discussing innovations that remain controversial, Dr. Sakran underscored the role of REBOA (resuscitative endovascular balloon occlusion of the aorta).

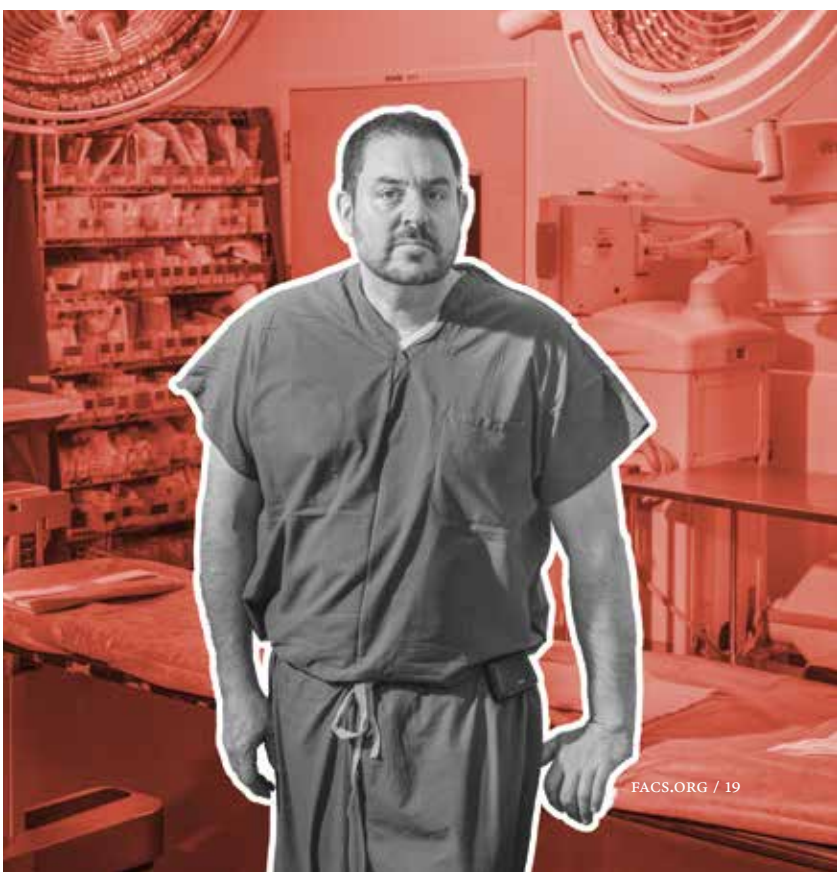
"Some tools, like REBOA, remain controversial—but they buy surgeons time, sometimes literally saving lives," he said.

Initially developed as a minimally invasive alternative to emergency thoracotomy, REBOA temporarily controls noncompressible torso hemorrhage by occluding the aorta. It can augment cardiac, cerebral, and coronary perfusion but carries risks of downstream ischemia—prompting ongoing research examining its indications and safety.

Dr. Sakran also highlighted the profound influence of military medicine on civilian trauma care: "The battlefield pioneered rapid hemorrhage control and evacuation, evangelizing tourniquet use, hemostatic agents, and structured evacuation—all of which have dramatically cut preventable deaths."

These strategies, rooted in tactical combat casualty care, have been widely adopted and adapted in civilian settings.

Looking ahead, he stressed the potential of technology. Artificial intelligence-based decision support systems are emerging that leverage real-time patient data—like vital signs or injury profiles—to inform personalized resuscitation approaches, promising even greater precision in timing and treatment.



Dr. Joseph Sakran, a trauma surgeon at Johns Hopkins Medicine, waits in the OR during a 24-hour shift in 2024. *(Credit: Jason Andrew)*

Surgeons as Advocates

Reducing and preventing trauma demands more than surgical skill—it requires surgeons to step into advocacy-related initiatives.

Dr. Sakran, Chair of the COT Advocacy and Health Policy Program Area, emphasized this expanded role: "As surgeons, our responsibilities extend far beyond the operating room. We are not just clinicians—we are powerful advocates."

Whether it's promoting seat belts, helmets, safer gun storage, or supporting programs like Stop the Bleed, surgeons have a unique platform to drive systemic change.

Hospital-based violence intervention programs (HVIPs) exemplify this ethos. These multidisciplinary initiatives unite hospital staff and community partners to offer safety planning, trauma-informed care, and post-discharge coordination for survivors of violent injury. Surgeons play a crucial role in identifying and referring patients, championing the programs internally, and sometimes actively participating in intervention efforts.

"Surgeons need to help deploy trauma-informed care practices and screening for social needs in partnership with community organizations to address the cycles of violence," Dr. Sakran explained.

By advocating for injury prevention and leveraging their voices in policy and hospital systems, surgeon-advocates demonstrate how medical professionals can shape safer communities—well before the need for surgical intervention ever arises.

Dr. Punch added that "HVIPs are an important part of any community's response to preventing a violent event from turning into a homicidal event."

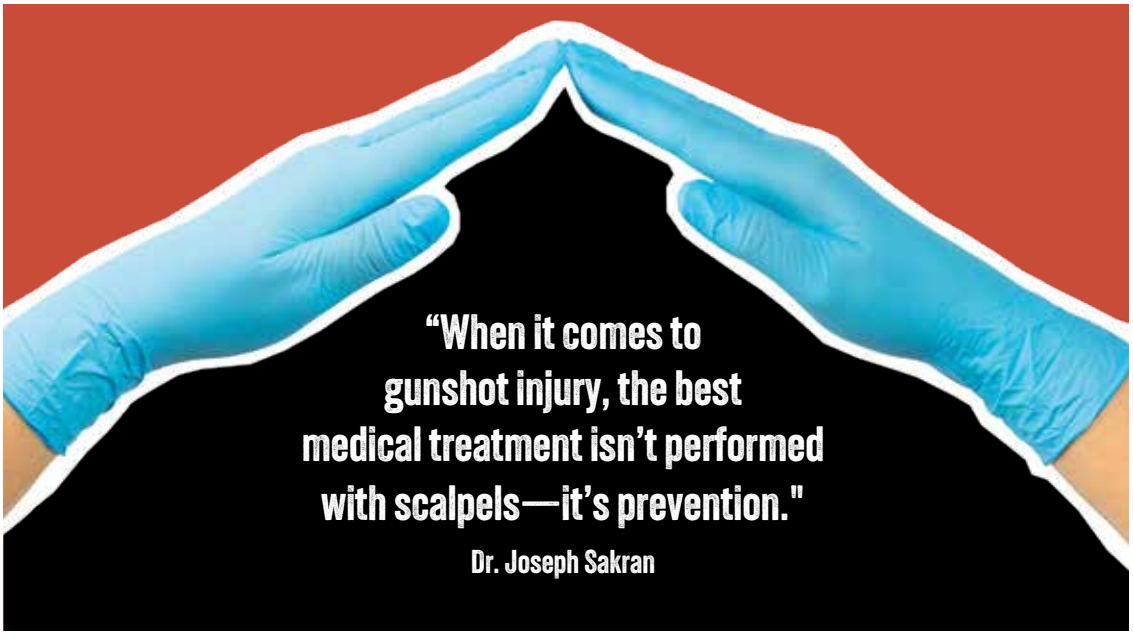
BRIC has worked to support the HVIP programs at Regional Medical Center and Regional One Health, both in Memphis, Tennessee, as well as the Denver Youth Collaborative REACH Clinic in Colorado. "This connection enables people to get their bodies cared for and be in a better position to engage with social services," he said.

Surgeons Can Shape Trauma's Future

Personal experience often fuels a surgeon's dedication to trauma care, and Dr. Sakran's story is particularly moving. At just 17 years old, he was struck in the neck by a stray bullet during a high school football game—an event that profoundly shaped his life's mission.

At Inova Fairfax Hospital in Virginia, a vascular surgeon harvested a vein from Dr. Sakran's leg to repair the damaged carotid artery in his neck, while a trauma surgeon meticulously reconstructed his shattered larynx. The experience affected not only Dr. Sakran, but also his family—especially his parents, with his physical and emotional recovery lasting for months. Reflecting on that night, Dr. Sakran shared: "That night could have ended it all. I was given a second chance. Every day since, I've been driven—not just to save lives in the trauma bay, but to prevent injury well before a patient ever enters the operating room."

Today, he channels that drive into systemic change. As board chair and chief medical officer of



Brady United, Dr. Sakran brings his experience and influence to the forefront of firearm injury prevention.

"When it comes to gunshot injury, the best medical treatment isn't performed with scalpels—it's prevention," he said.

His leadership bridges the worlds of surgery and public health, guiding hospital-based care and national advocacy with equal conviction.

Dr. Punch is encouraged by the development of programs that provide resources for long-term outpatient recovery care for trauma patients. After all, hospitals provide a lot of high value, intense care, but they can't do everything.

"Helping the system build beyond what it's doing in the hospital helps patients, but it also helps providers know that they're not just sending people into an abyss after they've invested a huge amount of care into their life and their well-being," he said.

Surgeon engagement in communities, such as supporting hospital centers, investing in at-risk areas, and offering youth mentorship, are critical to reducing trauma.

"Policy advocacy and public health are in our lane," Dr. Quintana said. "A lot of us truly believe that in our hearts, but maybe just don't know exactly how to get involved."

There are many ways for surgeons to get involved, starting with linking up with their state COT. Other options include:

- **Public health involvement:** Get an advanced education in public health or build bridges with the local school of public health to involve students in your hospital's trauma program.
- **Trauma research:** Trauma has a history of extensive patient data, benchmarking outcomes, and developing quality improvement measures through such programs as the Trauma Quality Improvement Program.
- **Community outreach:** There are many community outreach activities that surgeons can get involved in, such as the local Stop the Bleed program.
- **Education:** Surgeons can get involved in multidisciplinary education within their hospitals or the community. "Keep your eyes open to what your community needs," Dr. Quintana said. "What we need here in Washington, DC, is very different from what someone might need in rural Montana."
- **SurgeonsVoice:** The ACS SurgeonsVoice.org advocacy center has a trauma advocacy section where you can use pre-written letters and easily contact your lawmakers.

The BRIC in St. Louis, Missouri, bridges emergency care and long-term trauma recovery for patients with bullet-related injuries, offering support for survivors and their caregivers.

Working outside the OR allows surgeons to amplify the impact of the work they do inside the OR.

"By embedding trauma-informed care and community outreach into our practice," Dr. Sakran said, "we save lives before the knives are drawn and before patients ever enter our trauma bay."

Jim McCartney *is a freelance writer.*

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In Trauma Bay, Surgeons Can Protect Patient Rights during Active Criminal Investigations

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Surgeons often encounter patients in their most vulnerable states. This is particularly true in the case of trauma and acute care surgery, where surgeons must treat patients with potentially life-threatening injuries or illnesses.

Figure 1.
Surgeons must prioritize patient safety, treatment, and privacy, whereas law enforcement also must consider public safety and preservation of evidence in the case of an ongoing investigation.

AT TIMES, the circumstances that lead the patient to the emergency department (ED) may require the involvement of law enforcement due to suspicion of violent acts, traffic offenses involving alcohol or other drugs, or other criminal acts. In these cases, police have a legal duty to chaperone suspects and victims of crime, secure evidence for ongoing investigations, and protect medical personnel from possible violence.

Yet, the presence of law enforcement also may incite fear and mistrust, especially in patient populations who are disproportionately affected by both violent crime and previous experiences with police.

But how does the presence of law enforcement officers affect surgeons treating patients in the ED and, more importantly, their ability to provide equitable care without violating patients' rights to privacy or autonomy?

Members of The American Association for the Surgery of Trauma (AAST) were surveyed by Kaufman and colleagues and determined that less than 30% of respondents found the presence of law enforcement officers helpful or very helpful.[1] Those who perceived a negative effect on patient care cited reasons such as "interruptions to clinical care, including difficulties that emerge when patients are handcuffed or shackled; potential violations of patient privacy when law enforcement officers are within earshot of clinical procedures and conversations; and most commonly, added emotional distress and agitation in patients."[1]

Without clear policies to guide the presence of law enforcement in the ED and trauma bay, surgeons leading resuscitation teams must learn to navigate the intersection of law and healthcare. While there are no established societal guidelines regarding the presence of law enforcement during the care of acutely ill patients, the AAST Injury Prevention Committee provides a bioethical framework, and here we aim to provide practical guidance to surgeons navigating these interactions.[2]

Competing Priorities for Law Enforcement and Surgeons

Law enforcement and surgeons share the goal of protecting the public and preserving the sanctity of life. However, in an acute patient setting, they may be faced with competing priorities (see Figure 1, this page).

The surgeon's primary duty is to the patient. Over centuries, the Hippocratic Oath has been adopted by physicians as a public declaration to uphold professional ethical standards and "abstain from whatever is deleterious and mischievous," often paraphrased as the well-known adage "Do no harm."[3] Translated to modern times, physicians should aim to render timely and appropriate treatment while avoiding unnecessary testing or procedures, undue use of physical restraints, inadvertent invasions of privacy, or triggers driving medical vulnerability.[4,5]

Conversely, law enforcement's primary duty is to the public. Achieving public safety can take many forms, especially during an active criminal investigation. It may require restraining an individual, limiting communication or visitation with a person until the threat of violence is eliminated and/or once physical or testimonial evidence has been secured.

These competing interests may foster ambiguity during exigent circumstances, sometimes at the detriment of the patient. Therefore, we advocate for surgeons to engage in dynamic and collaborative

Figure 1.

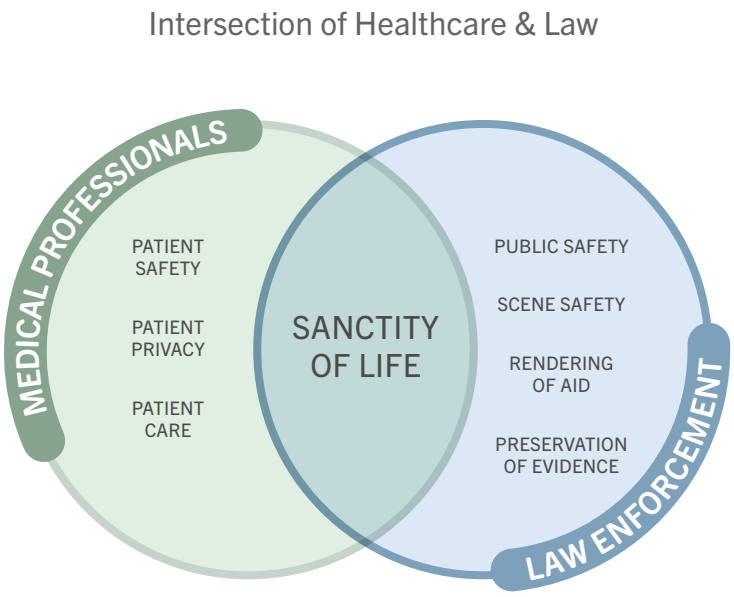
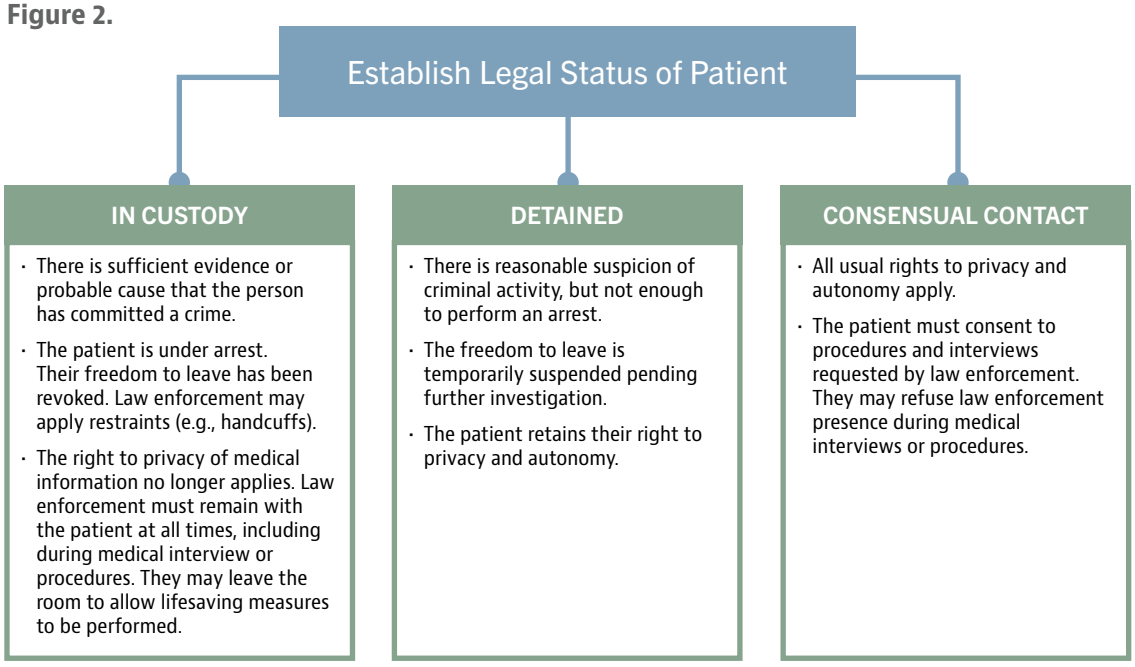


Figure 2.



bedside conversations with law enforcement officers to resolve conflicts in a respectful and expeditious manner.

Three Legal Status Categories

The appropriate level of law enforcement engagement and degree of their authority over the patient are informed by the patient's legal status. An individual interacting with law enforcement may be grouped into one of three legal status categories (see Figure 2, this page):

In Custody (Arrested): An individual placed under full custodial arrest (colloquially "under arrest" or "in custody") has been formally taken into police charge when there is probable cause of having committed a crime. Probable cause must meet a threshold of factual justification sufficient to convince a reasonable person. The individual is informed of the arrest and advised on their rights or constitutional protections during custody and custodial interrogation (e.g., Miranda rights).

Handcuffs or other physical restraints may be used at this time. Arrest implies a formal legal process has been started through which formal charges subsequently may be brought by a prosecutor. Incarcerated patients also are in custody, specifically under the state Department of Corrections (DOC).

When a patient is in custody, the right to privacy no longer applies. In the medical setting, law enforcement officers are generally obliged to stay in the room with the patient during all discussions and examinations. Communication and visitation with family/next of kin may be restricted by the law enforcement agency or DOC.

Detained: An individual detained by law enforcement is temporarily held but not arrested. Police may temporarily detain a person if they have reasonable suspicion of criminal activity or need to continue an investigation (e.g., questioning or search). Detainees are not allowed to leave law enforcement's oversight but are otherwise entitled to bodily autonomy and privacy.

Law enforcement officers can be asked to wait outside the patient's room to avoid overhearing sensitive medical information or witnessing sensitive exams, but may need to maintain a line of sight to an individual's location. Law enforcement officers should generally honor these requests by medical providers unless additional concerns for public safety or flight risk arise.

Figure 2.
The legal status of an individual informs the appropriate level of engagement from law enforcement officers, and the level of autonomy and privacy retained by the patient.

Social or Consensual Contact: A social or consensual contact describes any law enforcement contact, including victims or witnesses of crimes or accidents, in which there is no reasonable suspicion or probable cause to detain someone for a crime. These patients maintain their legal rights to privacy and autonomy. They can refuse all forms of law enforcement contact, including during the medical evaluation. Medical personnel are permitted to assist individuals in exercising these rights.

Where Can Potential Disagreements Arise?

Use of Restraints

Patients in custody are generally restrained (e.g., handcuffs, leg cuffs, belly/transport chains). Some law enforcement department policies require two-point restraints at all times. According to the United Nations Office on Drugs and Crime, handcuffs and limb restraints should be used only "when there is objective reason to believe the offender may escape or…use violence against the law enforcement official or someone else…[and] the condition of the person should be monitored to ensure that there is no particular risk of injury or death."[6]

The use of restraints presents a spectrum of potential passive harm. In the acute setting, multiple-point restraints (e.g., bilateral wrists, contralateral wrist and ankle, or four-point restraints) may interfere with routine trauma exams or procedures or delay proper positioning in emergent situations (e.g., intubation for respiratory failure, recovery position for seizures, or alleviation of positional asphyxia).[6,7]

When restraint removal is necessary to administer lifesaving care, the gravity of the situation should be clearly articulated to the bedside law enforcement officer. Plain language such as, "This is life threatening," may be helpful.

Restraints also should be repositioned once such a request is issued by medical providers, although law enforcement department policies should be maintained as well. An example of this approach would be to use shackles instead of a two-point restraint, which can be repositioned from bilateral wrists to an ipsilateral wrist and ankle to allow the patient to be turned.

Occasionally, patients who are not under arrest, but are in legal custody may arrive shackled. In such cases, as may occur with agitated patients, the medical team should promptly request the removal of law enforcement restraints and consider the use of soft medical restraints or sedatives, which may be considered more appropriate in these circumstances.

Patient Privacy

Respect for patient privacy is a tenet of the Hippocratic Oath: "Whatever I see or hear in the lives of my patients, whether in connection with my professional practice or not, which ought not to be spoken of outside, I will keep secret, as considering all such things to be private."

Patient privacy also is mentioned in a federal rule under the Health Insurance Portability and Accountability Act (HIPAA). The HIPAA Privacy Rule defines patient-protected health information and limits its disclosure. In certain circumstances, covered entities may disclose protected health information to law enforcement.[8] These situations could include:

- As required by law, including court orders, court-ordered warrants, subpoenas, and administrative requests
- Limited demographic information needed to identify or locate a suspect, fugitive, material witness, or missing person
- Protected health information pertaining to a victim or suspected victim of a crime, if the individual consents (excludes mandatory reporting for suspected child abuse)
- To alert law enforcement of a person's death if the healthcare provider suspects death due to criminal activity
- When a healthcare provider suspects that protected health information is evidence of a crime that occurred on their premises
- To inform law enforcement about the commission, nature, location, victims, or perpetrator of the crime in a medical emergency

Finally, patient privacy is legally safeguarded under the Fourth and Fifth Amendments in the US Constitution, which protect citizens from unreasonable search and seizure without a warrant and from self-incrimination, respectively.

The ED presents a unique setting in which patients may expect medical privacy, but the reality

is that, from a legal perspective, such privacy is not required.[4]

Police permitted into the ED or trauma bay may be considered "lawfully present," and as such, anything seen, heard, or obtained from within "plain view" may be submitted as evidence in legal proceedings without being subjected to protections afforded by the Fourth Amendment.[4] Thus, an officer may use patient information, history, or relationship to a crime overheard in the trauma bay as evidence or the basis for further investigation. This also extends to the procurement of patient belongings in "plain view" (e.g., temporarily discarded on the floor) as they are considered abandoned, and therefore their collection by law enforcement is not considered unreasonable search and seizure.

These legal nuances can place surgeons at odds with the fundamental tenet of patient-physician confidentiality. For in-custody patients, this may be unavoidable; the officers must stay with them. However, for patients not in legal custody, providers can help build trust with the patient and decrease the risk of patient self-incrimination by obtaining patient's consent to law enforcement presence or requesting the officer step out of the room during the medical interview and examination.

(Photo Credit: Jamie Tung, MD)

Third-Party Actions

During legal investigations, law enforcement may attempt to solicit evidence from the medical team.

Information freely provided to these officers through a third party, such as a healthcare worker, may be used as evidence regardless of whether a warrant was granted. The American College of Emergency Physicians policy statement, titled "Law Enforcement Information Gathering in the Emergency Department," describes three situations in which physicians may provide clinical information to law enforcement: (1) the patient consents to the release of information; (2) the law mandates physicians report such information; or (3) law enforcement provides a subpoena or court order.[9]

Surgeons may release general patient status (e.g., stable, serious, critical). Regarding requests for further clinical information or the procurement of physical bodily evidence from the patient (e.g., blood draws), the surgeon should first ascertain the patient's legal status. If the patient is not in custody, law enforcement should be advised to obtain a warrant or court order via the usual administrative channels before any release of medical information can occur. Otherwise, any disclosed information can be admissible in court. If there is any ambiguity or conflict during these discussions, surgeons should contact hospital administration and/or legal counsel. Most centers will have an administrator, clinical, or security supervisor on call who can field such policy-related questions.

It is important to note that aspects of these laws may vary by state. Several states exercise implied consent for blood draws when patients are under arrest, intoxicated, or involved in motor vehicle accidents with suspected intoxication. Others mandate reporting of nonaccidental injuries secondary to suspected abuse, arson, or substance abuse during pregnancy.[9] As such, surgeons should familiarize themselves with local and state mandatory reporting and assisting laws.

Outside Communication and Visitation

Generally, there is no legal basis that allows law enforcement to interfere with hospital visitation for patients not in custody or to prevent the surgeon from sharing medical information with a patient's

Table. Case Examples

CASE SCENARIO	LEGAL DISCUSSION POINT
Patient privacy	
A 40-year-old female presents to the trauma bay in extremis after a thoracoabdominal gunshot wound. The details of the incident are unclear at present time. Upon arrival, the patient is hemodynamically unstable and obtunded. The decision is made to proceed emergently to the operating room for hemorrhage control. As the patient is wheeled out of the room, you notice law enforcement obtaining photographs and collecting her belongings as evidence. • **Is this legal?** • **Is there a way healthcare professionals can protect the patient's privacy?**	The emergency department and trauma bay are deemed extensions of the street. Any patient belongings left in these areas could be considered abandoned and legally gathered as evidence. In these circumstances, defining the patient's legal status can help determine the appropriate next steps. If the patient is deemed a social or consensual contact with law enforcement, you can protect the patient's privacy by placing her things in a bag and ensuring the bag of belongings is handed to a hospital security guard. When the security guard has possession of the belongings, they are not deemed abandoned. A warrant is required to search or seize those belongings. If law enforcement officials state the patient is under full custodial arrest or that there is an ongoing investigation, a chain of custody must be maintained for evidence to be admissible in court; hospital security can generally function as part of that chain of custody.
Use of restraints	
A 35-year-old male under the custody of the Department of Corrections (DOC) presents to the trauma bay after being assaulted. He arrives with all four limbs restrained in handcuffs. There is an obvious laceration to the right parietal scalp with active bleeding. The patient is visibly agitated. To properly perform the primary and secondary exam, the cuffs will need to be removed. • **Can the restraints be removed to assess the patient?**	Healthcare professionals should first clarify the patient's legal status. In this scenario, the patient is in DOC's custody. It is important to articulate the potential for life-threatening injuries and collaborate with law enforcement officials on a plan to ensure public and patient safety. For instance, many law enforcement departments require two-point restraints at all times. Prompt repositioning of restraints to ipsilateral wrist and ankle can facilitate turning the patient for an adequate exam.
Next-of-kin notification	
A 65-year-old male arrives in traumatic arrest following a motor vehicle accident involving multiple vehicles and casualties on scene. Despite ongoing resuscitative efforts, the patient is declared dead in the trauma bay. According to law enforcement, the patient is suspected of being intoxicated at the time of the incident, resulting in an active investigation. • **During an active investigation, is medical staff allowed to notify family or next of kin that the patient has died?**	Generally, medical providers may notify family members or next of kin regarding a patient's death. In some circumstances, law enforcement officials may request a reasonable amount of time to determine if such notifications are likely to impact the investigation (e.g., next of kin may be a suspect in their death). This is unlikely to be a concern in the case of a motor vehicle crash.

Surgeons must take an active role in protecting the patient's rights to privacy and autonomy within the confines of their established legal status.

next of kin. Law enforcement officers may, however, attempt to limit communication and visitation with the patient during an active investigation in the following scenarios:

1. They cannot yet confirm if visitors are potential suspects or involved in the criminal act.
2. Evidence must be collected from the patient before being contaminated by others.
3. There is still a threat to be eliminated.

If such restrictions are requested by law enforcement, they should be time limited, allowing a reasonable amount of time to complete the tasks described in this article. Any restrictions placed on the clinicians may be in accordance with specific state or local guidance, or explicit policies or agreements between a hospital and the local law enforcement or corrections agency.

It is important for surgeons to understand the precise language and reach of those policies and to involve both hospital and law enforcement agency supervisors, if needed, to ensure they are applied correctly. In instances where family visitation of a deceased patient is prohibited by an officer, surgeons should adhere to these requests as the patient's body is considered evidence under the law.[1]

Law enforcement officers are often present in the ED and trauma bay due to their role in investigating crimes and protecting public safety, yet their presence has the potential to violate patient rights and privacy. The level of access law enforcement has to patients should be informed by the patient's legal status (e.g., in-custody/under arrest, detained, or social contact).

Surgeons must take an active role in protecting the patient's rights to privacy and autonomy within the confines of their established legal status. Specifically, patients who are not in custody can refuse law enforcement presence during their medical evaluations, and staff may help them exercise this right. Surgeons also should be familiar with state and local reporting regulations to remain in compliance and be prepared to escalate cases of ambiguity around the release of medical information and use of restraints to ensure policies are followed.

Disclaimer

This article has been prepared by the authors for informational purposes only and does not constitute legal advice. The American College of Surgeons expressly disclaims all liability with respect to actions taken or not taken based on the contents of this article.

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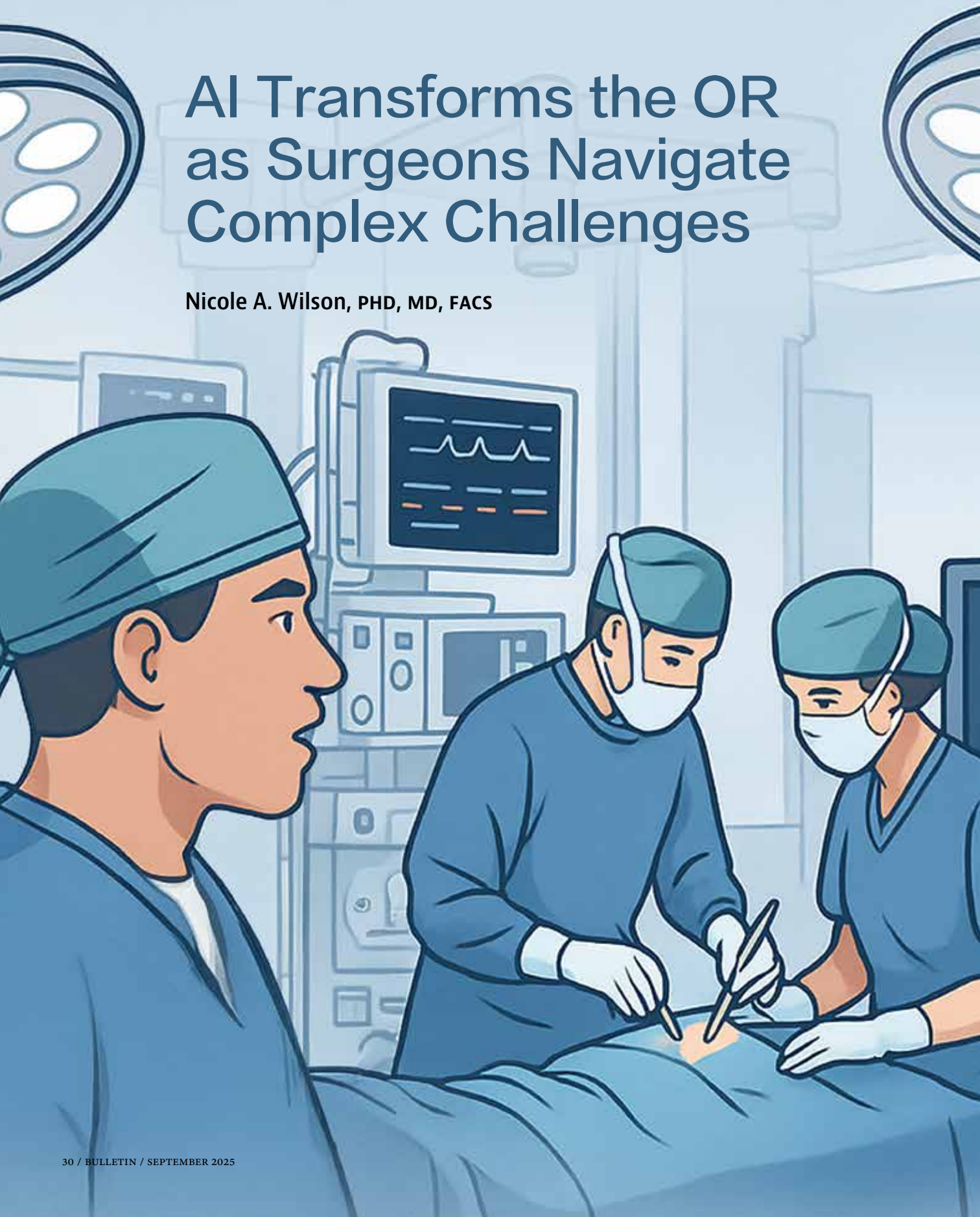
AI Transforms the OR as Surgeons Navigate Complex Challenges

Nicole A. Wilson, PHD, MD, FACS



The landscape of modern medicine is continuously shaped by technological advancements, and artificial intelligence (AI) is emerging as a transformative force in surgical practice.

BUILDING UPON THE INCREASINGLY high-tech nature of healthcare, AI promises to revolutionize how surgeons operate, document, and conduct research, ultimately enhancing patient care and streamlining professional workflows. This article provides an overview of current and emerging use cases for AI in surgery, offers practical examples of implemented tools, addresses crucial ethical situations that surgeons will need to navigate, and focuses on three primary categories of AI applications (i.e., ambient AI, prediction tools, and writing and research solutions).

Ambient AI: Automating the Clinical Encounter

One of the most rapidly evolving and widely adopted applications of AI in healthcare is ambient AI. These tools are designed to operate seamlessly in the background of clinical interactions, serving as virtual assistants or digital scribes. Their primary function is to enhance the efficiency and quality of patient encounters by automating many routine administrative tasks.

Ambient AI leverages advanced speech recognition capabilities to listen to physician-patient conversations and integrate directly with electronic health records (EHRs) to facilitate automated clinical documentation.

For instance, a system like Dragon Ambient eXperience (DAX) CoPilot combines ambient listening technology, Dragon Medical One speech recognition, and generative AI. Tools like DAX CoPilot (and similar solutions in the ambient AI healthcare space) can transcribe and organize an entire patient encounter, creating a templated note within the EHR by intelligently populating relevant sections with details from the conversation.

This capability represents a significant shift from traditional manual documentation, allowing clinicians to focus more intently on the patient rather than on concurrent note-taking. The increased attentiveness to patient needs is a direct result of AI managing routine tasks, lightening the cognitive load for the surgeon.

Studies have shown that burdensome documentation is a major cause of physician burnout.[1] Ambient AI offers a powerful solution to the long hours spent writing detailed notes, entering data into EHRs, and completing coding for insurance—all tasks that divert attention from direct patient care and other professional responsibilities. By automating the documentation process, ambient AI can significantly reduce this administrative burden and reduce a primary driver of burnout.

Finally, AI tools have the potential for producing higher-quality documentation.[2] Maintaining accurate and comprehensive patient records is a fundamental, yet time-consuming task in healthcare. Ambient AI tools can automate the creation of detailed, accurate clinical notes by passively listening to conversations or analyzing the clinician's actions in real time. This can lead to more thorough and consistent records, which are vital for patient safety and continuity of care.

Several tools are available on the market for ambient AI. These include the previously mentioned DAX CoPilot, Augmedix, and commercial solutions like the Limitless wearable pendant. Additionally, some institutions, such as The Permanente Medical Group, have developed home-grown solutions.

A critical consideration when evaluating these tools are data privacy and compliance with elevated privacy standards for health-related data, such as those set forth in the Health Insurance Portability and Accountability Act (HIPAA). Commercial options that do not have built-in EHR integration (i.e., Limitless Pendant) are generally not advisable for use in patient encounters, because most of these systems upload and store conversations in cloud-based platforms, leading to loss of control of the data and potential public disclosure of sensitive patient information and breaches of confidentiality. Surgeons must be acutely aware of these data security implications to protect patient privacy and adhere to professional standards.

Prediction Tools: Foresight for Enhanced Surgical Practice

Building upon the foundational applications of ambient AI, prediction tools represent another rapidly evolving domain for AI in surgery. These tools currently are an immensely active area of research and are designed to leverage vast datasets to forecast various outcomes, optimize resource allocation, and provide crucial decision support for surgeons and their teams.

Prediction tools can be broadly categorized into three main areas: risk prediction, resource utilization, and clinical decision support. While many of these tools are still experimental, those that have been implemented clinically have been met with mixed success but have shown immense promise.

Risk Prediction

One of the most intuitive applications of AI in surgery is the prediction of surgical risk. By analyzing comprehensive patient data, AI models can identify individuals at higher risk for complications, allowing for more informed preoperative planning and patient counseling. A notable example is the POTTER (Predictive Optimal Trees in Emergency Surgery Risk) calculator,[3] which uses a machine learning backbone to predict the risk associated with emergency general surgery.

By employing data from the ACS National Surgical Quality Improvement Program (NSQIP®) database as training data, the POTTER algorithm outperformed the American Society of Anesthesiologists classification and the ACS NSQIP calculator for predicting both morbidity and mortality.[3] Originally, these findings were published in 2018, yet despite these promising performance statistics, POTTER and other similar tools have not yet been widely adopted across clinical practice, highlighting a recurring challenge in AI implementation.

Resource Use

AI-driven prediction tools also are proving invaluable in optimizing resource efficiency and allocation within surgical departments. These applications often operate somewhat "behind the curtain," streamlining operational aspects without direct patient interaction, which may contribute to their greater success in implementation compared to risk prediction and clinical decision support tools.

For instance, a research group in Italy has published extensively on using AI models to improve OR management.[4] Similarly, a group in Israel has developed a model specifically designed to predict the duration of surgical cases, facilitating more optimal OR scheduling.[5] These types of AI-based resource management models are increasingly being used at institutions worldwide, indicating a growing recognition of their practical benefits in enhancing efficiency and reducing operational bottlenecks.

Clinical Decision Support

The concept of clinical decision support tools has been present in healthcare for some time, preceding the development of AI, with earlier implementations often taking the form of pop-up alerts within EHRs. Many surgeons may recall experiences with these early clinical decision support tools, such as alerts suggesting evaluation for sepsis. However, these initial versions often faced significant clinical push-back. Reasons for this resistance included predictions that were not sufficiently accurate, a lack of contextual understanding in the algorithms, and the creation of additional clicks and distractions within the EHR, rather than streamlining workflows.[6]

However, newer generations of clinical decision support tools are being developed to overcome these limitations and often overlap with the risk prediction and resource utilization categories. For example, a research group in New York State has developed an algorithm capable of predicting

The illustrations in this article were generated using OpenAI's Sora platform with prompt-based input, subsequent modifications, and minor edits.

the trauma activation level for pediatric trauma patients upon their arrival at the hospital, based on prehospital information.[7] This algorithm serves as a direct clinical decision support tool for nurses who perform this critical triage task at many institutions.

Challenges

Despite these advancements and the clear potential of such tools, their widespread implementation remains a significant challenge. A primary hurdle is the absence of standardized pathways for integrating these new technologies into most healthcare institutions.

Unanswered questions persist regarding who is responsible for building or integrating these new tools into the EHR or a dedicated application; who is accountable for the ongoing maintenance and performance monitoring of the background AI model; and how institutions can effectively assess for potential biases within these algorithms,[8] ensuring equitable and safe care for all patient populations. Addressing these fundamental questions will be critical to unlocking the full potential of prediction tools and embedding them seamlessly into surgical practice.

Writing and Research Tools

The landscape of scholarly work is increasingly benefiting from AI applications, with a burgeoning array of solutions designed to streamline workflows in research and writing, ranging from summarizing articles to assisting with complex systematic reviews and meta-analyses.

Article Reviews and Summaries

For tasks such as article reviews and summarization, popular AI tools like Notebook LM and ChatGPT are readily available.

These platforms allow users to upload a document and generate a summary or a critical review of its content. While seemingly convenient, their use for scientific review comes with significant caveats, particularly concerning privacy and security.

A major dilemma can surface due to the fact that most journals currently do not allow the use of AI tools when performing scientific reviews of articles.[9] This restriction stems from at least one fundamental concern: when an article is uploaded to an AI service like OpenAI (which powers ChatGPT), the user effectively loses control of that information, which can lead to potential public disclosure of unpublished, sensitive data.

The risk is that an author's manuscript data, intended to remain confidential during the peer-review process, could inadvertently be used to train the AI model in the future. Such scenarios have already sparked numerous lawsuits concerning the unauthorized use of data for training large language models, a reality that underscores why surgeons should avoid such breaches of confidentiality when using these tools.

Systematic Reviews

The tools available for performing complex research tasks like systematic reviews are becoming increasingly sophisticated. Specific examples include SWIFT-Review, Rayyan, and ResearchRabbit with Rayyan being one of the most well-developed of these tools.

An illustrative example of the potential of systemic review solutions comes from Abigail Loszko, MD,

who recently conducted simultaneous systematic reviews, one using traditional methods and another using only AI tools.[10] While the AI method was not quite as thorough or well-developed as the traditional approach conducted by a research librarian, the study demonstrated significant time savings using AI tools. Furthermore, the AI solutions identified a reasonable number of additional papers that were not found using traditional search methods, highlighting the potential of AI tools to augment rather than simply replace established research practices.

Meta-Analyses

Moving to even more complex research tasks, AI tools also are emerging for performing meta-analyses, such as Elicit, Grapha, and DataSquirrel. Meta-analyses, however, are significantly "trickier" as they require AI tools to extract, pool, and analyze data from multiple sources, introducing a higher degree of complexity and potential for error. As a result, most of these tools are not yet ready for widespread use.

Given the considerable amount of manual data oversight that still needs to be performed to produce trustworthy results, it is currently safer to conduct these analyses manually. Nevertheless, the rapid pace of development suggests it will not be long before these tools are reliably incorporated into everyday surgical research workflows.

The applications of AI in surgery, from ambient AI to prediction tools and sophisticated research aids, are just a few examples of the transformative potential of this technology. Despite certain ethical considerations and current stipulations from journals that may require disclosure of AI use or prohibit it for scientific reviews, these tools are rapidly evolving. AI will soon become as ubiquitous in our professional lives as are the spelling and grammar checkers we rely on daily, with most common word processing tools already incorporating predictive text features built on AI frameworks.

AI tools represent the future of surgical practice and research. Becoming familiar with them undoubtedly will make certain aspects of your professional life easier. It is paramount for surgeons to remain acutely aware of the pitfalls, potential mistakes, and critical ethical considerations that accompany their use.

Thoughtful adoption, coupled with an understanding of their limitations and responsibilities, will be key to harnessing AI's full potential in enhancing patient care and streamlining surgical workflows.

Disclaimer

The mention of specific company names, products, or technologies in this article is for informational purposes only and does not constitute endorsement by the ACS.

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Dr. Elliot Servais

Emergency Conversion Preparedness Is Paramount in Robotic Thoracic Surgery

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Ammara A. Watkins, MD, MPH, FACS
Elliot Servais, MD, FACS

Robotic-assisted surgery has ushered in a new era in thoracic surgery, offering enhanced precision, improved ergonomics, better visualization, and digital tools aimed at facilitating surgeon training and patient outcomes.

MINIMALLY INVASIVE thoracic surgery carries the potential for emergency conversion to open thoracotomy. Despite its advantages, emergency conversion during robotic-assisted thoracic surgery (RATS) has the unique challenge of the surgeon being positioned away from the patient's bedside.

While infrequent, these conversions are high-stakes events that demand meticulous preparation and execution. Our group at Lahey Hospital & Medical Center in Burlington, Massachusetts, has developed a reliable and effective technique that was featured in an article published earlier this year in *Operative Techniques in Thoracic and Cardiovascular Surgery*.[1]

In this viewpoint article, we highlight key considerations every surgeon should be aware of based on insights from our experience regarding emergency conversions during RATS.

Understanding Emergency Conversions

Emergency conversion refers to an unplanned shift from a minimally invasive to an open surgical approach in response to intraoperative complications that cannot be safely managed thoracoscopically. Unlike elective or strategic conversions, which are anticipated and made preemptively due to anatomical or oncologic considerations, emergency conversions are reactive, often triggered by major bleeding, complex anatomy, or loss of visualization. Although the overall conversion rate is lower with RATS compared to video-assisted thoracoscopic surgery (VATS), emergency conversions present greater technical and logistic challenges in RATS.[2]

Prevalence and Predictors

A large study on conversions from The Society of Thoracic Surgeons showed that while emergency conversions during minimally invasive lobectomy are relatively infrequent, they are clinically significant.[2] The overall conversion rate was 11.0% for VATS and 6.0% for RATS, with emergency events accounting for the majority of conversions.

Several patient and surgical factors were identified as predictors of emergency conversion. The most consistent risk factors included reduced forced expiratory volume in 1 second, left-sided resections, and advanced clinical stage, particularly stage III disease. In VATS, additional predictors included elevated body mass index, male sex, hypertension, and prior chemotherapy. Conversely, emergency conversions in RATS were more frequently triggered by vascular injuries and were associated with diabetes and lower institutional case volume.[2]

Preoperative Planning and Intraoperative Decision-Making

Operating Room and Surgeon Considerations

Effective management of emergency conversion begins well before the first incision and continues through every phase of the operation. Thorough preparation and clear communication are essential to ensuring patient safety and optimizing outcomes.[3,4]

Preparation starts with a comprehensive team briefing, during which anticipated risks are discussed, and a detailed conversion plan is reviewed. This approach includes clearly marking the planned thoracotomy incision site to guide a rapid transition if needed. Teams also should rehearse the conversion protocol through simulation training, particularly in institutions where bedside assistant experience may vary.

Optimizing patient setup is equally critical. The robotic boom should be fully extended during docking to maximize workspace and facilitate swift undocking if conversion is required. Additionally, essential equipment for conversion to open should be readily available.

The decision to convert should be proactive, not reactive. Delayed conversion can lead to increased blood loss, longer operative times, and higher complication rates.[1-5] Predefined intraoperative protocols and clear team communication enable timely, coordinated responses. Incorporating a conversion plan into preoperative briefings, especially for high-risk cases, is essential for maintaining control during unexpected events.

Patient Considerations

Emergency conversion should be part of the preoperative discussion with patients. Understanding that conversions may occur, and that they are sometimes the safest course of action, can help preserve trust

and mitigate dissatisfaction in the event of unexpected changes.

Technical Considerations

A smooth and controlled transition from robotic to open surgery hinges on timely decision-making and technical precision. Once the need for conversion is recognized, the surgeon should apply pressure to the bleeding site using robotic instruments, while clearly announcing the conversion to the team.

As maintaining visualization is critical, the robotic camera should remain in place until thoracotomy access is established. A limited thoracotomy is performed at the pre-marked site, allowing the bedside assistant to insert a sponge stick for direct pressure at the hilum (see Figure, this page). Tamponade is then transitioned from robotic control to manual control by the assistant, after which the surgeon scrubs in and joins at the bedside. The robot is undocked with trocars left in place, and the thoracotomy is extended to achieve definitive exposure and bleeding control.

In settings where a qualified assistant is not available, the console surgeon may maintain pressure with the posterior robotic arm before leaving the console to perform the thoracotomy. This sequence ensures continuous control of the operative field and minimizes disruption during a critical intraoperative event (see Table, page 39). Two common challenges can complicate this process: loss of visualization and workspace limitations. Removing the robotic camera too early can result in dangerous lapses in visual control, making a backup thoracoscopic scope essential. Additionally, inadequate undocking or poor positioning of the robotic boom can obstruct access during conversion. Anticipation and preparation are key in these scenarios.

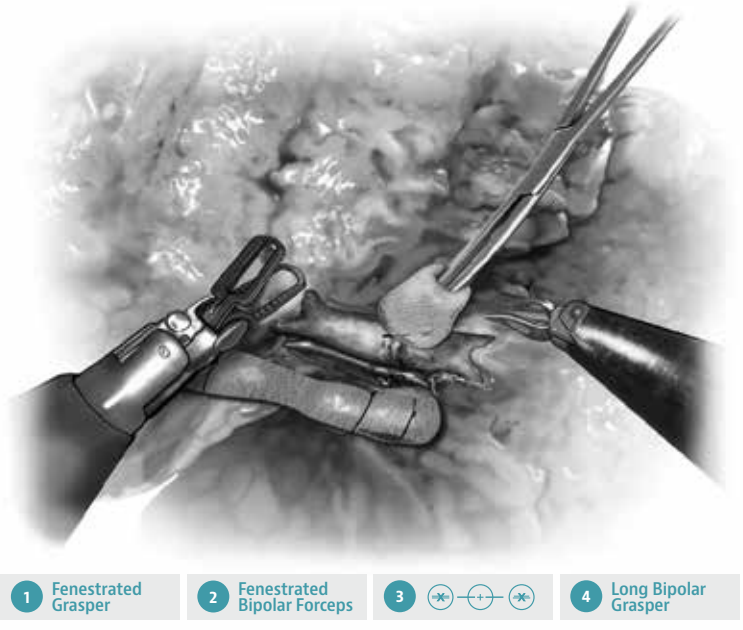

Figure.
This image shows how to control bleeding by transitioning pressure from the robotic arm to a bedside assistant's sponge stick.

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Outcomes and Impact

Emergency conversion during RATS is associated with increased operative time, greater blood loss, higher transfusion requirements, and elevated rates of postoperative complications, such as arrhythmias and prolonged chest tube duration.[5] These patients also tend to experience longer hospital stays.

However, when performed promptly and effectively, emergency conversion does not lead to increased mortality and should not be viewed as a failure.[5] Rather, it is a proactive and lifesaving intervention that mitigates the risk of more severe adverse events. Importantly, while short-term morbidity is higher, long-term survival among patients who undergo emergency conversion is comparable to those whose surgeries are completed robotically, underscoring the importance of timely surgical judgment and execution.

Emergency conversion during robotic thoracic surgery, while uncommon, is a pivotal competency for all surgeons. A structured, team-based response, grounded in simulation and preparation, can mitigate morbidity. Recognizing risk factors and preparation through simulation ensures that these high-risk events are managed with confidence and competence. B

Disclaimer

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When performed promptly and effectively, emergency conversion does not lead to increased mortality and should not be viewed as a failure.

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Table.

Step-by-Step Robotic Conversion to Open

1	Pre-incision marking of planned thoracotomy and limited thoracotomy incision.
2	Recognition of intraoperative bleeding and prompt control of bleeding with sponge utilizing a robotic instrument.
3	Communicate need for conversion to entire OR team and mobilize resources and additional personnel (i.e., second thoracic surgeon).
4	Bedside team may insert nonrobotic handheld thoracoscopic camera through an assistant port for independent visualization of the robotic instruments.
5	Bedside assistant makes a limited thoracotomy directly over the hilum and inserts a sponge stick into the chest. Scrub technician or second bedside assistant holds manual camera maintaining visualization.
6	Transfer bleeding control from robotic instruments to the sponge stick at the bedside and ensure no robotic instruments are holding tissue or sponges.
7	Surgeon scrubs in after confirming bedside assistant has complete control of bleeding.
8	Remove robotic instruments from patient and undock the robotic arms.
9	Once all instruments are removed and arms undocked, circulator backs the robot away from the patient's bedside.
10	Extend thoracotomy as needed, control bleeding, and complete operation if appropriate.

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Dr. Michael Alperovich

Academic Surgeons Confront Stagnant Pay, Persistent Gaps in Compensation

Paula Flores Pérez
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In addition to saving lives and improving patients' quality of life, academic surgeons are responsible for training future surgeons and advancing the field through research and innovation.

DESPITE THE CRITICAL ROLE they play in our healthcare system, academic surgeons tend to earn significantly less than their private practice counterparts.[1,2] This difference in earning potential often factors heavily into graduating residents' decisions about whether to pursue careers in academia or private practice.[3]

As the US faces a projected shortage of 10,000 to 19,000 surgeons by 2036, building and sustaining an academic surgical workforce that reflects and meets the needs of an aging, increasingly multicultural population will require not only an investment in training, but also fair and competitive compensation.[4,5]

Even with this urgency, comprehensive analyses of academic surgeon compensation trends remain limited. To address this gap, the authors and collaborators at Yale University School of Medicine in New Haven, Connecticut, analyzed data from the Association of American Medical Colleges (AAMC) Faculty Salary Report from 2017 to 2023, examining trends across rank, gender, race/ethnicity, and surgical subspecialty. This article summarizes findings from the study, "Academic Surgeon Financial Compensation in the US: Trends from 2017 to 2023," published in the June 2025 issue of the *Journal of the American College of Surgeons.*

Changing Economic Landscape

Our study found that from 2017 to 2023, academic surgeon salaries increased by a compounded annual rate of 2.9%. Over the same period, the US inflation rate averaged 3.69%, suggesting that compensation for academic surgeons has not kept pace with the cost of living.[6]

In parallel, prior research has shown that medical school debt has increased by 268% during the past 40 years, delaying financial stability for surgeons, who often complete longer training compared to physicians in other specialties.[7] Broader pressures compound these challenges. Between 2013 and 2021, Medicare reimbursement for surgical procedures declined by 9.8%, while compensation for outpatient visits increased by 1.3%, further straining financial viability.[8]

Together, these findings highlight the need to reevaluate compensation models to reflect the full scope of academic surgeons' responsibilities, not only as clinicians, but also as educators, researchers, and institutional leaders.

Disparities across Demographic Groups

Our study also highlights disparities in compensation across gender and race/ethnicity. After adjusting for rank, women earned 77 cents on the dollar compared to men in 2023. This gap widened in higher-paying surgical subspecialties. For instance, in orthopaedic surgery, women earned only 76 cents on the dollar, while in transplant surgery, the lowest-paying specialty, women earned 96 cents on the dollar compared to men. Race- and ethnicity-based disparities were similarly evident. After controlling for academic rank, Black faculty earned 91 cents, Hispanic faculty 93 cents, and Asian faculty 98 cents on the dollar compared to White peers. Among all groups, Asian women had the lowest average compensation, earning just 73 cents on the dollar compared to White men.

As the US population becomes increasingly multicultural, so must the healthcare workforce. Studies show that physicians from underrepresented backgrounds are more likely to care for underserved populations, return to their communities, and improve outcomes.[9-11]

While medical student enrollment has gradually begun to reflect the racial and ethnic makeup of the general US population, there remain leaky pipelines into competitive surgical subspecialties, and pay disparities may remain barriers to long-term retention and advancement.[12-15] These inequities raise urgent questions about how compensation is structured in academic medicine and whether we are doing enough to retain a skilled, motivated, and diverse

academic surgical workforce. Understanding and addressing the root causes of these gaps is essential for ensuring a fair healthcare system that reflects and serves all patients.

Limitations and Future Directions

The limitations of this study include a lack of granular data on individual productivity and institutional-level compensation variation, as well as underrepresentation of certain racial/ethnic groups in the AAMC dataset. Nevertheless, the trends are consistent with findings in other specialties and merit serious attention.

The surgical community has an opportunity and responsibility to lead in addressing these disparities. Academic institutions must take proactive steps: conduct regular pay equity audits, increase salary transparency, and reexamine promotion and compensation policies to account for the full scope of contributions academic surgeons make. Without these efforts, we risk losing the surgeons who are best positioned to drive innovation and improve care for future generations.

Disclaimer

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If You're Not Falling, You're Not Learning: Margo Shoup's Story

Tyler G. Hughes, MD, FACS

NOTE FROM DR. HUGHES: *Talking about the "average" surgeon is like referring to an "average" astronaut. Every story is unique; there is no average. In this article series, I will feature surgeons of different specialties, backgrounds, ages, and practice types. Some of the surgeons you may know well, while others have worked in near obscurity. As surgeons, they serve all with skill and trust. If you are an ACS member and would like to meet with me to share your experiences, contact bulletin@facs.org.*

TENLEY ALBRIGHT, MD, was the first US woman to win an Olympic gold medal in figure skating in 1956. After her skating career, this spectacular individual went on to study medicine at Harvard University in Cambridge, Massachusetts, specializing in orthopaedic surgery before joining the faculty there. She never lost her love of skating and often went to the local rink in Boston with her children. During those visits, she met a little girl who was approximately 11 years of age. Dr. Albright's kind attitude and marked intellectual achievements would inspire the girl in ways beyond athletics.

That little girl got up at 4:30 am every morning to practice her figures and skating. She learned focus, determination, and persistence. She did this for years. She also would eventually become a surgeon, and Dr. Albright was one of her inspirations both in skating and medicine.

In the subsequent years, this petite and fiercely competitive young woman would grow into a world class skater and, like her role model, become a famous surgeon who has changed the lives of patients, fellow surgeons, and health systems.

Margo Shoup, MD, MBA, FACS, is another example of an ACS Fellow quietly making the world a better place.

Dr. Shoup always is driven to "get better" in whatever she pursues. She left her home in Indianapolis at age 16 to train at the Olympic Skating Center in Colorado Springs. After a successful skating career, Dr. Shoup, like Dr. Albright, felt there were new goals to conquer, and so she decided to go to medical school.

Her first clinical rotation in medical school was surgery, and during that experience, she scrubbed in as an observer on a heart transplant. There is a moment in such transplants when the patient is literally alive without a beating heart. Seeing that empty chest cavity in a living patient was a moment the young medical student would never forget, resulting in her pursuit of a surgical career. Dr. Shoup said that even now, decades later, she tingles when thinking of that moment.

She had planned on becoming an orthopaedic surgeon like her hero Dr. Albright, but it was surgical oncology where she ultimately found her true passion. Orthopaedics now seemed too confined without the application of physiology and basic science that she loved. General surgery satisfied her but was too episodic; oncology allowed her to fuse her love of challenging surgery, physiology, and long-term relationships with patients.

Dr. Shoup completed her fellowship at Memorial Sloan Kettering Cancer Center in New York City, which led her to an academic post in Chicago. She eventually was recruited to a community practice in Chicago where she dedicated herself to providing seamless oncologic care and led a very successful program. She took her approach to oncologic care to Connecticut and Florida and now lives and works near Tacoma, Washington, running a cancer program that covers the state of Washington.

During these years of community practice, Dr. Shoup was president of the Chicago Surgical Society, Midwest Surgical Association, Central Surgical Association, and Western Surgical Association; she also was vice president of the Society of Surgical Oncology and a director of the American Board of Surgery (ABS).

I've known Dr. Shoup for several years stemming from her time on the ABS. Two moments that stand out for me are her bungee jump from a bridge in New Zealand and her jumping off a 30-foot rock cliff into the Caribbean.

The woman is fearless.

However, one should remember she routinely was flying through the air over rock-hard ice from the time she was 8 or 9 years old until her early 20s. Like every skater, no matter how accomplished they become, she knew the pain of falling on the ice. Similarly, in her surgical practice, each leap is a calculated risk balancing risk versus reward based on knowledge, training, and practice. So, Margo Shoup knew the joy of flying and the pain of crashing, yet she persisted on the ice and in her surgical training. She will tell you, "If you are not falling, you're not learning."

Opposite:
Dr. Margo Shoup

Above:
Dr. Margo Shoup bungee jumps in New Zealand.

Margo Shoup keeps flying while uplifting all those she serves with skill and trust.

A young Margo Shoup showcases her grace and determination during her competitive figure skating years—qualities she later brought to the surgical field.

Over her career of some 30 years, Dr. Shoup moved gradually from the operating room to the C-suite because she wanted to bring physician input to health systems management and, as she would say, "make being a surgeon fun again." Her goal was to combine superb personal care to patients while at the same time making that care a joyful and rewarding experience for the healthcare team at all levels.

Dr. Shoup's life has not been without its searing moments of pain. She herself is a cancer survivor, and her daughter, Erica, was diagnosed with leukemia at 18 years old, spending 4 years in intense treatment and living with the ongoing angst of whether she would survive.

Erica did survive, and the experience reset Margo's outlook. She said that before that time she ascribed to the generally accepted premise that it was important to go to the right schools, find the best job, work hard, and then happiness would follow. Now, she says that's backward. Doing what you love because you love it will lead you to all those right places, people, schools, and opportunities that result in meaning, purpose, and fulfillment.

In the aftermath of the cancer battles, the family has renewed energy to enjoy each moment and experience. They fly and sometimes fall, realizing that it is all part of a full life.

Dr. Shoup still gets up every day at 4:30 am and goes to work preparing to soar but knowing that falls are part of the work that makes her a better surgeon and person. She often still thinks of Dr. Albright, who is now 89 years old.

Margo Shoup keeps flying while uplifting all those she serves with skill and trust.

Read "The Nearly Headless Patient," another installment in Dr. Hughes's series, "A Surgeon's Tale," published in the April 2025 issue of the ACS *Bulletin*.

Disclaimer
The thoughts and opinions expressed in this article are solely those of the author and do not necessarily reflect those of the ACS.

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The Joint Commission Enters New Era of Accreditation

Lenworth Jacobs Jr., MD, MPH, FACS

IN AN EFFORT TO MODERNIZE healthcare accreditation, The Joint Commission recently introduced Accreditation 360: The New Standard—a new approach designed to elevate clinical outcomes for patients and reduce administrative burden for healthcare providers.

For surgeons, this process represents an opportunity to lead patient-centered innovation and healthcare quality and safety. Notably, this accreditation process prioritizes patients and their families and caregivers.

Why Accreditation 360 Matters to Surgeons

Surgeons operate at the intersection of high acuity, rapid decision-making, and measurable outcomes. They balance all this with the patient squarely at the center of every decision. Accreditation 360 recognizes this by shifting the focus from process-heavy compliance to outcome-based performance, enabling surgical teams to demonstrate excellence in patient care through data that reflect real-world impact.

The approach also introduces next-generation certifications—developed in partnership with the National Quality Forum—that prioritize outcome measures in four high-volume, high-impact areas: Hip and Knee Procedural Care, Spine Procedural Care, Cardiovascular Procedural Care, and Maternity Care. These certifications, all of which align with the work of surgeons, are designed with best data and guidance input from individuals and organizations that are experts in the field—clinicians, health systems, payers, and patients—ensuring they reflect the priorities of those delivering and receiving care.

Less Burden, More Relevance

One essential aspect of Accreditation 360 is that the program simplifies the accreditation process and reduces the associated burden on the healthcare worker community. The Joint Commission has eliminated more than 700 outdated or redundant requirements for hospitals and critical access hospitals, building on the 400 requirements removed in 2023.

The updated hospital accreditation manual now distinguishes standards that are aligned with the Centers for Medicare & Medicaid Services Conditions of Participation from The Joint Commission's National Performance Goals—a new framework that consolidates safety priorities into 14 streamlined, evidence-based goals. For surgeons, this change means more time focused on delivering safe, effective, and compassionate care to patients and less time navigating redundant documentation.

The Joint Commission also is making these updated standards more accessible. In a move toward greater transparency, The Joint Commission standards are now available online and searchable for the public.

Continuous Engagement and Real-Time Support

Today, postoperative patients typically require a short stay or no stay in the hospital following a surgical procedure. Approximately 50 million surgeries are performed annually in the US, and 75% to 80% are ambulatory surgeries. Patients undergoing major surgical procedures, such as total hip or knee replacement as well as cholecystectomies and appendectomies, are frequently in the hospital overnight or sent home on the same day.

This shift means that patients' loved ones are managing their postoperative care at home when they have little or no medical education or information. However, the public and payers expect that patient outcomes would be the same as when they were managed 24/7 in the hospital by professional physicians, nurses, therapists, nutritionists, and rehabilitation specialists.

The new Continuous Engagement option for Accreditation 360 offers ongoing support and perpetual survey readiness, replacing episodic inspections with a more collaborative, real-time approach. The focus is not on "ramping up" for a Joint Commission survey, but being perpetually ready to meet every patient's healthcare needs by providing consistently high-quality, safe, and compassionate care.

It moves the survey process to one of collegial partnerships to improve performance. This approach is especially relevant for surgical departments, where continuous quality improvement and rapid-cycle feedback are essential to maintaining excellence and elevating patient care. It will generate support and guidance from The Joint Commission, as needed or desired.

Data-Driven Insights and Shared Learning

The Accreditation 360 process is underpinned by advanced data and analytics and benchmarking tools that allow healthcare organizations to compare performance, identify gaps, and adopt high-performing practices from peers across the country. The new SAFEST (Survey Analysis For Evaluating STrengths) program will evolve into a national database of leading practices, enabling healthcare organizations to learn from high-performing institutions and contribute their own innovations.

The Joint Commission surveyors will be looking for what healthcare organizations are doing well (not just where they are struggling) and sharing those leading practices. When data-based on "trusted" information is shared, patients and their caregivers benefit.

A Message to the Surgical Community

As Jonathan B. Perlin, MD, PhD, MSHA, MACP, president and CEO of The Joint Commission, stated, "Reducing burden helps busy clinicians and healthcare organizations focus on what matters most: delivering the safest, highest-quality, and most compassionate healthcare possible."

This is a message that resonates deeply with the surgical community. Surgeons are uniquely positioned to lead the charge in outcome-driven, patient-centered care. Accreditation 360 empowers them to do just that.

Looking Ahead

The Joint Commission is actively engaging with healthcare leaders, including the ACS, to ensure Accreditation 360 reflects the needs and insights of the surgical profession. Future issues of this column will provide updates on the innovations from Accreditation 360.

For more information, visit: www.jointcommission.org/what-we-offer/accreditation/accreditation-360.

Disclaimer

The thoughts and opinions expressed in this column are solely those of Dr. Jacobs and do not necessarily reflect those of The Joint Commission or the ACS.

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Michigan Hospital Improves Time to Antibiotics for Open Fractures

Samantha Kipley, RN, BSN
Karen Pollitt, CPHQ

HENRY FORD HOSPITAL (HFH)—located in Detroit, Michigan—is a nonprofit, urban, tertiary quaternary care hospital that is designated as a Level I trauma center with helicopter service.

With 877 licensed beds, HFH has 646 inpatient beds, 39 Level III neonatal ICU beds, 54 observation beds, and 165 adult ICU beds—the largest licensed bed facility in Michigan. HFH has participated in the ACS Trauma Quality Improvement Program (TQIP) for more than 12 years and was successfully reverified as a Level I trauma center in 2023.

Identifying the Local Problem

During its trauma reverification process, an opportunity for improvement was identified related to persistently prolonged antibiotic administration time for open fractures. Delayed antibiotic administration increases risk of infection, which can prolong hospital stays, complicate recoveries, and worsen patient outcomes. The problem affects trauma patients with open fractures, identified during both TQIP data review and the March 2023 Level I reverification survey.

While the TQIP metric specifically tracks blunt open tibia fractures, HFH also participates in the Michigan Trauma Quality Improvement Program (MTQIP), which monitors a broader cohort: patients with acute open femur or tibia fractures, as defined by the Abbreviated Injury Scale, and not limited to blunt mechanisms. MTQIP is a collaborative funded by Blue Cross Blue Shield and has approximately 30 participating hospitals within the state. The benchmarks are tracked and relayed to the team at HFH by Brooke Jamison, BSN, RN, MTQIP RN coordinator. Jamison has been in this role for 4 years.

The delayed antibiotic administration also was noted during a previous review but had not yet been addressed. Sarah Capizzo, BSN, RN, who has worked at HFH for almost 6 years and has been the performance improvement coordinator for the past year, noted when the delay was first identified, it was handled in a track-and-trend method.

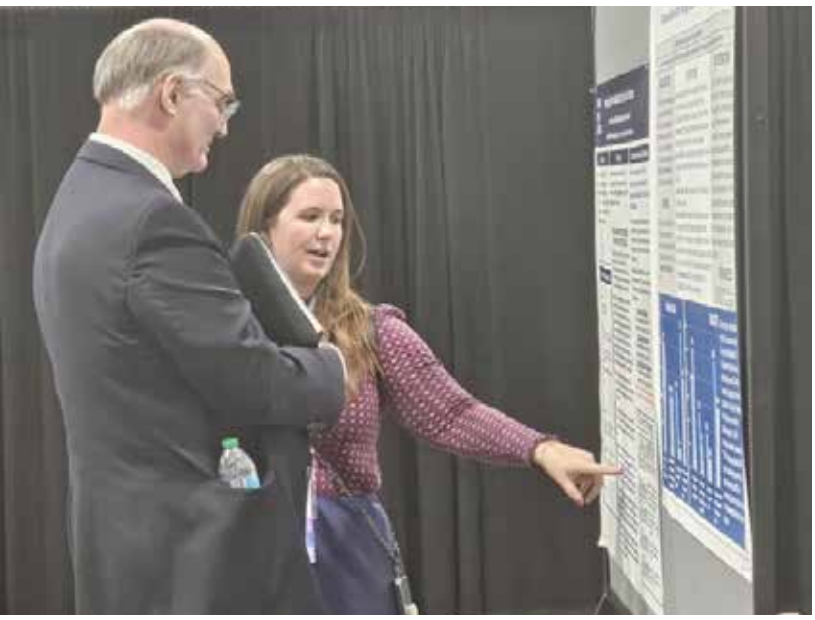
"This (method) doesn't work. We need specific interventions," she said.

Capizzo explained her role as someone who "oversees the data and puts all the pieces together." Both Capizzo and Jamison agreed that it is an important position, one that became a standard of care in the TQIP guidelines in 2022.

"Having this guidance in the standards helps to push the quality of care," Capizzo said.

With the opportunity for improvement pointed out again during the 2023 reverification, the quality improvement project began.

A focused internal review revealed that open fracture



Sarah Capizzo and Scott Sagraves, MD, FACS, discuss the poster, "Improving Time to Antibiotic for Open Fracture," from Capizzo and Jamison, at the TQIP Annual Conference in November 2024.

patients—particularly those with firearm-related injuries—experience consistent delays in antibiotic administration. These delays predominantly occur in the emergency department (ED), where time to antibiotics frequently exceeds the MTQIP benchmark of 90 minutes.

Developing QI Activity

The goal of the project was to increase the percentage of open fracture patients receiving antibiotics within 90 minutes to more than 90%. Through collaboration with MTQIP, HFH staff realized that other Level I and II hospitals in the area can administer timely antibiotics for open fractures. Achieving this goal by developing specific protocols improves infection prevention and aligns with national and state benchmarks, affecting quality metrics and influencing institutional standing. Initial implementation and data collection spanned 2022 to mid-2024, with ongoing monitoring into 2025.

During meetings, including the monthly Resus meeting and the Institutional Trauma Committee meeting at HFH (which includes many departments such as pharmacy, orthopaedic, trauma quality, and liaisons from the ED), specific guidelines for the QI project were developed. One guideline revision that was put into place was related to clarifying the verbiage stating that antibiotics were to be given before x-rays were taken. According to Capizzo, it was found that waiting for an x-ray caused delays in antibiotic administration.

Adding Quick Links order sets was another intervention that was part of the QI project. Having an antibiotic order automatically in the order set was a strategy to help achieve the goal of prompt antibiotic administration.

To educate nurses and staff on these interventions, the ED education staff took the lead and developed a PowerPoint presentation that was part of competency training.

Results and Next Steps

Active implementation of the guideline changes began in early 2023. Guideline revision happened mid-2023, and nurse competencies were updated toward the end of that year. Case reviews of 2022 showed the average time to antibiotics was 76 minutes.

While the guideline changes were geared toward penetrating trauma, the overall education of this benchmark helped improve the blunt mechanism cohort. With guidelines in place, 2023 had a marked improvement to an average of 16 minutes. In 2024, more than 90% of patients received antibiotics within 30 minutes.

Jamison explained that one of the next steps is finding a way to remind staff to pull the tetanus vaccine and antibiotic at the same time. Both of these items are kept in the same Pyxis, so pulling them at the same time makes sense. However, looking back through charting, it became clear that the tetanus vaccine often was pulled first, and the antibiotic was pulled later—sometimes even hours later.

This project was submitted during the call for abstracts for the TQIP Annual Conference in November 2024 and was accepted for the poster session. A total of 11 posters from HFH were accepted for the TQIP conference last year. Both Capizzo and Jamison attended the TQIP conference and noted that participating in TQIP and attending the conference enhance networking opportunities.

To read the full case study, "Improving Antibiotic Time for Open Fracture," visit the ACS Case Study Repository. For more information regarding TQIP, contact tqip@facs.org.

Samantha Kipley *is a Quality Resource Specialist in the ACS Division of Research and Optimal Patient Care in Chicago, IL.*

Beyond ASK QI Initiative Supports Smoking Cessation in Cancer Care

Eileen M. Reilly, MSW
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Tobacco use in patients diagnosed with cancer increases the risk of adverse outcomes, and patients diagnosed with cancer experience direct benefits of smoking cessation.[1]

EVIDENCE-BASED APPROACHES to smoking cessation can improve survival by approximately 1.8 years if a patient quits within 6 months of a cancer diagnosis. A 2023 survey of the National Cancer Database® (NCDB®) revealed that approximately 14.7% of newly diagnosed patients reported smoking at the time of diagnosis.[2,3]

Guidelines from the National Comprehensive Cancer Network support assessment and assistance for smoking cessation in patients with cancer. Evidence-based cessation efforts include in-office behavioral counseling, referral to a tobacco quitline, referral to a certified tobacco treatment specialist, or pharmacotherapy.

Building upon results from the ACS national quality improvement (QI) initiative Just ASK, which focused on addressing cigarette smoking by asking newly diagnosed patients with cancer about their smoking status,[4] Beyond ASK was developed and launched in 2023 to support programs in taking steps to support cessation efforts in patients who report being smokers.

The primary aim of the Beyond ASK QI initiative was to increase smoking cessation assistance for newly diagnosed patients with cancer by at least 20% from the individual program baseline or maintain assistance provided at less than 90%.

A total of 324 ACS Commission on Cancer (CoC) and National Accreditation Program for Breast Centers programs participated in the initiative, which spanned 12 months. The initiative included the formation of a QI team, response to five data collection surveys, and participation in educational webinars and collaborative learning sessions. Programs also were given access to an online practice change package that contained information about

evidence-based smoking assessment and cessation tools, practice workflow, and electronic health record (EHR) guidance. Individualized technical assistance was offered, and participants shared local implementation strategies and success stories during bimonthly national calls.

To assess progress over time, surveys were collected at five time points during the year. These surveys included metrics on newly diagnosed patients, featured questions about current smoking status, and if the status positive, included the number of patients who received evidence-based smoking cessation assistance. Surveys also collected data on implementation strategies (e.g., identifying a cessation treatment champion, adding a prompt within clinical workflow, and obtaining leadership support).

A publication reporting outcomes data is pending; however, it is clear that this national QI project is producing results, specifically at the local level. During the 12-month initiative, "ask" rates started high and remained high at the programmatic level. Overall, assist rates increased and more than 65% of programs reached their goal of increasing these rates by 20% or more.

The most commonly identified strategies to assist patients included in-office brief counseling, in-office behavioral counseling, referral to a smoking cessation treatment program, and referrals to community-based treatment. Referrals to quitlines and prescription of cessation medication were strategies used more by programs that reached the goal of a 20% increase in assisting patients versus those that did not. Common implementation strategies for achieving this increase include gaining support from program leadership, increasing or modifying EHR documentation, developing patient education materials, and identifying organization resources.

Overall, these results demonstrate that improvements in evidence-based smoking cessation assistance can be scaled and sustained across cancer care settings in a relatively short amount of time with modest changes to current workflow and processes.

Barriers to achieving the goal of a 20% increase in assistance included lack of training, lack of time, and competing clinical priorities. Additional support is indicated for programs to increase patient engagement in smoking cessation programs.

While previously recognized as a barrier in the 2022 Just ASK initiative, the inability to use the EHR to identify patients who currently smoke or to capture smoking history was reported by fewer than 8% of participating programs. Tobacco is now a core data element in most EHRs, which removes the EHR as a barrier, and as of 2023, tobacco use is reported in the NCDB.

Beyond ASK represents the largest known national project to address smoking cessation efforts in patients with cancer. Despite strong evidence and clinical practice guideline recommendations, delivery of smoking cessation treatment in oncology settings has remained subpar. Leveraging lessons learned from Beyond ASK and Just ASK, the CoC has developed a new standard on smoking cessation for patients with newly diagnosed cancer, which aims to provide evidence-based interventions for patients with cancer who are current smokers. This standard supports universal screening and assistance when indicated, encouraging opt-out treatment and referral approaches that are appropriate for the context and resources of local programs.

The findings from the Beyond ASK initiative strongly demonstrate the feasibility of distributing evidence-based smoking cessation support across various cancer programs nationwide. Considering the negative impact of ongoing smoking on cancer treatment results and the indisputable benefits of quitting, implementing sustainable smoking cessation programs universally across all US cancer care programs has strong potential to impact treatment outcomes.

Eileen Reilly *is the Quality Improvement Manager for ACS Cancer Programs in Chicago, IL.*

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2025 Quality and Safety Conference Points to Bold Future of Surgical Quality

Matthew Fox, MSHC

Members of the surgical quality improvement (QI) community are advancing the field in unprecedented ways.

THAT WAS A KEY TAKEAWAY from the recent 2025 ACS Quality and Safety Conference (QSC), which took place July 17–20 in San Diego, California, with the theme "Embracing Change and the Future of Quality."

Approximately 1,500 surgeons and other QI professionals attended the event, which celebrated the 20th anniversary of a meeting that began when the ACS adopted and expanded the National Surgical Quality Improvement Program (NSQIP®) from the Veterans Administration.

"ACS NSQIP has changed the very culture of our surgical profession, and in doing so, all of us have improved the lives of millions of surgical patients," said Bruce L. Hall, MD, FACS, from the University of California Davis Health in Sacramento, and Program Director for QSC.

Building on that history, Clifford Y. Ko, MD, MS, MSHS, FACS, Senior Vice President of the ACS Division of Research and Optimal Patient Care, discussed the significant step forward that is taking place with the new ACS clinical data strategy, which he announced in his opening remarks.

The ACS has entered into an agreement with Epic Systems, the largest electronic health records (EHR) provider in the US. This agreement is part of a multiyear strategy that will involve several technology companies and will lead to the development of innovative solutions and tools to enhance how data are used and accelerate the QI process.

"This strategy will make data collection less burdensome, less expensive, more efficient, broader, and simultaneously more detailed," Dr. Ko said.

Throughout the conference's General Sessions, speakers described current efforts to advance technology, methodology, and teamwork to bolster surgical QI.

HIT and Project Planning Drive Future of Quality

The ACS data strategy is designed to decrease friction in the process of transmitting actionable data to researchers and those on the front line of patient care, and a major part of that efficient future will require the continuing evolution of health information technology (HIT).

"Clinical registries are foundational to our quality efforts, but they have room to improve. Human-intensive abstraction is retrospective and slow to adapt," said ACS Chief Health Informatics Officer Genevieve Melton-Meaux, MD, PhD, FACS, from the University of Minnesota in Minneapolis.

She added that evolving data procurement platforms will include additional automation and injection of artificial intelligence (AI) into the data abstraction process to streamline usable data.

While the ACS data strategy speaks to a high-level vision for how technology and collaborations will advance quality surgical care, "small-scale, frontline QI—the kind performed by surgeons, nurses, registrars, quality officers, which the team actually touches and that patients experience—is essential," Dr. Ko said.

To that end, the ACS collaborated with The Healthcare Improvement Studies Institute to develop the Early Planning of Small-Scale Surgical Improvement Projects (EPoSSI) Tool, which focuses on the critical early stages of project planning that lay the groundwork for success. The tools cover nine domains such as choosing an improvement team, developing aims, planning intervention implementation, and deciding on "go/no go," among others.

"Small-scale efforts aren't often published, and we don't often know a lot about them—and yet, this is where frontline care happens. If we do these small-scale efforts better, a lot of care will get better for our patients" in a much shorter timeframe, Dr. Ko said.

AI Synopses of Operative Data Could Advance Training

As much as technology is changing QI and high-level decision-making, new developments may have an impact on training and care within the OR itself.

During a session on the future of surgery, Carla Pugh, MD, PhD, FACS, from Stanford University School of Medicine in California, spoke on how

Dr. Ko introduces the conference by discussing the past and promising future of surgical quality.

Access related video content online.

multimodal data capture is providing a level of personalized intraoperative feedback that could change how surgeons and trainees understand their strengths and weaknesses. The baseline starts with surgical video.

"The real benefit of AI is related to automated analytics. It can help find and deliver that short, 5–10 second video clip to review from a 4-hour procedure, which by itself saves considerable time and effort," she said. From there, audio capture, electroencephalogram, and motion capture work in tandem with the video to provide a window into a surgeon's or trainee's activities.

As an example, Dr. Pugh shared data from hand sensors during a macrovascular anastomosis. A side-by-side comparison showed a faculty surgeon operates with considerably greater efficiency, smoothness, and velocity than a trainee.

Nassib Chamoun, founder, president, and CEO of Health Data Analytics Institute also addressed current and near-future uses of AI within surgical care workflows.

He noted that AI could save a significant amount of clinician time managing patient information in the EHR by proactively designing the right patient workflow, aligning resources to needs, and delivering actionable insights at the point of care.

Chamoun described how his team has used AI to build hundreds of predictive models based on Medicare data for outcomes, utilization, and cost to understand performance at a granular level, with the next steps in development.

"You need to have a real-time platform that can process all these data and deliver the information not just to clinicians, but to every member of the care team on the front line," Chamoun said, adding that generative AI agents are uniquely suited to this stratified aggregation and are able to deliver information that is fully transparent and traceable.

Reimbursement Models Affect Patient Care, Bottom Line

Not to be lost among conversations on the technology and new resources that will directly aid in surgical care is the critical role that reimbursement and measurement itself plays in supporting QI and patient safety—a role that can help or hinder patients and care teams.

The US healthcare system has long existed in a fee-for-service world, and that has led to fragmented care that does little to reward quality or outcomes, according to Mary Witkowski, MD, MBA, from Harvard Medical School and Harvard Business School in Boston, Massachusetts.

Fee-for-service leads to a lack of transparency for patients and, importantly for QI professionals, "the time horizon is too short for payment to be tied to outcomes and not a meaningful way to do risk adjustment," Dr. Witkowski said.

The solution to these issues is shifting to value-based care, "which not only would reward quality care, but also make the care horizon that matches the underlying health needs that physicians are working on for patients," she added, describing promising models related to type 1 diabetes that are showing improved clinical outcomes for patients, cost savings for payers, and financial bonuses for providers.

But in the nascent days of experiments with value-based care, hospitals are still learning how to balance the improved outcomes of value-based care with uncertainty in costs, as Elizabeth C. Wick, MD, FACS, of the University of California San Francisco (UCSF), discussed.

Dr. Wick described how UCSF implemented a bundled payment system for bowel surgery, based on the Centers for Medicare & Medicaid Services

Captain Becker delivers the compelling Keynote Address, focusing on how surgeons can grow their teamwork and reduce system errors by using concepts championed by the US Navy.

Transforming Episode Accountability Model (TEAM) that will go into effect in 2026.

The UCSF version covered costs in a 90-day period after surgery, which included elective colorectal surgery, emergency rectal surgery, and others (TEAMS is a 30-day period). The initial payment was meant to cover all costs related to the care episode, including follow-up, complications, and so on.

The planning work that went into this transition of reimbursement did make a beneficial impact for patients—but a difficult one for providers.

"In the first 2 years, it reduced complications, length of stay, and 90-day readmission, which are positive from the patient perspective. By year 3, the price per episode started to far exceed the payment, and the hospital bore the burden of $500,000 in extra cost," Dr. Wick said.

The TEAM initiative, with its shorter period, may mitigate some of the extra costs, but surgeons will need to be prepared for potential issues while the payment system is implemented and refined, she said.

Crew Resource Management Is Critical for Surgeons

An intense OR is a work environment that few individuals outside of surgery are likely to understand—but fighter jet pilots like Keynote Speaker Jack Becker, a retired Captain in the US Navy, are well-versed in stressful situations.

In the Navy, he said that what mitigates the stress of operating—and making mistakes—in life-and-death situations is the concept of crew resource management.

This training system is built not upon strict hierarchy, where lower-ranking individuals must defer to higher-ranking professionals, but an environment that reinforces "the vulnerability of needing each member of our team to succeed in order for us all to succeed," Captain Becker said.

Navy culture used to be, "the captain is always right," and opinions were meant to be unspoken—a sentiment that surgeons may have experienced at some point in their careers. This kind of culture is liable to lead to a mistake due to human error, which leaders as well as team members will inevitably experience. It is critical to address an error when it is still manageable.

"Human error is unavoidable. Pilots and surgeons often can afford to make a mistake—but what your team cannot afford is repeated mistakes that lead to a culture of error," Captain Becker said.

Crew resource management was designed to promote communication, assertiveness, leadership, decision-making, and other elements in all members of a team to create a high-functioning unit that is capable of the pursuit of perfection. To illustrate that point, he described the iterative process of standardizing the act of landing a supersonic jet on a nuclear-powered aircraft carrier.

"Every time I landed my F-18 on the aircraft carrier, I was asking them to find me a 14-inch window for the right approach. If they brought me in or I came 3 inches low, there was no blaming. We would say, 'We'll do it better next time,' because we wanted the team to succeed," he said.

The intent is to instill the idea of psychological security, where all members of the team are unencumbered to bring up thoughts, concerns, and outside-the-box ideas without ridicule of reprimand—all in service of preventing errors.

Top 10 Abstracts

More than 800 abstracts were submitted for consideration at QSC, and the top 10 were featured in a General Session with brief presentations.

Acute Care Surgery Pilot Program: OR Prioritization Protocol Decreases Healthcare Resource Utilization for Patients with Cholecystitis (EGS)

Chad Hall, MD, FACS, Baylor Scott & White Medical Center, Temple, TX

AI Capability in Patient Education and Pre-/Postoperative Care in Tracheostomy (Education)

Keer Zhang, PhD, Princeton University, NJ

Creation of Data Dictionary to Standardize SCR Workflow and Data Entry (Pediatric)

Megan V. Vitullo, RN, University Hospitals Rainbow Babies & Children's Hospital, Cleveland, OH

Day of Surgery Cancelations (Interdisciplinary Collaboration in Surgery)

Norman Honecker, MBA, RN, CNOR, Cincinnati Children's Hospital Medical Center, OH

From Sterile to Sustainable: Implementing Tap Water for Endoscopy to Reduce Environmental and Financial Costs (Environmental Sustainability in Surgery)

Hilalion San Ahn, MD, University of Ottawa, ON

Patient Valuation of Their Surgical Operations: Proof of Concept (Healthcare Information for Quality)

Prakash Vasanthakumar, University of South Florida Morsani College of Medicine, Tampa

Decreasing LOS for Hip/Knee Patients Arthroplasty at Safety Net Hospital by Using Lean Principles (Patient Reported Outcomes/ Patient Centeredness)

Colm D. Seigne, Sinai Health System Chicago, IL

Reducing NSQIP Surgical Site Infections by Focusing on General Surgery: Topical Skin Adhesive Education and Patient After Care Instruction Standardization (Surgical Infection Control)

Kyle V. Wong, Kaiser Permanente, Santa Clara, CA

Risk Factors for Development of New Onset Anxiety and Depression after Anterior Cruciate Ligament Reconstruction (Surgical Potpourri)

Justin J. Turcotte, PhD, MBA, Luminis Health, Annapolis, MD

Utility of Triaging the Found Down Patient Population as Part of the New Field Trauma Triage Guidelines (Trauma/Acute Care)

Sarah E. Johnson, DHSc, MS, ROT, Grand Strand Medical Center, Myrtle Beach, SC

Relevant to surgeons and QI professionals was the concept of drift, where you let your standards slide "just a bit."

"The most insidious thing that happens with drifting standards is that we get away with it," Captain Becker said. You may be able to drift off your standardized workflow for a time without an issue, but that will eventually lead to a cascade of errors that can be life-threatening in the unforgiving work of pilots or surgeons.

After decades of experience in team-building, the Navy created a system that had aided pilots in pursuing perfection: Brief–Execute–Debrief–Perfect.

This system provides a formalized space to define expectations and roles (the brief) and to standardize communication during project execution. The debrief is the critical next step that allows invaluable lessons to be learned and rolled into the brief the next day, creating a cycle that will, ideally, allow the project, the flight mission, or the operation and patient experience to be perfected.

Multidisciplinary Efforts Lead to Perioperative Advancement

Surgeons are no doubt the de facto leaders within the OR, but to ensure high-quality patient outcomes and safety, all parts of the perioperative care team must work together and strengthen one another.

As the frontline providers who interact the most with patients, nursing teams have played an integral role in perioperative advancement in recent years, according to Nakeisha Tolliver, DNP, MBA, RN, NE-BC, CNOR, CSSM, from The University of Texas Health Science Center at Houston and the Association of periOperative Registered Nurses.

In addition to technological advancements that nurses have a major role in managing, implementation of World Health Organization Surgical Safety Checklists made nurses central to team compliance, timeouts, and prevention of never events.

"This has made nurses champions and frontline leaders in compliance and continuous improvement," Tolliver said, adding that the shift from task-based to team-based care has leaned into nurses' strengths as communicators and patient advocates while growing the expectation for critical thinking and process improvement.

As the OR and hospital of the future become increasingly integrated through data-driven care models and technology, such as AI-driven precision surgery, the perioperative nurses will need to continue growing their skills, she said. Future roles for nurses will include informatics nurse specialists, robotic technology specialists, and safety champions.

It is important to recognize the successes that are already taking place in the perioperative environment, according to Komal Bajaj, MD, MS-HPEd, from NYC Health + Hospitals/Jacobi in North Central Bronx.

QI historically has investigated the gaps in care, the errors, and other failures within patient care as a springboard toward innovation by using a root cause analysis as the foundation of investigation and improvement.

Panelists in the "Breaking Barriers: It Takes a Village to Shape the Future of Quality Patient Care" discuss how national QI can support local QI and vice versa.

Rather than using a reactive approach, Dr. Bajaj said the OR of the future would be proactive about patient safety.

"How can we learn from the wondrous things that happen each and every day, such as the complex case that goes off without a hitch, to make care safer for the patients who come next?" she asked.

Along with her team, she started to implement a "success cause analysis," which deploys root cause methodology to understand positive outcomes, noting the effective response to pediatric malignant hyperthermia. The perioperative team observed two key factors they believed contributed to the success: escalation numbers were prominently displayed, and that the team happened to participate in experiential, biannual simulation drills on responding to malignant hyperthermia.

"So, we took those two factors and hardwired into similar areas, and we've had several other areas that

have required escalation that have leaned heavily on these factors to have a successful outcome," Dr. Bajaj said. This is an effective reminder about the importance of multidisciplinary care teams and their innate ability to diffuse QI principles.

Breaking Barriers Project Connects Local, National QI Efforts

Both ends of the QI scale, from national to local, can affect one another, as evidenced by the ACS Commission on Cancer (CoC) Breaking Barriers project.

Breaking Barriers is a national project that identified and aimed to reduce "no-shows" to radiation therapy appointments by 20%, according to Laurie J. Kirstein, MD, FACS, Chair of the CoC, who said that it is "a model for how to do a large-scale QI program while overcoming local barriers to care and strengthening standards."

She provided a detailed overview of the project, which, through bidirectional communication between CoC leadership and local cancer centers, sought to determine if barriers existed to patients showing for radiation appointments.

She defined two sets of goals: The national goal was to create a scalable framework for identifying the most modifiable barriers, while the local goal was to decrease no-shows of patients in active treatment.

A poster abstract author discusses his research.

Using the Breaking Barriers Toolkit, current results from the project have shown that participating programs "saw a 39.8% reduction in no-show appointments, 1,600 additional patients completing optimal radiation therapy, and improvements across all program types," according to Anthony D. Yang, MD, MS, FACS, from Indiana University in Indianapolis.

To provide a local perspective, Camille Biggens, MHA, from the Floyd and Dolores Jones Cancer Institute in Seattle, Washington, described how her institution focused on transportation as the most actionable barrier that could be addressed with available resources.

During their root cause analysis, though, the QI team made the surprising finding that no-shows due to transportation barriers seemed to be decreasing. Was that barrier not as impactful as previously thought?

The answer revealed that local barriers are often highly contextual and dynamic. Transportation needs may change over the course of treatment, the accessibility of roads may change day to day, and even severe weather can affect access to transportation, Biggens said.

Social workers were spending a disproportionate amount of time absorbing the variations to prevent no-shows from occurring, masking the true magnitude of the barriers in the no-show rates.

"From participating in the Breaking Barriers project, we learned that no-show rates may mask the true extent of patient susceptibility to a given barrier; therefore, it is important to consider transportation vulnerability of each patient, even those who do show up for appointments," she said.

Save the Date

Starting next year, the ACS Cancer Programs Annual Conference will be fully integrated into QSC to allow a larger platform for the latest in cancer QI and standards. The 2026 Quality, Safety & Cancer Conference will take place July 30–August 2 in Orlando, Florida. B

Matthew Fox *is the Digital Managing Editor in the ACS Division of Integrated Communications in Chicago, IL.*

ACS MyCME

American College of Surgeons

Now Available: Automatic CME Credit Reporting to the ABS

By attending an ACS-accredited activity, you may choose to participate in the automatic transfer of your CME credits to the American Board of Surgery (ABS) via the Accreditation Council for Continuing Medical Education (ACCME).

Go to ***facs.org/mycme*** today, verify your ABS ID and date of birth on the Board Certification tab, and select "Opt In." After that, your CME data will be automatically transmitted to the ABS!

This arrangement with the ABS and ACCME is phase one; the ACS is also working on autotransfer protocols with other surgical boards. Stay tuned!

facs.org/mycme

Dr. Kristan Staudenmayer Will Be Next COT Chair

The ACS Board of Regents confirmed Kristan L. Staudenmayer, MD, MS, FACS, as the next Chair of the ACS Committee on Trauma (COT).

DR. STAUDENMAYER assumes leadership of the ACS COT in March 2026, becoming the 22nd Chair of the COT during its 104th year as an ACS committee. Dr. Staudenmayer succeeds Jeffrey D. Kerby, MD, PhD, FACS, from The University of Alabama at Birmingham.

"Being named Chair of the Committee on Trauma is a great honor," said Dr. Staudenmayer. "I'm thankful to the leaders who have shaped the COT, especially Dr. Kerby, whose leadership has made a lasting impact. I'm dedicated to continuing that legacy as we develop a national trauma system, improve our core programs, and get ready for the challenges ahead to ensure we provide the best care to every patient."

Dr. Staudenmayer is a trauma and acute care surgeon at Stanford University in California, where she serves as associate section chief of acute care surgery and an associate professor of surgery. She also holds the Betty and Gordon Moore Endowed Faculty Scholar position, acknowledging her leadership in and contributions to clinical care and surgical systems improvement, particularly in trauma surgery.

Dr. Staudenmayer's clinical practice focuses on trauma, emergency general surgery, and surgical critical care. A recognized leader in trauma surgery, she plays a central role in Stanford's multidisciplinary efforts to care for critically ill and injured patients, while also working to advance trauma systems of care and drive innovation in the management of trauma patients.

Her research bridges clinical medicine and health policy, with a strong focus on trauma systems and the care of vulnerable patient populations. She has led and contributed to several federally funded research efforts, including a National Institutes of Health (NIH) K08 award

"Dr. Staudenmayer is a highly respected trauma surgeon and uniquely qualified to take on the role as Chair of the COT."

Dr. Jeffrey Kerby

from the National Institute on Aging to study the impact of injury in older patients and an NIH/Clinical & Translational Science Awards-supported study focused on prehospital trauma triage. Her work is widely published in peer-reviewed journals, and she is a frequent speaker at national conferences on trauma systems and surgical health services research.

Dr. Staudenmayer is a committed educator and institutional leader who has earned recognition for excellence in teaching, including the Arthur L. Bloomfield Award from the Stanford School of Medicine and the Fellowship Award from the Executive Leadership in Academic Medicine Program at Drexel University in Philadelphia, Pennsylvania. She chairs the Surgical Sub-Council at Stanford Health Care and is the unit-based medical director, helping to improve performance in high-acuity care settings.

Roles in the COT

For the ACS, Dr. Staudenmayer currently holds many roles, which reflects her deep commitment to shaping the future of trauma care and surgical education. She serves on the COT Executive Committee and is Chair of the Trauma Systems Pillar. She also is the Program Area Chair for Trauma System Evaluation and Planning, a member of the National Trauma and Emergency Preparedness Systems Steering Group, and a lead reviewer for the Trauma Systems Consultation Program.

In addition to these current appointments, she has contributed in several other capacities, including as an instructor for both the Advanced Trauma Life Support and Trauma Evaluation and Management programs, and as a member of the Advocacy and Health Policy Committee, Performance Improvement and Patient Safety Committee, and the White Book Steering Group. She also has participated in working groups focused on postgraduate education, national trauma system and research initiatives, and regularly contributes as a Trauma Quality Improvement Program Conference abstract reviewer.

Dr. Staudenmayer received her medical degree from The University of Texas Southwestern Medical School in Dallas and completed her general surgery residency at Parkland Hospital in Dallas. She went on to pursue a trauma and surgical critical care fellowship at the University of California San Francisco, followed by a master of science in health services research degree at Stanford. Her academic training also includes an NIH T32 research fellowship at the University of Washington in Seattle, where she studied innate immunity in trauma. Dr. Staudenmayer is triple board-certified in general surgery, surgical critical care, and clinical informatics.

"Dr. Staudenmayer is a highly respected trauma surgeon and uniquely qualified to take on the role as Chair of the COT," said Dr. Kerby. "Her extensive breadth of knowledge and high-level engagement in issues related to development of a national trauma system of care will ensure this transformational strategic target will remain a priority of the COT. In addition, her ability to energize high functioning teams that further key mission elements bodes well for the ability of the COT to advance its vision of eliminating preventable death and disability from traumatic injury across the globe."

Dr. Pon's Transformative Gifts Unlock New Opportunities for Surgery

Tony Peregrin

THE LARGEST INDIVIDUAL GIFT in the ACS Foundation's 20-year history—$2 million—was contributed by Pon Satitpunwaycha, MD, FACS, earlier this year to support the long-term priorities of the ACS Executive Director and CEO and help advance the College's mission "To Heal All with Skill and Trust."

A reception and dinner held July 16 at the historic Rainier Club in Seattle, Washington, honored "Dr. Pon," as he prefers to be called, and his decades-long generosity and unprecedented contributions to the ACS Foundation.

The event drew 20 invited guests, including ACS Past-Presidents Carlos A. Pellegrini, MD, FACS (2013–2014), and Ronald V. Maier, MD, FACS (2018–2019), ACS Regents Douglas E. Wood, MD, FACS, FRCSEd, and Sanjay R. Parikh, MD, FACS, and other ACS dignitaries. Patricia Zundel, MD, Dr. Pon's daughter and an anesthesiologist, and Roger S. Zundel, MD, Dr. Pon's son-in-law and a general and pediatric otolaryngologist, also attended the gathering.

"Dr. Pon is, by any estimation, an exemplar, even among philanthropists, for his enormous generosity," said ACS Executive Director and CEO Patricia L. Turner, MD, MBA, FACS, who is also the Foundation President. "His giving is extraordinarily impactful because his lifelong commitment to patients and our commitment to patients are in such close alignment. I am grateful for how his commitment to patients reflects and deepens my own."

Dr. Pon's current gift of $2 million is one of 17 gifts he has given to the ACS Foundation over the years,

Surgeons and guests from the Seattle area paid tribute to Dr. Pon and his generosity to the Foundation during a July celebration.

with a total of more than $5.1 million in donations to the College.

"Although he has been incredibly generous to the College, Dr. Pon remains very humble and unassuming about his support," said H. Randolph Bailey, MD, FACS, Chair of the ACS Foundation. "I have asked him about his motivation to support the ACS, and one theme seems to emerge. He feels like surgery and the College have been very good to him and he wants to give back. He says that when we were practicing surgery, we took good care of our patients. Now, we need to take good care of our profession."

After investing in the stock market in 2008, at the suggestion of a patient, and having success, Dr. Pon was in a position to make large-scale gifts to the ACS. His generosity has helped fund trauma surgery education, provide research fellowships and scholarships to burgeoning female surgeons in Africa, and create opportunities for surgeons to better understand and effectively integrate artificial intelligence and machine learning into surgical practice.

"The healthcare situation in the US is very complex, and for a young surgeon, it takes a long time to become established," said Dr. Pon. "I support the College to ensure that future surgeons have the same opportunities that I had."

In 2001, Dr. Pon received the Distinguished Philanthropist Award—the Foundation's highest and most significant honor—for his record of service to the College and the Foundation and his commitment to the practice of philanthropy.

Dr. Pon, who was born and raised in Thailand, graduated from Chulalongkorn University in 1962, which is internationally recognized as the top university in Thailand. He completed his internship and residency at Northwestern University in Chicago, Illinois, in 1964, before returning to Thailand as an instructor at Chulalongkorn University Medical School.

After accepting a fellowship position with pioneering cardiovascular surgeon Denton A. Cooley, MD, FACS, at The Texas Heart Institute (now part of Baylor College of Medicine) in Houston, Texas, Dr. Pon made the decision to remain in the US where he practiced general surgery for more than 40 years.

A fellow of the ACS since 1973, Dr. Pon retired from practice in October 2020, and today, he continues to be a proud member and supporter of the College.

"I try to give consistently to the College to support my profession because I always enjoyed being a surgeon," said Dr. Pon. "I'm just happy to have the opportunity to give back at this point in my life."

To learn more about the ACS Foundation, its programs, and how to contribute, visit *facs.org/foundation*. Foundation staff also will be available during Clinical Congress 2025 at McCormick Place in Chicago. B

Tony Peregrin *is the Managing Editor of Special Projects in the ACS Division of Integrated Communications in Chicago, IL.*

ACS Awards Three Surgical Adhesions Improvement Grants

THE FIRST GRANTEES from the ACS Surgical Adhesions Improvement Project have been announced.

Private philanthropists Peter and Marshia Carlino, whose involvement with surgical adhesions is motivated by the experience of their son with intraperitoneal adhesive disease, sponsored the awards, in addition to funding a summit in September 2024 in Washington, DC, that gathered approximately 100 surgical adhesion experts from around the world.

Three grantees will receive awards of $100,000 each over 2 years to study the biology of adhesive disease and/or the development of medical products that may prevent or heal adhesions in the abdomen or pelvis. The ACS Surgical Research Committee chose the winning grant applications via a process adhering to National Institutes of Health guidelines, without the input of Surgical Adhesions Improvement Project organizers.

Michael T. Longaker, MD, MBA, FACS

Awardee Michael T. Longaker, MD, MBA, FACS, is the Deane P. and Louise Mitchell Professor in the School of Medicine and a professor, by courtesy, of materials science and engineering at Stanford University in Palo Alto, California. A pediatric craniofacial surgeon whose research career has focused on wound repair and fibrosis, he also was the winner of the inaugural ACS Jacobson Promising Investigator Award in 2005.

His grant-funded project will focus on assessing the use of T-5224-hydrogel therapy for the prevention of abdominal adhesions. The approach builds on Dr. Longaker's previous research into the role of JUN, a transcription factor known to regulate adhesion-forming fibroblasts. Dr. Longaker has established, via a porcine model, that the small molecule inhibitor T-5224 can suppress JUN signaling in small bowel anastomotic healing. The current grant project will examine its use in the context of colon resection, intra-abdominal cancer, and repeated abdominal surgery.

Deshka Foster, MD, PhD, an assistant professor of general surgery at Stanford University who earned her doctorate in cancer biology in Dr. Longaker's laboratory, will participate in the research. Dr. Foster also was part of the Surgical Adhesions Improvement Project Summit in September 2024.



(from left) Dr. Michael Longaker, Dr. Nicole Wilson, and Dr. Samuel Carmichael II

Nicole A. Wilson, PhD, MD, FACS

A second project will build upon existing evidence from murine studies demonstrating the relevance of a small calcium-binding protein, S100A4, to adhesion formation. Researcher Nicole A. Wilson, PhD, MD, FACS, who is an associate professor of surgery and director of the Engineering & Clinical Laboratory for Innovation in Pediatric Surgery at The University of Oklahoma Health Campus in Oklahoma City, will use her grant to create a rabbit model of abdominal adhesion formation. She will then comprehensively examine this model via integrated single-cell sequencing and spatial transcriptomics, which will help to establish the types, locations, and interactions of gene expression within the adhesion tissue. Dr. Wilson will examine whether S100A4 inhibition makes meaningful improvement in adhesions via treatment with the S100A4 inhibitor Niclosamide, a drug presently mostly used to treat certain tapeworm infestations.

Samuel P. Carmichael II, MD, PhD, FACS

The final grantee is Samuel P. Carmichael II, MD, PhD, FACS, an assistant professor in the Department of Surgery at the Wake Forest School of Medicine in Winston-Salem, North Carolina. Dr. Carmichael conducts basic and translational research at the Wake Forest Institute for Regenerative Medicine and is co-chair of the Surgical Consortium on Adhesions Research (SCAR) Advisory Group, which helps to lead the Surgical Adhesions Improvement Project. His grant-funded project will aim to enhance understanding of the thromboinflammatory environment of the peritoneal cavity. He will focus on comprehensively characterizing the environment that promotes fibrosis in the abdomen following surgical injury to tissue, moving from an established rat model to a clinical one. The project also will identify new targets for drugs in a clinical population.

Via the SCAR Advisory Group, the Surgical Adhesions Improvement Project also has undertaken other research studies. These include reviews of tools for intraoperative assessment of adhesions, patient-reported outcomes measures, available prophylaxis for adhesive small bowel obstruction, and the development of new technologies relevant to adhesive disease.

Dr. Carmichael expressed his gratitude for the philanthropists who have made this possible: "None of this would have been possible without the Carlino family. I certainly can't say that enough. I call it 'fuel for the mission,' which, absolutely, over and over again, bears being repeated and being remembered."

For more information about the Surgical Adhesions Improvement Project and surgical adhesions research, read "Surgical Adhesions Improvement Project Advances Disease Science" in the June 2025 issue of the ACS *Bulletin*.

Faculty Research Fellows Are Announced

The ACS awarded four Faculty Research Fellowships for 2025–2027.

THE FELLOWSHIPS ASSIST surgeons in the establishment of their research programs under mentorship, with the goal of transitioning to independent investigators. The fellowship award—$40,000 per year for each of 2 years—is supported through the generosity of Fellows, Chapters, and friends of the ACS.

Franklin H. Martin, MD, FACS, Faculty Research Fellowship

Kevin J. Contrera, MD, MPH, University of Pittsburgh in Pennsylvania
- *Discipline:* Otolaryngology–Head and neck surgery
- *Research title:* Precision Treatment of HPV+ Oropharyngeal Cancer through Early Perioperative Circulating Tumor DNA

Undesignated Fellowships

Kimberly E. Kopecky, MD, MSCI, The University of Alabama at Birmingham
- *Discipline:* Surgical oncology
- *Research title:* Aligning Pre-Operative Expectations with Postoperative Recovery for Patients Considering CRS/HIPEC: A Mixed Methods Intervention Development Study

Sara P. Myers, MD, PhD, The Ohio State University in Columbus
- *Discipline:* Surgical oncology
- *Research title:* Defining Priorities and Core Outcomes to Guide Care Pathway Development for Young Adults with Breast Cancer

Jason M. Samuels, MD, Vanderbilt University Medical Center in Nashville, Tennessee
- *Discipline:* General surgery
- *Research title:* GLP-1 Receptor Agonists Post-Bariatric Surgery (GRABS) 0 Pilot Trial

An open call for applications for the 2026–2028 cohort begins soon. More information is available at *facs.org/faculty-research-fellowships.*

Annual Business Meeting of Members

ALL MEMBERS are welcome and encouraged to attend the Annual Business Meeting of Members of the ACS on Tuesday, October 7, 2025, at 4:15 pm in the Skyline Ballroom/Room W375b on Level 3 of the West Building of the McCormick Place Convention Center in Chicago, Illinois. This session is in accordance with Article I, Section 6, of the Bylaws.

During the meeting, ACS Officers and Governors will be elected, and reports from College officials will be presented. Items of general interest to the Members also will be included on the agenda. Members are respectfully urged to attend.

Sherry M. Wren, MD, FACS
Secretary
American College of Surgeons
September 1, 2025

Learn more about registering for Clinical Congress and attending the Annual Business Meeting of Members at *facs.org/clincon2025*.

New Senior Fellows Society Presents Opportunities for Professional Growth, Engagement

The ACS has launched a new lifecycle program. To complement and strengthen existing programs for medical students, residents, young Fellows, and Fellows, the Board of Regents approved an ACS Senior Fellows Society (SFS).

THE MISSION OF THE SFS is "To provide the opportunity for engagement of senior surgeons in the sharing of knowledge and experience to create a forum for mentorship and development of younger surgeons and their journey through their surgical careers. To serve as a focal point for collaboration across the lifecycle programs of the ACS."

History of Embracing Senior Surgeons

In 2014, the ACS articulated a strategy that established education as the cornerstone of excellence, recognizing that education transforms possibilities into reality, and instilling the joy of lifelong learning for students at all levels. It was noted that the fulfillment of lifelong learning is accomplished by maintaining expertise during the three phases of a surgeon's professional journey: training, practice, and sharing expertise as a senior surgeon.

To encourage senior surgeons to share their expertise, knowledge, and insights with others, an ACS Committee on Coaching the Next Generation was formed to develop programs that supported the education and training of practicing surgeons, surgical residents, and medical students.

The committee's planned activities included mentoring, proctoring, role modeling, teaching in simulation centers, supervising the work of surgical trainees in ambulatory settings, and providing guidance in leadership and administration.

They initially focused on two domains: training and engagement of senior surgeons

The original committee members included:

R. Phillip Burns, MD, FACS, Chair
Gerald B. Healy, MD, FACS, Co-Chair
John L. D. Atkinson, MD, FACS
Robert R. Bahnson, MD, FACS
L. D. Britt, MD, MPH, FACS
Michael A. Choti, MD, FACS
Edward M. Copeland III, MD, FACS
Joseph A. Corrado, MD, FACS
A. Brent Eastman, MD, FACS
E. Christopher Ellison, MD, FACS
Jill E. Endres, MD, FACS
Norman C. Estes, MD, FACS
Richard H. Feins, MD, FACS
Lewis M. Flint Jr., MD, FACS
John B. Hanks, MD, FACS
Leonard H. Hines, MD, FACS
David B. Hoyt, MD, FACS
Paul J. Huffstutter, MD, FACS
Ronald C. Jones, MD, FACS
Helen M. MacRae, MD, FRCSC, FACS
Layton F. Rikkers, MD, FACS
Charles F. Rinker II, MD, FACS
Grace S. Rozychi, MD, FACS
William P. Schecter, MD, FACS
Laurel C. Soot, MD, FACS
Beth H. Sutton, MD, FACS
Andrew L. Warshaw, MD, FACS

in simulation-based teaching and engagement of senior surgeons in coaching of surgeons and surgical trainees.

The committee developed and launched a course specifically for senior surgeons, "Introduction to Simulation-Based Teaching." Senior surgeons who participated in the 2-day course received training in fundamental knowledge of simulation-based surgical education, participated in hands-on simulation-based experiences, and then used simulation to teach novice learners several procedures while faculty provided guidance and feedback. The popular courses reached capacity, signaling the interest and need for this type of instruction for senior surgeons.

Another area of focus for the committee was the creation of a model for coaching surgeons in nonsurgical skills, such as those related to administration, practice management, and other professional activities.

Committee on Professional Opportunities for Senior Surgeons

By 2018, the committee had established a distinct need for, and interest in, programs for senior surgeons, and changed its name to better reflect its purpose—the Committee on Professional Opportunities for Senior Surgeons (CPOSS).

In addition, initiatives guided by CPOSS expanded to include:

- **ACS Colleague Connection Program**—An ACS Fellow who seeks advice is matched with a senior surgeon for confidential consultation on a specific question topic, such as practice management, relations with colleagues, or administration, personal, and financial issues—but not clinical problems. The ACS Advisory Council for General Surgery is participating in this initiative, and other Advisory Councils will be added to the program.
- **Aspiring Leaders Program**—For mid-career surgeons, this program has been piloted for the past 2 years with small groups of mentor-coaches (senior surgeons) and mentees across surgical specialties. It aims to accelerate professional development and maximize leadership potential of the participants through a yearlong personal relationship. An external vendor with expertise in coaching has been engaged to provide support for the mentor-coaches and program. The pilot program has been well received by both the mentor-coaches and mentees and is being expanded incrementally.

CPOSS also has developed sessions for Clinical Congress to help senior surgeons with their personal financial planning, as well as options for professional activities that use a lifetime of experience after retirement.

Official Launch at Clinical Congress

The new SFS will be formally recognized during Clinical Congress at an event on Saturday, October 4, 11:30 am–1:30 pm, at the Marriott Marquis Chicago Hotel (Henry Clarke, Level 3).

Membership in the SFS is open to ACS Fellows age 65 years and older, as well as those who are officially retired.

For more information, contact Ulli Langenscheidt at ulangenscheidt@facs.org.

Member News

Freischlag Tower Opens in Winston-Salem

Julie A. Freischlag, MD, FACS, was honored at a recent ceremony celebrating the opening of the Julie Ann Freischlag Tower at Atrium Health Wake Forest Baptist Medical Center in Winston-Salem, North Carolina. The seven-story, 327,000-square-foot facility—part of a $426 million investment by Atrium Health—will provide advanced medical technologies, innovative treatments, and expanded critical care services. Dr. Freischlag, a vascular surgeon and ACS Past-President, will retire at the end of 2025 after 8 years as CEO of Atrium Health Wake Forest Baptist.

Bacha Assumes AATS Presidency

Emile A. Bacha, MD, FACS, became the 106th President of the American Association for Thoracic Surgery (AATS). He succeeded David R. Jones, MD, FACS. A recognized leader in pediatric and adult congenital cardiac surgery, Dr. Bacha is a professor of surgery at Columbia University in New York, New York, and serves as chief of the Division of Cardiac, Thoracic, and Vascular Surgery at NewYork-Presbyterian/Columbia University Medical Center. He also is codirector of the Congenital Heart Center at NewYork-Presbyterian.

Drebin Takes Over as MSK Chief Physician Executive

Jeffrey A. Drebin, MD, PhD, FACS, was named chief physician executive of Memorial Sloan Kettering Cancer Center (MSK) in New York, New York. In this role, he will lead the MSK academic clinical departments, hospital-based research, medical education, training programs, and faculty affairs. A hepatopancreatobiliary surgeon, Dr. Drebin joined MSK in 2017, serving as chair of the Department of Surgery.

Have you or an ACS member you know achieved a notable career highlight recently? If so, send potential contributions to Jennifer Bagley, MA, *Bulletin* Editor-in-Chief, at jbagley@facs.org. Submissions will be printed based on content type and available space.

Nfonsam Is President of APDS

Valentine H. Nfonsam, MD, MS, FACS, was appointed president of the Association of Program Directors in Surgery (APDS), a professional organization for general surgery residency program directors in the US. He will serve a 1-year term. A colorectal surgeon, Dr. Nfonsam is executive vice chair for surgery and a professor of surgery at the Morehouse School of Medicine in Atlanta, Georgia.

St. John Moves to Johns Hopkins

Maie St. John, MD, PhD, FACS, has been named the Andelot Professor and director of the Johns Hopkins Department of Otolaryngology–Head and Neck Surgery, effective October 1. Dr. St. John currently serves as a professor and chair of the Department of Otolaryngology–Head and Neck Surgery at the University of California, Los Angeles (UCLA), where she also holds the Thomas C. Calcaterra, MD, Chair in Head and Neck Surgery position. In addition to her surgical leadership, she is a professor of bioengineering, codirector of the UCLA Health Head and Neck Cancer Program, and executive director of cancer research and education at the UCLA Jonsson Comprehensive Cancer Center.

Magee Leads Vascular and Endovascular Surgery at NYU Langone

Gregory Magee, MD, MSc, FACS, was appointed chief of the New York University (NYU) Langone Health Division of Vascular and Endovascular Surgery. In this new role, Dr. Magee—also the Frank J. Veith, MD, Clinical Professor of Vascular and Endovascular Surgery in the Department of Surgery—will focus on building a multidisciplinary vascular program. Most recently, he served as the director of research in the University of Southern California (USC) Division of Vascular Surgery and Endovascular Therapy in Los Angeles, and held a joint appointment in aerospace and mechanical engineering at the USC Viterbi School of Engineering.

Parra-Davila Receives Ellis Island Medal of Honor

Eduardo Parra-Davila, MD, FACS, was awarded the prestigious Ellis Island Medal of Honor for Dedication to Medicine and Global Impact. The award honors US citizens whose accomplishments in their field and service to others exemplify the spirit of America. Dr. Parra-Davila is a general, colorectal, and bariatric surgeon at Good Samaritan Medical Center in West Palm Beach, Florida.

JACS JOURNAL OF THE AMERICAN COLLEGE OF SURGEONS

Highlights

The following articles appear in the September 2025 issue of the *Journal of the American College of Surgeons (JACS)*. A complimentary online subscription to *JACS* is a benefit of ACS membership. See more articles at ***facs.org/jacs***.

New Surgical Frailty Scoring Tool: Modified 4-Factor Functional Frailty Index

Alexandra Z. Agathis, MD, Jeanne Wu, MPH, and Celia M. Divino, MD, FACS

The new Modified 4-Factor Functional Frailty Index (mFF-4) includes variables that embody the frailty phenotype—history of falls, dementia, low body mass index, and non-independent functional status. The mFF-4 accurately predicts 30-day mortality, postoperative complications, and geriatric outcomes across the overall and subspecialty populations.

Association of Guideline-Concordant Care with Superior Survival Outcomes for Clinical T2N0M0 Esophageal Squamous Cell Carcinoma

Ryan C. Jacobs, MD, MS, Austin B. Chang, BA, Dominic J. Vitello, MD, and colleagues

This analysis of the National Cancer Database reveals a treatment mismatch for patients with clinical T2N0M0 esophageal squamous cell carcinoma: low-risk tumors are often undertreated with upfront esophagectomy, while high-risk tumors are frequently overtreated with chemoradiation therapy alone.

Is There Still a Need to Discuss the Use of Antibiotic Decontamination? Results of a Prospective Cohort Study Involving 999 Left-Sided Colorectal Resections

Benjamin Wiesler, MD, Jörn Markus Gass, MD, Raphaele Galli, MD, and colleagues

The implementation of antibiotic decontamination and mechanical bowel preparation in left-sided colorectal resections across an entire healthcare region was associated with reduced overall complication severity, without impacting rates of anastomotic leakage or surgical site infection, according to multivariate logistic regression analysis.

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