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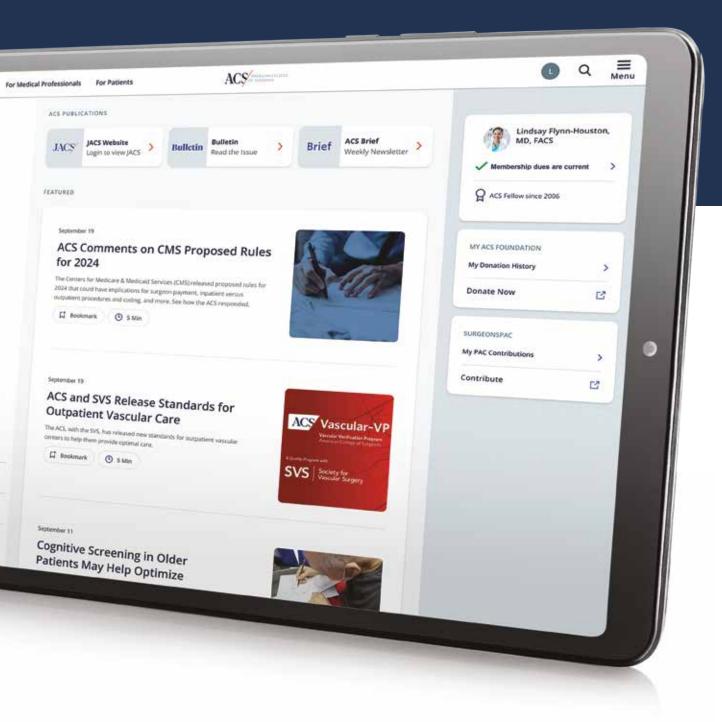
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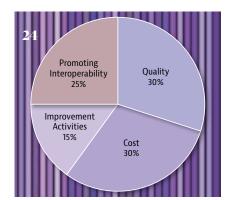
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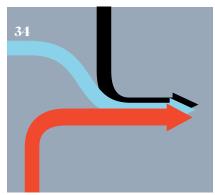
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Bulletin of the American College of Surgeons (ISSN 0002-8045) is published 10 times a year by the American College of Surgeons, 633 N. Saint Clair St., Chicago, IL 60611-3295. It is distributed electronically, without charge, to all ACS members. Dues-paying members can request a complimentary print subscription. Nondues-paying members and nonmembers can purchase an annual print subscription (\$50 within the US and Canada; \$75 for all others). Contact bulletin@facs.org.

Periodicals postage paid at Chicago, IL, and additional mailing offices. POSTMASTER: Send address changes to Bulletin of the American College of Surgeons, 633 N. Saint Clair St., Chicago, IL 60611-3295. The American College of Surgeons headquarters is located at 633 N. Saint Clair St., Suite 2400, Chicago, IL 60611-3295; tel. 312-202-5000; toll-free: 800-621-4111; email: postmaster@facs.org; website: facs.org. The Washington Office is located at 20 F Street NW, Suite 1000, Washington, DC 20001-6701; tel. 202-337-2701.

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Printed in the USA.

Gynecological Surgery: Influencing the ACS for 120 Years

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THE AMERICAN COLLEGE OF Surgeons is The House of Surgery™, and that means we strive to serve surgeons in all specialties. In 2024, I wrote about the relationships we have enjoyed with a few surgical disciplines. This month, I will focus on another that has had an enduring positive impact on the ACS: gynecological surgery.

The influence of this surgical discipline on the ACS began before our founding. In 1905,

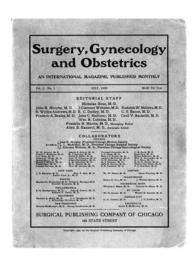
pioneering gynecologic surgeon Franklin H. Martin, MD, FACS (1857–1935), established the academic journal Surgery, Gynecology & Obstetrics (SG&O), offering, in the first volume, articles on appendicitis in pregnancy, toxemia in pregnancy, and sudden death after childbirth, as well as topics in general surgery such as incision technique and antiseptic use.

In 1910, Dr. Martin invited all *SG&O* subscribers to a conference, the Clinical Congress, in Chicago; it drew an unexpectedly robust crowd of 2,000 surgeons eager for professional development, clinical skill-building, and camaraderie. Buoyed by this success, Dr. Martin and his colleagues decided to host the conference annually. In 1913, after successful Clinical Congresses in New York City and Philadelphia, the leaders of the time founded the ACS to serve surgeons year-round.

The College continues to integrate gynecological surgeons into its work. In September 2024, the ACS convened 100 surgical adhesions experts from around the world for the Surgical Adhesions

Improvement Project Summit (see October 2024 article). The 2-day meeting launched an ongoing ACS-led effort to address adhesive disease. This vexing problem impacts all who operate in the abdomen and pelvis and, as such, represents a research area that is of interest to many specialties, including gynecological surgeons. The additional relationship between adhesions and compromised fertility makes this an area of particular concern. The Surgical Adhesions Improvement Project includes the voices of prominent gynecological surgeons with expertise in this condition.

Recognizing the important contributions of gynecological surgeons is something the ACS has done for more than a century. On 25 occasions, we have made surgeons specializing in gynecology and obstetrics Honorary Fellows of the ACS. The first such Honorary Fellow was **Thomas Addis Emmet**, MD, FACS(Hon), who received this honor in 1914, just 1 year after the founding of the ACS. Among other achievements, Dr. Emmet was surgeon-in-chief of the Woman's



Hospital in New York, New York, from 1861 to 1872.

Another notable Honorary Fellow is E. Catherine Hamlin, MBBS, FRCS(Eng), FACS(Hon) (1924-2020), an Australian gynecological surgeon who spent 6 decades repairing obstetrical fistulae in Ethiopia, at the Addis Ababa Fistula Hospital, which she cofounded. Her influential example of long-term commitment to resource-constrained nations is reflected in the approach of our own global surgery initiative, ACS Health Outreach Program for Equity in Global Surgery (ACS H.O.P.E.), which maintains ongoing multidisciplinary surgical teaching hubs in Hawassa, Ethiopia; Kigali, Rwanda; and Lusaka, Zambia.

In addition to recognizing prestigious gynecological surgeons with honorary fellowships, they are included in leadership roles. The ACS Advisory Council for Gynecology and Obstetrics advises the College on issues affecting gynecological surgeons and patients. Gynecological surgery is also represented on the ACS Board of Regents, through

Carol L. Brown, MD, FACOG, FACS, a renowned gynecologic oncologist at Memorial Sloan Kettering Cancer Center in New York, New York. In addition to her leadership in the ACS, Dr. Brown was a member of the Presidential Cancer Moonshot and joined the President's Cancer Panel in early 2023.

Clinical Congress endures as our flagship meeting, and in 2024, panel sessions covered rural gynecological emergencies, cytoreductive surgery, multidisciplinary management of fistulae, pelvic masses, and other gynecological topics. These sessions, chosen with input from the Advisory Council, remain accessible on demand via the conference's virtual platform. Multidisciplinary sessions, including those developed with general surgery, urology, and surgical oncology, are always well-received.

In the first issue of SG &O, in July 1905, J. Clarence Webster, CMG, FRSE, FRSC, a pioneering Canadian gynecological surgeon, wrote, "In recent years, the idea has been widely promulgated that the specialty of gynecology is doomed to extinction." He opined, however, that "the younger generation of gynecologists need not be discouraged," in part because the new journal "will give to American gynecology an even great pre-eminence than it has yet reached."

Dr. Webster was correct in part: gynecology has never become extinct, and the journal, which ultimately became the Journal of the American College of Surgeons in 1994, continues to publish broad-based surgical research, including studies in gynecological surgery.

The ACS is proud to contribute to all specialties, including gynecological surgery, and honored by how gynecological surgeons have contributed to the College for so many years.

Clinical Congress 2024

If you did not attend Clinical Congress 2024, you can still register for online access, where you can view many conference sessions on demand, gain valuable information, and earn CME credit until February 24. See *facs.org/clincon2024* for details.

Cancer Conference 2025

If you are a surgical oncologist, please join us at the ACS Cancer Conference in Phoenix, Arizona, on March 12-14. Registration is open now at *facs.org/cancerconference*. ①

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





Imagine the waiting room of a US Level I trauma center, filled with the tense hush of the relatives of a patient undergoing trauma surgery. When a door finally opens and a surgeon walks out, ready to give the family the update they've been longing for, they will no doubt address the physician as "Doctor."

But would a title like "Major," "Lieutenant Colonel," or "Colonel" be more accurate?

Overleaf:
Dr. Brian
Eastridge (left)
and colleagues
operate on a
patient with a
gunshot wound
at Bagram Airfield
in Afghanistan.

IF THE SURGEON WAS Colonel Jennifer M. Gurney, MD, FACS, MC, the military appellative would be appropriate. But if the moment allowed, Dr. Gurney also could confirm that arrangements placing military surgeons and surgical teams in civilian settings to provide surgical care—military-civilian partnerships—are now part of a growing number of US hospitals.

These partnerships benefit both patients undergoing care in civilian settings and patients who these military surgeons may later treat in armed conflict zones. Dr. Gurney, who is chief of the Joint Trauma System for the US Department of Defense, an institution serving as a center of excellence for trauma care of combat casualty care, explained, "During times of peace, we have to heavily rely on and leverage the civilian trauma learning experience to be able to not just maintain our skills as surgeons, but also to codify and evolve the lessons learned from the military during wartime service into civilian trauma care."

Historical Connection

Overlaps between military and civilian healthcare workforces are not new. In an interview. C. Williamw Schwab, MD, FACS, FRCS, a retired US Navy Commander and emeritus professor of surgery and founding chief of the Division of Traumatology and Surgical Critical Care at the University of Pennsylvania Medical Center in Philadelphia, said, "If you go back and look at the first 200-plus years of the history of the US, military and civilian service were joined at the hip and especially strong, historically, between military-civilian medical commitments. American physicians, nurses, allied health professionals, and administrators rallied to the call."

In fact, innovations created by surgeons in multiple armed conflicts have had rapid and enduring influence on civilian healthcare. As Lester Martinez-Lopez, MD, MPH, former Assistant Secretary of Defense for Health Affairs explained in his Martin Memorial Lecture at Clinical Congress 2024, "Many concepts we take for granted today were first proven in the battlefield, including triage systems, specialized surgical teams, wound management techniques, blood transfusion practices, prosthetics development, trauma resuscitation, and medevac capabilities—all things that benefit military and civilian patients alike."

Indeed, the very concept of a trauma system first came to fruition in the US during war. Between the First Battle of Bull Run in July 1861 and the end of the US Civil War in April 1865, both Union and Confederate armies made substantial inroads in organizing trauma care.

Innovations from this period include critical advancements in surgical hygiene and anesthesia, the creation of the first ambulance corps, groundbreaking data collection practices, federal legislation supporting the development and use of battlefield medicine, and the implementation by both sides of the Lieber Code, an early form



of international humanitarian law that included standards on medical practice.^{1,2}

The pattern of innovation in armed conflict continued through World War I, World War II, the Vietnam War, and the armed conflicts in Iraq and Afghanistan. These lengthy engagements each fomented significant changes in military trauma care, including new strategies for providing damage control surgery to soldiers with critical injuries.3 As a result, soldiers survived with more grievous wounds than in previous conflicts, from a slim minority in the US Civil War to rates as high as 98% in Afghanistan.4

Defeating the Walker Dip

However, none of these important innovations stopped the changing sociocultural attitudes and end of the US military draft in the mid-1970s. Combined, these circumstances left US civilian and military medicine interactions dormant for years.

"Essentially, after that, the American public—and I think Congress—generally ignored the need for a very strong military medical combat-ready service," Dr. Schwab said.

During the first Gulf War in 1991, though, it became clear to military officials that a ready medical force was lacking.

"Combatant commanders and medical commanders who served in that short war came back and said, 'We're not ready for any type of armed conflict that comes up in the world," Dr. Schwab explained, noting that a 1993 opinion article by trauma surgeon Donald Trunkey, MD, FACS, in the *Archives of Surgery* was particularly influential in making this point.

Today, the problem Dr. Trunkey (who also was influential in the ACS Committee on Trauma, including serving as its Chair between 1982 and 1986) and others named is known as the "Walker Dip." Long noted but named in 2018 by Alasdair Walker, CB, OBE, QHS, FRCS, a surgeon vice admiral and past surgeongeneral of the British Armed Forces, it refers to "a pattern whereby military medical care improves in wartime and these advances are lost by the time the next conflict occurs."5

In other words, although major innovations relevant to civilian medical care will spread beyond the military and endure well past the conflicts that created them, the readiness of individual military physicians and the trauma system, as well as the focus of leaders on combat casualty care, will atrophy during

Dr. Brian Eastridge (center) and Matthew Martin, MD, FACS (right), work on a patient in Ghazni, Afghanistan. peacetime for lack of exposure to the kind of high-volume, highacuity healthcare environments that war generates.

This reality means that a ready medical force is hard to maintain between deployments, unless access to civilian trauma care environments can be found. Indeed, one study found that as of 2019, just 10.1% of surgeons met goal readiness threshold for combat casualty care.⁶

"Just because we understand the Walker Dip does not mean we have to accept it," Dr. Martinez-Lopez said in the Martin Memorial Lecture.

The best option, as Drs. Trunkey, Walker, Martinez-Lopez, and

others have articulated, is to place military surgeons in civilian trauma centers so that these surgeons can maintain and increase their skills. This approach addresses the need for a surgeon to gain or retain trauma surgery expertise away from the battlefield and ensures their enduring readiness for deployment, which in turn helps ensure that troops in armed conflict zones receive optimal care (and, perhaps, that the innovation borne of such conflicts can occur).

In addition, embedding military medical trauma teams promotes bidirectional learning, permits collaborative research efforts, alleviates the workforce shortages in some civilian hospitals and thus helps ensure high-volume, high-acuity centers provide highquality care.

Dr. Gurney, who was the 2023-2024 President of the Excelsior Surgical Society, noted that the applications of these collaborations are broader. "It doesn't have to be war" that calls for a military-civilian partnership, she said. "It can be a natural disaster. It can be many other threats. If the military and civilian trauma system are not integrated and working in concert, our patients don't do as well. It's all about providing the best trauma care, anytime, anywhere."

A patient affected by a landmine explosion is treated by Dr. Brian Eastridge (center) and Timothy Counihan, MD, FACS (right), in Bagram, Afghanistan.



Advocacy that Succeeded

Such military-civilian partnerships slowly emerged after the Gulf War. Per Brian Eastridge, MD, FACS, the Medical Director of the ACS Military Health System Strategic Partnership, "They've existed in some form or another for about 3 decades."

But the concept reached fuller realization after a post-September 11 US faced long-running conflicts in Iraq and Afghanistan. For his part, Dr. Schwab said he learned of the experiences of several surgeon colleagues deployed into these conflicts, and over time embraced the view that additional civilian training would be an important advancement.

As a result, when he gave the prestigious Scudder Trauma Memorial Lecture at Clinical Congress 2014, he used the opportunity to call for just such an arrangement. He later published a white paper further elucidating his support for embedding military trauma personnel at US academic medical universities for trauma combat casualty care.⁷

At the same time, experts (including Dr. Schwab) also were meeting under the auspices of the National Academies of Sciences, Engineering, and Medicine (NASEM). In 2016, this organization released A National Trauma System: Integrating Military and Civilian Trauma Systems to Achieve Zero Preventable Deaths after Injury,8 a 530-page report advising, among other things, that military surgeons work in civilian trauma units for both troop readiness and improvements to civilian care.

The ACS helped bring this idea to fruition. Over the next several years, the College and other entities advocated for the passage of laws that would create

these partnerships. Dr. Schwab, who has been a part of the ACS for approximately 40 years, participated in that effort. He described Senator Tammy Duckworth, who is a veteran from Illinois, as "just unbelievably supportive," adding that "a number of other senators, including Bob Casey from Pennsylvania, my own senator" were likewise helpful.

As a result of this support and other efforts, the Military Injury Surgical Systems Integrated Operationally Nationwide to Achieve ZERO Preventable Deaths Act, more commonly known as the MISSION ZERO Act, was signed into law in June 2019 as part of the Pandemic and All-Hazards Preparedness and Advancing Innovation Act. The act authorizes military-civilian partnerships in US trauma centers.

In the same year, through the John S. McCain National Defense Authorization Act (a yearly law that authorizes funding and authorities for the US military and other defense priorities), US Congress again directed the military to create these military-civilian partnerships, also appropriating funding for this to occur.

87 and 1

By a count Dr. Gurney completed in 2022 with a research team. at least 87 unique partnerships supported by the MISSION ZERO Act exist.9 Prominent examples include The University of Alabama at Birmingham, where a well-established partnership embeds US Air Force Special Operations Surgical Teams;10 Penn Medicine's Penn Presbyterian Medical Center, where a deployment-eligible multidiscipline surgical team and a healthcare administrator from Navy Medicine are embedded: a collaboration between the US

and United Arab Emirates armed forces at the high-level trauma center within Sheikh Shakhbout Medical City in Abu Dhabi; and a partnership with University Hospitals Cleveland Medical Center in Ohio.

Dr. Gurney continues to pursue the creation of a single registry that can capture quality improvement measures for all such partnerships, while noting that varying approaches, extents, and durations make them hard to count or describe succinctly.

"Some of them are just for surgeons," she explained. "Other ones are for teams. Others are rotational, or they are embedded or fully integrated, where they have an admitting privilege and don't have to be supervised. These partnerships depend a lot on the ecosystem of the trauma care delivery in that region as well as the governance of that civilian hospital."

If no military-civilian partnerships existed, how many military-only hospitals could offer experience in a high-volume, high-acuity trauma centers to military surgeons? Just one, Dr. Gurney said—the only Level I trauma center solely within the military health system, at Brooke Army Medical Center in Fort Sam Houston, Texas.

"Right now, unless you're working at Brooke Army Medical Center, valuable high-volume, high-acuity trauma care is within the military-civilian partnerships," she said.

Quantifiable Achievements

The positive impact of militarycivilian partnerships is clear. Dr. Schwab admitted that documenting impact on the civilian trauma system because of military surgeon participation remains a challenge, as military surgeons

Ways to Engage with the ACS as a Military Surgeon

- Access the Military-Civilian Partnership Portal on *facs.org* (coming soon) to see new trauma centers who are or are interested in participating in the program.
- Download The Blue Book for insights on military-civilian partnership best practices; read the forthcoming white paper on the same topic when it becomes available.
- Join the Excelsior Surgical Society, the ACS's voice for military surgeons, to enjoy camaraderie and contribute to ongoing work advancing military surgery.
- Attend Excelsior's 80/10 Anniversary meeting February 8–10 in Rome, Italy, in celebration of its 10th anniversary as part of the ACS and the 80th anniversary of its founding in 1945.
- Visit SurgeonsVoice, the online portal for advocacy, to participate in ACS's push for MISSION ZERO reauthorization and funding in the Pandemic and All-Hazards Preparedness Act.
- Connect with the Committee on Trauma to continue advancing trauma surgery, including military surgery.
- Learn more about military surgery via the ACS Military Clinical Readiness Curriculum, which is freely available online.
- Attend military-themed lectures and sessions each year at Clinical Congress or register now to view content online from the 2024 meeting.

remain a small percentage of all trauma personnel in the trauma system nationwide.

But he and Drs. Gurney and Eastridge point to positive reports from existing partnerships, as well as a general desire for hospitals to create new ones—despite the bureaucratic burden associated with military collaborations—as signs of success.

The findings are more than anecdotal. Research has shown quantifiable benefits from militarycivilian partnerships, in that participating military surgeons in civilian units can meet their deployment readiness goals^{6,10} while developing surgical outcomes on par with civilian surgeons11 and increasing their research output12an outcome that suggests the long-standing pattern of military innovation in surgery continues. These data have validated that the key goal of these partnerships, which is ensuring military trauma surgeons are ready for deployment, can be met without deleterious effects on civilian centers in which they serve.

That finding underplays the assistance that these surgeons can give to the trauma centers in which they serve. "There's this tremendous source of pride. There's a significant halo effect for these hospitals with respect to many of their communities," Dr. Eastridge said.

What's Next?

For all this success, however, there is a contradiction at the heart of these connections. While military-civilian partnerships clearly aid military surgeons and surgical teams by keeping their skills sharp in peacetime, the political capital to create and maintain these

partnerships rises when other military-inspired innovations do: during wars. With few US troops deployed to active conflict zones at present, will the progress of these programs be sustained?

Dr. Gurney believes they will be: "Punctuated equilibrium, where you have a lot of intensity followed by no intensity or complacency, is the natural ebb and flow of things. It needs policy, it needs leadership, and it needs both top-down and bottom-up solutions to keep the momentum. Yes, it is more difficult in an interwar period. But I think that we've codified a lot of things from the NASEM report, and we've had the right leadership in place so that we should be able to keep the momentum for the foreseeable future."

To that end, important efforts are underway. The ACS will launch the Military-Civilian Partnership Portal. Via a page on the ACS website, *facs.org*, military surgeons can find potential sites for service, while healthcare centers can publicize existing or nascent military-civilian partnership sites. The hope is that the portal will bolster the efforts of surgeons and hospitals to create and sustain military-civilian partnerships.

At minimum, it will fill an important gap in information access. "I can't count the number of emails in my inbox, saying 'How do I do this? How does my hospital engage or develop a partnership?"" Dr. Eastridge said. "There's nowhere out there to get these questions answered."

Building on the ACS guidelines document, *Military-Civilian*Partnerships for Trauma

Training, Sustainment, and

Readiness (The Blue Book),

Dr. Eastridge is leading a review

of multiple current militarycivilian partnership sites, with the aim of releasing a white paper this year with renewed perspectives on best practices.

Another crucial step is the continuation of the legislation that authorizes and funds these partnerships. Representatives Kathy Castor of Florida and Michael C. Burgess, MD, of Texas, reintroduced the MISSION ZERO Act in 2023. The ACS Division of Advocacy and Health Policy continues to advocate for the passage of legislation supporting military surgery.

Still others have expressed an interest in further ACS involvement. In the Martin Memorial Lecture, Dr. Martinez-Lopez called for other forms of professional development: "We need to develop military trauma leaders using the time between conflicts to work with our civilian partners, such as the Committee on Trauma, to formally mentor military surgeons and foster new leaders."

For now, Dr. Schwab, who received the 2024 ACS Distinguished Lifetime Military Contribution Award, said support continues to endure for the military-civilian partnership concept: "It has rekindled the national spirit. It has increased our morale and our optimism, and it has brought an unbelievable respect, for one, the US and the Department of Defense, and number two, for the men and women who serve in those uniforms."

13

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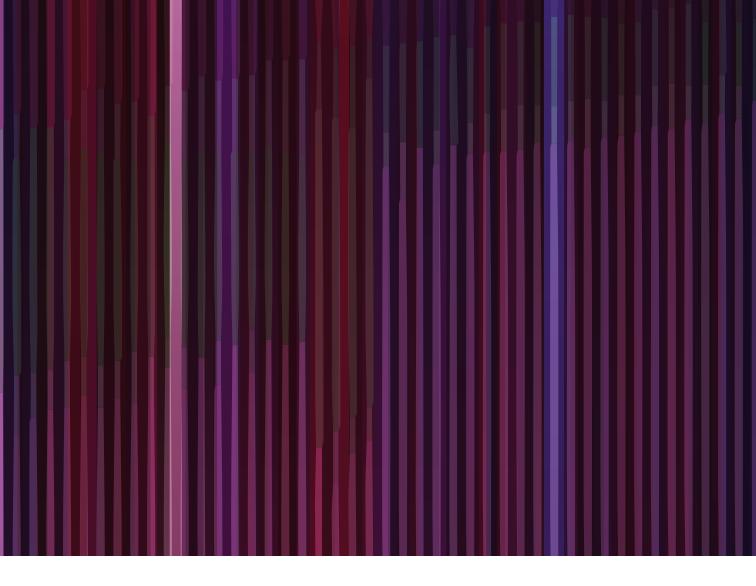
References

- Horvitz LA, Catherwood C. Encyclopedia of War Crimes & Genocide. Facts on File, 2006.
- Letterman J. Medical Recollections of the Army of the Potomac. Appleton and Co, 1866
- 3. Kellermann AL, Kotwal RS, Rasmussen TE. Military medicine's value to US health care and public health: Bringing battlefield lessons home. *JAMA Netw Open*. 2023;6(9):e2335125.
- Mabry RL, DeLorenzo R. Challenges to improving combat casualty survival on the battlefield. *Military Medicine*. 2014;179(5):477-482.
- Walker AJ. The 'Walker Dip.' J R Nav Med Serv. 2018;104:173-176.
- Sheldon RR, Bozzay JD, Brown SR. Case volume and readiness to deploy: Clinical opportunities for active-duty surgeons outside of military hospitals. *J Am Coll Surg.* 2023;237(2):221-228.
- Schwab CW. Winds of war: Enhancing civilian and military partnerships to assure readiness: White paper. J Am Coll Surg. 2015;221(2):235-254.
- 8. National Academy for Science, Engineering, and Medicine. A National Trauma Care System: Integrating Military and Civilian Trauma Systems to Achieve Zero Preventable Deaths After Injury. Published 2016. Accessed October 17, 2024. https://nap.nationalacademies. org/catalog/23511/a-national-traumacare-system-integrating-military-andcivilian-trauma
- Gurney JM, John SK, White EH, et al. Data-driven readiness: A preliminary report on cataloging best practices in military civilian partnerships. J Trauma Acute Care Surg. 2022 Aug 1;93(2S Suppl 1):S155-S159.
- Alexander D, Armen S. Adapt and overcome: Next steps in validating military–civilian partnerships. *Trauma* Surg Acute Care Open. 2024;9(1):e001419.
- Ruggero JM, Farnand AW, Roach PB, et al. Initial assessment of a regional military-civilian partnership on trauma surgery skills sustainment. *Mil Med*. 2023; 188(7-8): e2462–e2466.
- 12. Fannon EEH, Learn PA, Horton JD, Latham KP, Valerio IL. The power of cooperation: A quantitative analysis of the benefit of civilian partnerships on the academic output of military surgeons. Mil Med. 2023;188(7-8):e2448-e2453.



Presents Changes for General Surgery, Related Specialties

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



The American Medical Association (AMA) Current Procedural Terminology (CPT)* code set is updated annually. This article describes CPT 2025 coding changes that are relevant to general surgery and related specialties.

Intra-Abdominal Excision or Destruction of Tumors or Cysts

During the past 10–15 years, treatment for peritoneal surface malignancies has evolved significantly. As surgical indications, techniques, and technology have advanced, resection of significantly larger tumors and/or numerous small and large tumors is being performed to save and extend the lives of patients that were not considered candidates for treatment previously. In recognition of these changes, for CPT 2025, codes 49203, 49204, 49205 have been deleted and replaced by new codes 49186, 49187, 49188, 49189, 49190 that describe open excision or destruction of intra-abdominal primary or secondary tumor(s) or cyst(s), including cytoreduction, debulking, or other methods of removal of the tumor(s) or cyst(s). When performed via a laparoscopic or robotic approach, report the appropriate unlisted code. Table 1 (see page 19) provides the descriptors and Medicare Physician Fee Schedule work relative value units (RVUs) for the deleted codes 49203-49204 and the new codes 49186-49190.

Reporting is based on the sum of the maximum length of each tumor or cyst excised or destroyed (e.g., ultrasound desiccation). Only the tumor(s) and cyst(s) are measured, not the tissue (e.g., mesentery) in which the tumor(s) and cyst(s) may be implanted. If only a portion of a tumor or cyst is excised or destroyed, then only the excised or destroyed portion is measured. The tumor(s) and cyst(s) should be measured in situ before excision or destruction. It is important to document in situ measurement in the operative report. For example, "A single left retroperitoneal mass that measured 4.5 cm was identified and resected from adjacent structures with electrocautery and ultrasonic or harmonic dissectors. In addition, seven discreet 0.25 to 1.0 cm tumors in the right retroperitoneal mesentery that measured a total of 3.0 cm were identified that were then resected using electrocautery." This example would be reported with code 49187 (sum of the maximum length of tumor(s) or cyst(s) is 5.1 to 10 cm). Note that measurement includes only the tumor(s) and cyst(s) and not the margins.

Codes 49186-49190 are reported when the resected or destroyed intra-abdominal tumor(s) and cyst(s) do not directly arise from a resected organ (e.g., small bowel mass, renal mass, liver mass) or soft tissue that may be separately reportable. When the tumors arise directly from an organ or soft tissue, only the organ or soft tissue resection or destruction procedure code from which the tumors arise is reported. For example, if a partial ascending colon resection, including small tumor implants, is performed and a separate excision of multiple small tumor implants in the mesentery of the descending colon is also performed, the appropriate colectomy code (e.g., 44140) would be reported for the partial ascending colon resection and the excision of the tumor implants in the mesentery of the descending colon would be separately reported with an appropriate tumor excision code (49186-49190). The implants that were part of the ascending colon resection would not be included in the measurement for reporting the tumor excision code (49186-49190).

Open resection of recurrent ovarian, endometrial, tubal, or primary peritoneal gynecological malignancies without lymphadenectomy may be reported with 49186-49190. All other open resection of initial or recurrent ovarian, endometrial, tubal, or primary peritoneal gynecologic malignancies should be reported with 58943, 58950, 58951, 58952, 58953, 58954, 58956, 58958, 58960. For open excision or destruction of endometriomas, use 58999.

Skin Cell Suspension Autograft

A new subsection *Skin Cell Suspension Autograft* (SCSA) and new codes 15011-15018 have been added to the *Skin Replacement Surgery* subsection of CPT. This code set will primarily be reported for burn treatment and skin trauma such as degloving. The new technology differs from other types of skin autograft (e.g., partial or full thickness) where grafts are meshed to expand 1:2. Instead, the SCSA expands 1:80, allowing for much less skin to be harvested for a much greater defect coverage.

Codes 15011 and 15012 describe the harvesting of epidermal and dermal skin for use in the autograft. Codes 15013 and 15014 describe preparation of

the SCSA that requires enzymatic processing, manual mechanical disaggregation of skin cells, and filtration. If harvested skin is processed using automation rather than manual process, then it would not be appropriate to report 15013, 15014 for the autograft preparation. Codes 15015-15018 describe the spray-on application of the SCSA to the wound and donor sites. Application of the primary dressing with fixation (e.g., surgical glue, sutures, staples) is included and not reported separately. Surgical preparation of the recipient site prior to application of the SCSA, placement of a separate additional autograft prior to application of the SCSA, and repair of donor site requiring skin graft or local flaps are separately reported. For 2025, these codes are contractor priced. Table 2 (see page 20) provides the code descriptors and global period assigned to each code.

Synchronous Audio-Video and Audio-Only Evaluation and Management (E/M) Services

A new subsection *Telemedicine Services* and new codes 98000-98015 have been added to the *Evaluation and Management* section of CPT. These codes describe E/M services that were previously reported with the office or other outpatient E/M services codes 99202-99205 and 99211-99215, appended with modifier 95, *Synchronous Telemedicine Service Rendered Via a Real-Time Interactive Audio and Video Telecommunications System*. The code descriptors and requirements for billing these codes generally mirror the existing office/outpatient E/M codes with the exception of the technological modality used to furnish the service. The flexibility for reporting E/M services via

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Table 1.
Coding Changes for Intra-Abdominal Excision or Destruction of Tumors or Cysts

2025 Status	CPT Code	Descriptor	Work RVU
Deleted	49203	Excision or destruction, open, intra-abdominal tumors, cysts or endometriomas, 1 or more peritoneal, mesenteric, or retroperitoneal primary or secondary tumors; largest tumor 5 cm diameter or less	20.13
Deleted	49204	largest tumor 5.1-10.0 cm diameter	26.13
Deleted	49205	largest tumor greater than 10.0 cm diameter	30.13
New	49186	Excision or destruction, open, intra-abdominal (i.e., peritoneal, mesenteric, retroperitoneal), primary or secondary tumor(s) or cyst(s), sum of the maximum length of tumor(s) or cyst(s); 5 cm or less	22.00
New	49187	5.1 to 10 cm	28.65
New	49188	10.1 to 20 cm	34.00
New	49189	20.1 to 30 cm	40.00
New	49190	greater than 30 cm	50.00

Table 2. Skin Cell Suspension Autograft

CPT Code	Descriptor	Global
15011	Harvest of skin for skin cell suspension autograft; first 25 sq cm or less	000
15012	each additional 25 sq cm or part thereof (List separately in addition to code for primary procedure)	ZZZ
15013	Preparation of skin cell suspension autograft, requiring enzymatic processing, manual mechanical disaggregation of skin cells, and filtration; first 25 sq cm or less of harvested skin	XXX
15014	each additional 25 sq cm of harvested skin or part thereof (List separately in addition to code for primary procedure)	ZZZ
15015	Application of skin cell suspension autograft to wound and donor sites, including application of primary dressing, trunk, arms, legs; first 480 sq cm or less	090
15016	each additional 480 sq cm or part thereof (List separately in addition to code for primary procedure)	ZZZ
15017	Application of skin cell suspension autograft to wound and donor sites, including application of primary dressing, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; first 480 sq cm or less	090
15018	each additional 480 sq cm or part thereof (List separately in addition to code for primary procedure)	ZZZ

telehealth expired at the end of 2024 and reverted back to regulations in place prior to COVID-19 waivers. Therefore, the Centers for Medicare & Medicaid Services (CMS) does not support a programmatic need to recognize the audio-video and audio-only telemedicine E/M codes for payment under Medicare. CMS has assigned a procedure status indicator of "I" meaning there is a more specific code that should be used for purposes of Medicare, which in this case would be the existing office/outpatient E/M codes currently on the Medicare telehealth services list and the appropriate place of service code to identify the location of the beneficiary. In addition, when applicable, the appropriate modifier to identify the service as being furnished via audio-only communication technology should be appended to the E/M code.

Although CMS does not recognize this set of telehealth codes, the work, practice expense, and malpractice RVUs have been published to allow reporting for non-Medicare patients when appropriate. Table 3 (see page 21) provides the CPT codes and descriptors for these telehealth family of codes.

Brief Virtual Check-In

CPT has established a new code for reporting a brief virtual check-in: 98016, Brief communication technology-based service (e.g., virtual check-in) by a physician or other qualified health care professional who can report evaluation and management services, provided to an established patient, not originating from a related evaluation and management service provided within the previous 7 days nor leading to an evaluation and management service or procedure within the next 24 hours or soonest available appointment, 5-10 minutes of medical discussion. This code mirrors CMS Healthcare Common Procedure Coding System code G2012 that has been deleted.

Code 98016 is reported for established patients only. The service is patient-initiated and intended to evaluate whether a more extensive visit type is required (e.g., an office or other outpatient E/M service [99212, 99213, 99214, 99215]). Video technology is not required. Code 98016 describes a service of shorter duration than the audio-only services (98012-98015) and has other restrictions that are related to the intended use as a "virtual checkin" or triage to determine if another E/M service is

Table 3. Synchronous Audio-Video and Audio-Only E/M Services						
CPT Code	Descriptor					
Audio-vio	Audio-video, new patient					
98000	Synchronous audio-video visit for the evaluation and management of a new patient, which requires a medically appropriate history and/or examination and straightforward medical decision-making. When using total time on the date of the encounter for code selection, 15 minutes must be met or exceeded.	98002	Synchronous audio-video visit for the evaluation and management of a new patient, which requires a medically appropriate history and/or examination and moderate medical decision-making. When using total time on the date of the encounter for code selection, 45 minutes must be met or exceeded.			
98001	Synchronous audio-video visit for the evaluation and management of a new patient, which requires a medically appropriate history and/or examination and low medical decision making. When using total time on the date of the encounter for code selection, 30 minutes must be met or exceeded.	98003	Synchronous audio-video visit for the evaluation and management of a new patient, which requires a medically appropriate history and/or examination and high medical decision-making. When using total time on the date of the encounter for code selection, 60 minutes must be met or exceeded.			
Audio-vio	deo, established patient					
98004	Synchronous audio-video visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and straightforward medical decision-making. When using total time on the date of the encounter for code selection, 10 minutes must be met or exceeded.	98006	Synchronous audio-video visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and moderate medical decision-making. When using total time on the date of the encounter for code selection, 30 minutes must be met or exceeded.			
98005	Synchronous audio-video visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and low medical decision-making. When using total time on the date of the encounter for code selection, 20 minutes must be met or exceeded.	98007	Synchronous audio-video visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and high medical decision-making. When using total time on the date of the encounter for code selection, 40 minutes must be met or exceeded.			
Audio-on	ly, new patient		•			
98008	Synchronous audio-only visit for the evaluation and management of a new patient, which requires a medically appropriate history and/or examination, straightforward medical decision-making, and more than 10 minutes of medical discussion. When using total time on the date of the encounter for code selection, 15 minutes must be met or exceeded.	98010	Synchronous audio-only visit for the evaluation and management of a new patient, which requires a medically appropriate history and/or examination, moderate medical decision-making, and more than 10 minutes of medical discussion. When using total time on the date of the encounter for code selection, 45 minutes must be met or exceeded.			
98009	Synchronous audio-only visit for the evaluation and management of a new patient, which requires a medically appropriate history and/or examination, low medical decision-making, and more than 10 minutes of medical discussion. When using total time on the date of the encounter for code selection, 30 minutes must be met or exceeded.	98011	Synchronous audio-only visit for the evaluation and management of a new patient, which requires a medically appropriate history and/or examination, high medical decision-making, and more than 10 minutes of medical discussion. When using total time on the date of the encounter for code selection, 60 minutes must be met or exceeded.			
Audio-on	ly, established patient					
	Synchronous audio-only visit for the evaluation and		Synchronous audio-only visit for the evaluation and			

98012	synchronous audio-only visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination, straightforward medical decision-making, and more than 10 minutes of medical discussion. When using total time on the date of the encounter for code selection, 10 minutes must be exceeded.	98014	synchronous audio-only visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination, moderate medical decision-making, and more than 10 minutes of medical discussion. When using total time on the date of the encounter for code selection, 30 minutes must be met or exceeded.
98013	Synchronous audio-only visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination, low medical decision-making, and more than 10 minutes of medical discussion. When using total time on the date of the encounter for code selection, 20 minutes must be met or exceeded.	98015	Synchronous audio-only visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination, high medical decision-making, and more than 10 minutes of medical discussion. When using total time on the date of the encounter for code selection, 40 minutes must be met or exceeded.

Table 4. New Category III Codes

CPT Code	Descriptor		
0870T	Implantation of subcutaneous peritoneal ascites pump system, percutaneous, including pump-pocket creation, insertion of tunneled indwelling bladder and peritoneal catheters with pump connections, including all imaging and initial programming, when performed	0885T	Colonoscopy, flexible, with initial transendoscopic mechanical dilation (e.g., nondrug-coated balloon) followed by therapeutic drug delivery by drug-coated balloon catheter for colonic stricture, including fluoroscopic guidance, when performed
0871T	Replacement of a subcutaneous peritoneal ascites pump, including reconnection between pump and indwelling bladder and peritoneal catheters, including initial programming and imaging, when performed	0886T	Sigmoidoscopy, flexible, with initial transendoscopic mechanical dilation (e.g., nondrug-coated balloon) followed by therapeutic drug delivery by drug- coated balloon catheter for colonic stricture, including fluoroscopic guidance, when performed
0872T	Replacement of indwelling bladder and peritoneal catheters, including tunneling of catheter(s) and connection with previously implanted peritoneal ascites pump, including imaging and programming, when performed	0894T	Cannulation of the liver allograft in preparation for connection to the normothermic perfusion device and decannulation of the liver allograft following normothermic perfusion
0873T	Revision of a subcutaneously implanted peritoneal ascites pump system, any component (ascites pump, associated peritoneal catheter, associated bladder catheter), including imaging and programming, when performed	0895T	Connection of liver allograft to normothermic machine perfusion device, hemostasis control; initial 4 hours of monitoring time, including hourly physiological and laboratory assessments (e.g., perfusate temperature, perfusate pH, hemodynamic parameters, bile production, bile pH, bile glucose, biliary bicarbonate, lactate levels, and macroscopic assessment)
0874T	Removal of a peritoneal ascites pump system, including implanted peritoneal ascites pump and indwelling bladder and peritoneal catheters	0896T	each additional hour, including physiological and laboratory assessments (e.g., perfusate temperature, perfusate pH, hemodynamic parameters, bile production, bile pH, bile glucose, biliary bicarbonate, lactate levels, macroscopic assessment) (list separately in addition to code for primary procedure)
0884T	Esophagoscopy, flexible, transoral, with initial transendoscopic mechanical dilation (e.g., nondrug-coated balloon) followed by therapeutic drug delivery by drug-coated balloon catheter for esophageal stricture, including fluoroscopic guidance, when performed	0945T	Intraoperative assessment for abnormal (tumor) tissue, in-vivo, following partial mastectomy (e.g., lumpectomy) using computer-aided fluorescence imaging (list separately in addition to code for primary procedure)

necessary. When the patient-initiated check-in leads to an E/M service on the same calendar date, and when time is used to select the level of that E/M service, the time from 98016 may be added to the time of the E/M service for total time on the date of the encounter.

Category III Codes

A number of new CPT Category III codes have been established for 2025. Category III codes represent emerging technology, services, procedures, and service paradigms that allow data collection instead of reporting an unlisted code. These codes are contractor priced and may or may not be covered by Medicare and other payers. Table 4 (see page 22) provides the new Category III codes relevant to general surgery and related specialties.

Looking forward to CPT 2026

The meeting cycle for the CPT 2026 code set has concluded, resulting in new codes and guidelines that will be effective for CPT 2026. Several changes that are important to general surgery and related specialties include: (1) Addition of one code to report a gastric restrictive procedure through an endosurgical approach; (2) An editorial change throughout the CPT code set to delete the term "peritoneoscopy;" (3) Addition of 46 codes for reporting vascular procedures in the iliac vascular territory, femoral and popliteal vascular territory, tibial and peroneal vascular territory, and inframalleolar vascular territory, with deletion of the lower extremity revascularization codes 37220-37235: (4) Addition of two codes to report thoracic branch endograft services and revision of four current codes (33880, 33881, 33883, 33886) for repair of the thoracic aorta; (5) Addition of two codes to report rectal sensation and anorectal manometry, with deletion of 91120 and 91122; (6) Addition of two codes for reporting percutaneous irreversible electroporation ablation of tumors including imaging guidance of the liver and the prostate; and (7) Addition of eight new codes for reporting baroreflex activation therapy (BAT) modulation system procedures. Please note that codes are not assigned, nor exact wording

finalized, until just prior to publication of the CPT codebook. Release of more specific CPT code set information is timed with the release of the entire set of coding changes in the CPT publication.[†]

Learn More

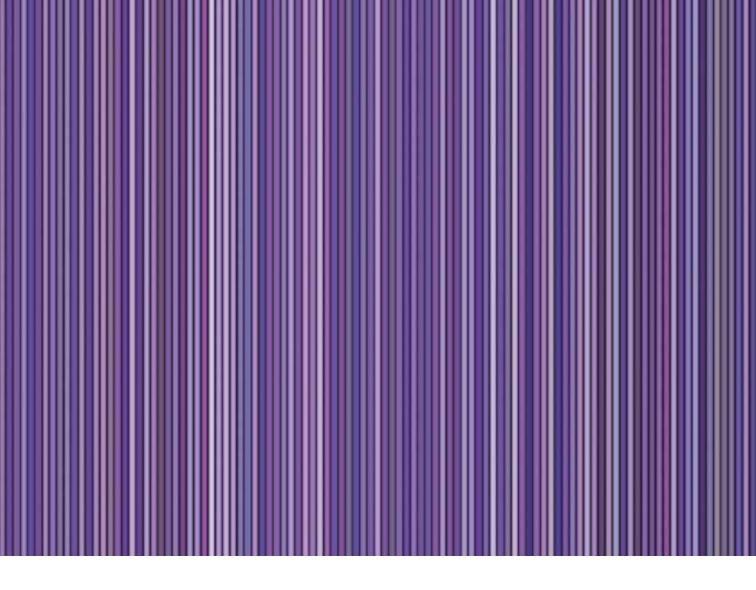
As part of the College's ongoing efforts to help members and their practices submit clean claims and receive proper reimbursement, a coding consultation service—the ACS Coding Hotline—has been established for coding and billing questions. ACS members are offered five free consultation units (CUs) per calendar year. One CU is a period of up to 10 minutes of coding services time. Access the ACS Coding Hotline website at *prsnetwork.com/acshotline*. (3)

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[†]American Medical Association. Summary of panel actions. Available at www.ama-assn. org/about/cpteditorial-panel/ summary-panelactions. Accessed November 25, 2024.

What's New for Ouality Payment Program in 2025

Kate Murphy Haley Jeffcoat, мрн Jill Sage, мрн



The Centers for Medicare & Medicaid Services (CMS) finalized several updates to the participation requirements for year 9 of the Quality Payment Program (QPP). Updates to the QPP are part of the calendar year 2025 Medicare Physician Fee Schedule (MPFS) released November 1, 2024. This article highlights the finalized QPP policies for the 2025 QPP performance year/2027 payment year that are most relevant to surgeons.

ACS QPP Advocacy Efforts

The ACS has strongly urged CMS to reframe the QPP from its inception and continues to highlight the need to redefine quality based on what is important to patients and their caregivers.

Existing measurement strategies are overly focused on single metrics that do not map to the patient, care team, or episode of care. In addition, current metrics do not capture the whole picture of patient care nor offer meaningful information to distinguish quality. As a solution, the ACS advocates for the incorporation of programmatic measures that build upon the ACS's experience developing and implementing quality programs.

These metrics combine structure, process, and outcome-based measures that align with clinical frameworks based on evidence-based best practices to provide goal-centered, clinically effective care for patients. This multifaceted approach differs from current single metric philosophies by looking across the entire service line or episode of care. This provides information that is more meaningful to patients as they try to determine where to find the best care for their needs that aligns with the programmatic nature of modern care delivery and helps drive quality improvement cycles.

Throughout its comments to the 2025 MPFS proposed rule, the ACS highlighted the problems with CMS's current strategy for the QPP and recommended that CMS think about how it can drive team-based care, put greater focus on patient goals, and incorporate more programmatic measures that align with episodes of care such as the Age Friendly Hospital Measure.

The Age Friendly Hospital Measure is the first programmatic measure modeled after the ACS Geriatric Surgery Verification (GSV) Program and will be required for reporting in the Inpatient Quality Reporting Program in 2025.

The measure includes five domains that closely align with high-impact standards incorporated in the ACS GSV Program with goals to create standardized structures and processes that focus on the unique needs of older adults. The ACS sees the incorporation of programmatic measures in CMS quality programs as an opportunity to further goals of team-based, patient-centered care.

In addition, since many surgeons report to Merit-Based Incentive Payment System (MIPS) through their employers and this better aligns with goals of forming teams around patients, the ACS continues to advocate for the alignment of hospital and physician programs by encouraging CMS to allow performance in hospital quality reporting programs to be used in MIPS.

ACS Advocacy for PROMs and PRO-PMs

The ACS urged CMS to incorporate Patient-Reported Outcome Measures (PROMs) and Patient-Reported Outcome Performance Measures (PRO-PMs) in its programs. These measures offer meaningful insight to the patient's perspective as well as the performance of the care team that cannot be captured using traditional outcome measures. The College emphasized the importance of defining episodes and understanding the needs of patient populations and care teams before designing the measures in order to best inform patients where to seek the best care for their needs.

QPP Updates for 2025

What to Know about MVPs

MIPS Value Pathways (MVPs) remain a voluntary reporting option in 2025, and surgeons who wish to report an MVP in 2025 must register in advance.

Whether a surgeon participates in traditional MIPS or an MVP, they will still be scored on Quality, Cost, Improvement Activities (IA), and PI, with lessened reporting requirements for the quality and IA performance categories compared to traditional MIPS. Those who elect to participate in MVPs also will be scored on population health-based measures.

CMS automatically calculates the cost and population health measures associated with the MVP using administrative claims measures. A clinician or group is only scored on these measures if enough patients are attributed under each measure.

Like traditional MIPS, MVP reporting is available for individuals, groups, and Alternative Payment Model (APM) Entities. However, MVPs also have an option for subgroup reporting. Subgroups consist of some but not all clinicians in a multispecialty practice. While subgroup reporting for performance year 2025 is voluntary, surgeons should note that it will be required beginning with the 2026 performance year.

Clinicians can choose from 21 MVPs starting with the 2025 performance year (see Figure, page 27). Six new MVPs were added, three of which are relevant to surgical care:

- · Ophthalmology
- Urology
- · Surgical Care

Figure. MVPs for 2025 Reporting



The ACS has opposed the implementation of the MVP framework and raised multiple concerns with the Surgical Care MVP. These concerns include a lack of alignment between quality and cost measures within the MVP, inclusion of broad surgical measures not applicable to many surgical episodes, and focus on individual physicians instead of patient-centered teambased care.

The ACS advocated that CMS should leverage programmatic measures to reframe MVPs because they incorporate key elements for value, which include:

- Creating a clinical program focused on informing patients or their surrogates such as primary care physicians as to where to find care
- Assembling care teams around patients and giving them meaningful feedback necessary to drive improvements in care
- Providing payers with key information to reward care they value for elements of safety, good outcomes, affordability, and meeting patients' goals

What's New for Quality Performance Category The goal of the Quality category is to measure the quality of care provided. For performance year 2025, surgeons can choose from 195 quality measures. Participants can explore the 2025 MIPS quality measure inventory for more details. MVP participants can choose quality measures from their selected MVP.

CMS also finalized its proposal to remove the seven-point scoring cap for topped-out measures that are included in specialty sets where there a limited number of measures applicable to that specialty. Topped-out measures are those for which performance is so consistently high that CMS noted that meaningful distinctions in quality are limited, so it capped the number of points a clinician could receive for reporting these measures to seven.

For many years, the ACS has opposed CMS's topped-out measure policy and urged the agency to remove the scoring cap on all topped-out measures; however, CMS maintained its proposal to only address measures in specialty sets with limited choice.

What's New for Cost Performance Category
The goal of the Cost performance category is to
measure a participant's total cost of care during the
year, a hospital stay, or an episode of care. There are
no individual reporting requirements for Cost, as
CMS calculates this category based on administrative
claims data. CMS continues to add episode-based
cost measures to the cost measure inventory.
Surgeons can explore these measures on the CMS
website.

While many policies for the Cost performance category remain the same in 2025, CMS finalized a new scoring methodology for this category, beginning with the 2024 performance year. The new methodology creates updated benchmark ranges that will inform achievement points in the Cost performance category. CMS said this new methodology will increase both the mean Cost performance category score and mean final score for MIPS participants. The ACS urged CMS to apply this new methodology to performance years before 2024, but CMS did not do so.

What's New for Improvement Activities Performance Category

The goal of the IA performance category is to reward clinicians for participating in activities that improve clinical practice. CMS made a number of updates to the IAs available for reporting in the upcoming performance year. They also made a notable change to how IAs are scored by eliminating the weighting of activities.

In the past, IAs were categorized to either high (worth 20 IA points) or medium (worth 10 IA points) weights. Beginning in 2025, all IAs will be weighted the same and worth 20 IA points, therefore reducing the number of activities to which clinicians are required to attest.

MIPS-eligible clinicians who participate in traditional MIPS will be required to report two activities (20 points each). MIPS-eligible clinicians who are categorized as small practice, rural, in a provider shortage area, or nonpatient facing will now be required to report one activity (40 points). MVP participants also are required to attest to only one activity.

What's New in APMs

APMs provide additional incentive payments to clinicians who demonstrate high-quality and costefficient care. APMs can apply to specific conditions, episodes of care, specialties, or populations; however, most available APMs are focused on primary care, despite the ACS's advocacy efforts to involve more specialists.

While many of the APM policies remain unchanged for performance year 2025, it is important to note that there will be two APM options for surgeons whose hospitals participate in the Transforming Episode Accountability Model (TEAM), set to begin in January 2026 (see article on page 34):

- Advanced APM option, for TEAM participants who are able to attest to using Certified Electronic Health Record Technology (CEHRT)
- Non-Advanced APM option, for those who do not meet CEHRT criteria

Surgeons can use the QPP Participation Status tool to determine if they are eligible for participation in an Advanced APM or MIPS.

The ACS's response to the 2025 MPFS proposed rule can be found on the ACS website. For more detailed information on how to successfully report to the QPP in 2025, surgeons can visit the ACS QPP Resource Center at facs.org/advocacy/quality-payment-program-resource-center/. ①

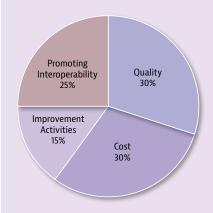
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QPP Highlights

Clinicians can participate in the QPP via three tracks: MIPS, MVPs, or APMs.

MIPS

Under MIPS, providers are scored on four categories: Quality, Cost, IAs, and Promoting Interoperability (PI)—with each contributing a specific weight (also referred to as points) to the clinician's MIPS final score. The performance category weights for performance year 2025 are:



For the performance year 2025, the MIPS performance threshold, or the number of overall MIPS points required to avoid a payment penalty in the 2026 payment period, is set at 75 points and the payment adjustment factors are set at +/- 9%.

The final score a clinician achieves during the performance year is compared to the performance threshold, which determines if they are eligible for a positive or negative payment adjustment to their 2027 Medicare Part B payments.

Positive payment adjustments are subject to a scaling factor to maintain budget neutrality, so clinicians rarely receive a full 9% increase. For example, in recently released data from CMS, the maximum positive payment adjustment for the 2025 payment year (2023 MIPS performance year) was approximately 2.15%.

MVPs

MIPS-eligible clinicians also can participate in MVPs—an alternative to traditional MIPS that are intended to focus measurement on specific conditions, specialties, or patient populations. MVPs include subset measures and activities from which participants can select to report. Like traditional MIPS, MVP participants must achieve a payment threshold of 75 points to avoid a negative payment adjustment.

APMs

APMs are intended to align with CMS's goals of moving a majority of patients into value-based arrangements. Advanced APMs, a subset of APMs, exempt their participants from MIPS reporting requirements and the associated performance threshold and payment adjustments. Instead, clinicians who achieve a threshold level of payment or patients—known as Qualifying Participants—are able to earn a higher MPFS update.

How Will the 2025 MPFS Impact Your Practice?

Lauren M. Foe, MPH Kate Murphy Vinita Mujumdar, JD

New payment policy, coding, and reimbursement changes set forth in the calendar year (CY) 2025 Medicare Physician Fee Schedule (MPFS) final rule took effect on January 1. The MPFS, which the Centers for Medicare & Medicaid Services (CMS) updates annually, lists payment rates for Medicare Part B services and introduces or modifies other regulations that affect physician reimbursement and quality measurement.

*All specific references to CPT codes and descriptions are © 2024 American Medical Association. All rights reserved. CPT is a registered trademark of the American Medical Association. THE ACS SUBMITTED comments on September 9, 2024, in response to the CY 2025 MPFS proposed rule issued by CMS earlier in the year.¹ Some provisions in the final rule, released November 1, 2024, incorporate the College's recommendations.² Although the final rule includes important policy changes that impact all physicians, this article focuses on those that are particularly relevant to general surgery and its related subspecialties.

Global Surgery Payment

Transfer of Care Modifiers As part of CMS's ongoing efforts to gather data to revalue global codes, CMS broadened the applicability of the transfer of care modifier, modifier -54 (Surgical Care Only). CMS finalized a proposal for modifier -54 to apply to all 90-day global surgical packages in any case in which a surgeon expects to furnish only the surgical procedure portion of the global package, including, but not limited to, when there is a formal, documented transfer of care as under current policy, or an informal, nondocumented but expected, transfer of care. Specifically, modifier -54 should now be appended in all instances when a surgeon only intends to perform the procedure and does not anticipate providing postoperative care or follow-up visits.

The ACS has expressed concern about CMS's various global codes data collection strategies in the past and has stressed that any changes to global codes must only be made using accurate, complete, and actionable data. This year, we commented that CMS's expansion of the use of the transfer of care modifier to include informal, nondocumented transfers of care will not result in meaningful information about the care that surgeons are providing in the postoperative period, and therefore should not be used to revalue global codes.

Postoperative Care Services Add-On Code CMS established separate payment for add-on code G0559 to account for postoperative care if furnished by someone other than the operating surgeon. CMS believes that there are instances in which someone other than the operating surgeon, such as a primary care physician or someone in a different group practice, provides follow-up care despite there being no formal transfer of care. The agency expects this add-on code to be reported with an office or other outpatient evaluation and management (E/M) visit and finalized the following code descriptor for G0559:

Postoperative follow-up visit complexity inherent to evaluation and management services addressing surgical procedure(s), provided by a physician or qualified health care professional who is not the practitioner who performed the procedure (or in the same

group practice) and is of the same or of a different specialty than the practitioner who performed the procedure, within the 90-day global period of the procedure(s), once per 90-day global period, when there has not been a formal transfer of care and requires the following required elements, when possible and applicable:

- Reading available surgical note to understand the relative success of the procedure, the anatomy that was affected, and potential complications that could have arisen due to the unique circumstances of the patient's operation
- Research the procedure to determine expected postoperative course and potential complications (in the case of doing a postop for a procedure outside the specialty)
- Evaluate and physically examine the patient to determine whether the postoperative course is progressing appropriately
- Communicate with the practitioner who performed the procedure if any questions or concerns arise (List separately in addition to office/outpatient E/M visit, new or established)

This add-on code was also part of CMS's attempts to gather data for revaluing global codes. The ACS commented that surgeons typically provide postoperative care to their own patients. If they are unable to do so, they formally transfer care to another

surgeon. Therefore, this add-on code is unlikely to gather useful information for revaluation of global codes. Our comments also noted that the code descriptor does not distinguish between surgical postoperative visits and visits unrelated to surgery. This lack of clarity could lead to misuse of the code and to duplicative payment.

Valuation of Surgical Services

The ACS made numerous recommendations to CMS regarding new or revised values for surgical Current Procedural Terminology (CPT)* codes for CY 2025, including those for intra-abdominal excision or destruction of tumors or cysts, skin cell suspension autograft, and others. To learn more, see "New 2025 CPT Coding Presents Changes for General Surgery, Related Specialties" on page 16.

Colorectal Cancer Screening Coverage

The agency expanded coverage for colorectal cancer (CRC) screening to include computed tomography colonography and blood-based biomarker CRC tests. In instances where either of such screening methods produce a positive result, patients are eligible for a follow-on screening colonoscopy with no additional beneficiary cost-sharing. To reflect current evidence-based clinical standards for CRC screening, the agency removed coverage for the barium enema

Table.
Calculation of the 2025 MPFS Conversion Factor

CY 2024 Conversion Factor	\$33.2875
Conversion Factor without the CAA 2024 (2.93% increase for 2024)	\$32.3400
CY 2025 Statutory Update Factor	0.00%
CY 2025 RVU Budget Neutrality Adjustment	0.02%
CY 2025 Conversion Factor	\$32.3465

procedure, which is no longer recommended as an appropriate CRC screening test given the advancement of alternatives.

ACS advocacy efforts have successfully led to numerous improvements in CRC screening policies over the last several years, such as reducing the age limitation for Medicare screening coverage from age 50 to 45; eliminating coinsurance for follow-on colonoscopies after noninvasive stool-based tests yield positive results; and phasing out beneficiary costsharing for CRC services that are planned as screening tests but become diagnostic tests when the physician identifies the need for additional treatment (such as removal of polyps) in the same clinical encounter.

Calculation of the 2025 MPFS Conversion Factor

Absent Congressional intervention, the 2025 MPFS conversion factor (CF)—which is the amount Medicare pays per relative value unit—is \$32.3465, an approximate 2.83% decrease from last year's CF of \$33.2875. The 2025 MPFS CF reflects the

expiration of temporary assistance provided by the Consolidated Appropriations Act (CAA) 2024 (see Table, this page).
①

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References

- 1. American College of Surgeons. Response to the CY 2025 MPFS Proposed Rule. 2024. Available at: https://www.facs.org/media/ s0bpgmhf/cy-2024-mpfs-proposedrule-acs-comment-letter.pdf. Accessed November 20, 2024.
- Centers for Medicare & Medicaid Services. CY 2025 MPFS Final Rule. 2024. Available at: https://publicinspection.federalregister.gov/2024-25382.pdf. Accessed November 20, 2024.



New TEAM Payment Model

Brings Opportunities, Challenges for Surgeons and Hospitals

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Surgeons practicing in hundreds of hospitals nationwide will see changes to the way Medicare pays for some of their patients starting in 2026.

REGULATIONS FINALIZED by the Centers for Medicare & Medicaid Services (CMS) in August 2024 included a new Transforming Episode Accountability Model (TEAM) focused on five surgical episodes. The new model will create opportunities for quality improvement and care redesign to achieve shared savings, but it also will include risk for losses to participating hospitals and potentially physicians. Initial analyses performed by Brandeis University and the Institute for Accountable Care (IAC) anticipate that up to two-thirds of participating hospitals will lose revenue under TEAM (see Figure, page 36).1

By understanding and implementing TEAM effectively, surgeons and quality partners stand to make substantial gains in care quality while reducing operating costs and receiving reconciliation payments from CMS. Conversely, hospitals and surgical teams who fail to prepare for the model could be in for an unwelcome surprise in 2026.

The ACS is currently exploring ways to help participants understand how they likely are to fare based on their current practice model and identify how best to prepare for success in the model. Here is what we know

about the model so far and what the ACS is doing to prepare members and quality partner hospitals to succeed.

What Is TEAM?

TEAM is a new value-based bundled payment model. The model examines spending and quality at acute care hospitals for Medicare patients undergoing coronary artery bypass grafting (CABG), surgical hip and femur fracture treatment (SHFFT), lower extremity joint replacement (LEJR), spinal fusion, and major bowel procedures. The model will be mandatory in 741 hospitals² and spread throughout 188 geographic regions. TEAM begins on January 1, 2026, and runs through the end of 2030.

The model covers payment for episodes of care initiated when a patient is admitted to a hospital or undergoes a qualified operation in the outpatient setting and extends 30 days after discharge.3 The bundled payment will cover all items and services covered under Medicare Part A and B during the episode related to the anchor procedure or hospitalization. The risk structure of TEAM is designed to ensure cost savings by CMS, and its mandatory nature creates a heightened sense of urgency for included facilities to prepare.

Why Is TEAM Being Tested?

Healthcare spending in the US has increased from roughly \$430 billion in 1970 by a factor of 10 to \$4.5 trillion in 2022, and is projected to increase by more than 70% to \$7.7 trillion in 2032.4 Increasingly, alternatives to the typical fee-for-service payment model have been sought to incentivize disease prevention and reduction in healthcare costs to slow the inflation in overall spending. These changes impact reimbursement and substantially change how patients, peers, regulatory bodies, and payers evaluate surgical care.

Nearly a decade ago, the US Congress passed the Medicare Access and CHIP Reauthorization Act (MACRA) in order to create a pathway toward value-based care. MACRA established the Quality Payment Program (QPP) to incentivize surgeons and other clinicians to focus on increasing quality and efficiency in traditional fee-for-service (FFS) Medicare and, ultimately, to transition to Advanced Alternative Payment Models (AAPMs).⁵

Participation in AAPMs can reward clinicians with incentive payments for performing well on quality and cost metrics and exempt them from certain CMS reporting requirements. An important feature of AAPMs is that the qualified participants must share a level of financial risk associated with participation. This feature is thought to incentivize participants to actively seek ways to lower the cost of providing care. That risk, however, is paired with quality incentives, which aim to push the quality of care delivered higher, thus providing a higher level of value to the care provided.6

One common type of AAPM is the bundled care model, which in its most basic level, combines reimbursements for charges for a defined episode of care into a single payment. Bundled payments can be applied either prospectively or retrospectively to either Medicare Part A charges (hospital services) or Medicare Part B charges (physician services); alternatively, it can combine payments for both Parts A and B.

CMS has tested several bundled payment models for surgical care in recent years, and currently two CMS models are in operation—the Bundled Payments for Care Improvement Advanced (BPCI-A) Model and the Comprehensive Care for Joint Replacement Model. Most previous models tested by the CMS Innovation Center have not resulted in net savings for Medicare, but some have reduced the cost of care without adversely impacting quality scores.⁷

For example, the BPCI Model (predecessor to the current BPCI-A) did reduce the cost of healthcare delivery for participants, but on average, CMS spent more money on incentive payments and administering the program than it saved in reduced charges. TEAM is built on the lessons learned from earlier models and is designed to overcome some of their perceived shortcomings to achieve meaningful cost savings

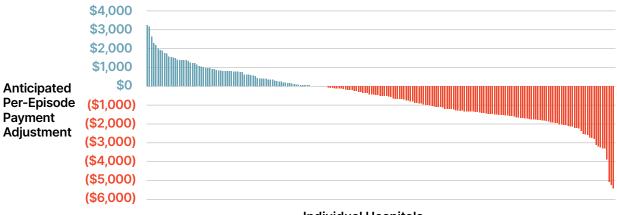
while incentivizing better care coordination between hospitals and clinical teams.

Three Tracks for Participation

TEAM offers three tracks for participation with varying financial upside and downside risk levels depending on hospital characteristics.8 By bundling inpatient and outpatient care together, CMS hopes to facilitate increased cooperation between acute care hospitals, outpatient providers, clinicians, and skilled nursing facilities to improve on cost savings seen with BPCI-A. The quality score methodology has been updated, including more measures than the BPCI, although it still lacks true episode-specific outcome measures and patientreported outcome measures for most episodes—the addition of which may improve sensitivity for changes in patient outcomes under the model.

Figure.

Financial Impact of TEAM for Hospitals with 300+ Qualifying Cases



Individual Hospitals

Credit: Institute for Accountable Care

Table 1.

Calculation of Hypothetical Reconciliation Amount

Episode Type (DRG)	Average System Spending Per Episode	Average Target Reconciliation	Total Episodes	System Aggregate Spending	Reconciliation Aggregate	Reconciliation Amount
CABG (231)	\$48,500	\$47,200	70	\$3,395,000	\$3,304,000	-\$91,000
LEJR (470)	\$25,325	\$22,789	100	\$2,532,500	\$2,278,900	-\$253,600
SHFFT (482)	\$40,100	\$38,525	120	\$4,812,000	\$4,623,000	-\$189,000
Spinal Fusion (455)	\$45,627	\$41,256	110	\$5,018,970	\$4,538,160	-\$480,810
Major Bowel Procedure (331)	\$30,254	\$33,652	95	\$2,874,130	\$3,196,940	\$322,810
Aggregate Amounts				\$18,632,600	\$17,941,000	-\$691,600

Under TEAM, hospitals, surgeons, and downstream providers continue to bill feefor-service throughout the year. Before the beginning of the performance year, CMS issues preliminary target prices for each Diagnosis Related Group (DRG) for the health system to measure itself against. These preliminary episode targets are determined prospectively using regional prices for covered episode types and related DRGs during a weighted 3-year baseline (benchmark period), and are recalculated annually.

CMS does additional manipulation, including capping these preliminary regional target prices at the 99th regional percentile, normalizing them toward the national risk-adjusted mean, and applying a trend factor to adjust preliminary prices in the direction that regional prices have trended in the benchmark period. The target price is further reduced by a discount factor of 2% for LEJR, SHFFT, and Spinal Fusion episodes and 1.5% for the CABG and Major Bowel Procedure episodes.9 This discount factor builds in savings for the Medicare program but means that participants will need to be more efficient to succeed.

The agency will carry out a

retrospective reconciliation on claims after the end of each performance year. This process takes the initial preliminary target price and applies risk-adjustment factors and quality measures to generate a reconciliation price. The actual dollar amount billed for the episode during the performance year is then subtracted from the reconciliation amount, providing the model with its incentive to reduce costs.10 Table 1 on this page provides an example of how this reconciliation process might look for a theoretical hospital for one DRG across all five episode categories.

In this example, the hospital was inefficient and, on average, was more expensive in CABG, LEJR, spinal fusion, and SHFFT, but beat target prices in major bowel procedures. The combined effect is a net loss compared to the target. The fictional LEJR data will be carried through the rest of this article to demonstrate mechanisms contained within the model for reconciliation and quality adjustment.

Model Is Risk-Adjusted

Risk adjustment is calculated for each individual episode, with different components for each surgical category. This risk adjustment is composed of hospital characteristics, patient characteristics, and specific high-risk diagnosis codes that the patient may have received in the period 3 months prior to the episode start date. Coefficients for each risk factor are calculated annually by CMS through a national linear regression model to identify the expected marginal impact of each risk factor. The risk-adjusted reconciliation target prices are then normalized with national data from the participation year. A retrospective trend factor also is applied to account for increasing or decreasing prices.11

Hospital Participation Tracks

Each of the three tracks have different levels of quality modification, final reconciliation modification, and eligibility criteria. Track 1 allows for upside benefit capped at 10% of the aggregate target price through reconciliation and quality modification with no downside risk. This is the default track for all hospitals in 2026 (performance year 1). Only safety net hospitals are eligible for track 1 in performance years 2 and 3.

Track 2 carries both a limited financial upside and risk for penalties which are capped

Table 2.

Quality Metrics, Volume Weighting, and Composite Quality Score:
LEJR in Model Year 2

Year of Relevance	Quality Measure	Quality Measure Score Percentile	Volume of Episodes	Normalized Weight	Weighted Scaled Score
All Episodes All Years	PSI 90	80	395	0.24	19.2
All Episodes All Years	Hybrid Hospital-Wide Readmission	30	395	0.24	7.2
Model Years 2-5	Postoperative Respiratory Failure	50	395	0.24	12
Model Years 2-5	Failure to Rescue	98	395	0.24	23.52
LEJR Only	THA/TKA/Pro-PM	70	100	0.06	4.2
	Composite Quality Score		1,680	1	66.12

at 5%. This track is available in performance years 2 through 5 for Medicare-dependent hospitals, rural hospitals, safety net hospitals, sole community hospitals, and essential access community hospitals. Track 2 is available for all hospitals for all performance years and is the default track for years 2 through 5 for hospitals that don't qualify for tracks 1 or 2.

Track 3 carries the highest amount of financial risk during reconciliation, but also allows for the highest level of financial rewards with both capped at 20% of the aggregate reconciliation amount.¹²

Quality Score Calculation

After calculating the reconciliation amount, CMS applies a quality score modifier to change the final reimbursement or repayment amount. The components of the quality score are listed in Table 2 on this page. The raw quality measure scores are then scaled using national percentile metrics, including all TEAM and non-TEAM participants. The scaled quality scores of each measure are then weighted per institution and summed to determine the

hospital's composite raw quality score (see Table 3, page 39).¹³

For track 1, the quality score can adjust reconciliation payments by a maximum of 10% for a positive reconciliation amount or a minimum of 0% for a negative reconciliation amount. Similarly, the reconciliation amount in track 2 can be adjusted up to a maximum of 10% or a minimum of -15% and in track 3 up to a maximum of 10% or a minimum of -10%. These financial benefits and risks laid out in TEAM are applied by CMS at the hospital level but are allowed to be shared with providers (downstream participants) within the parameters set by the model. If downstream participants participate in gainsharing or loss-sharing agreements TEAM can qualify as a MIPS-APM or an AAPM, incentivizing participation by surgeons.14

Final Reconciliation Amount

After CMS calculates the reconciliation target price (as described in the risk adjustment section), they modify this price by multiplying it by the composite quality score percent modifier. This price is then subtracted

from the original reconciliation amount to get the quality-adjusted reconciliation amount (QARA) (see Table 3, page 39). The QARA stop-gain and stop-loss capping is based on track. Track 1 reconciliation payments are capped at 10% gain and 0% loss against the aggregated reconciliation target prices (NPRA) (see Table 4, page 39). Track 2 is capped at 5% gain or loss. Track 3 is capped at 20% gain and 20% loss.15 This final amount is referred to as the net reconciliation payment amount and is paid to the hospital if positive or is owed to CMS if negative.

Bottom Line

The quality score is a tool that will help hospitals to benchmark themselves against other institutions and improve patient outcomes but ultimately, it is unlikely to make or break financial success under TEAM. Most of the revenue to be made or lost during reconciliation will come from staying under the preliminary target prices issued by CMS, and by having a favorable risk factor profile. The quality modification in the model serves to adjust positive reconciliation amounts downward (with higher quality scores causing decreased reductions in payments), or to adjust negative reconciliation amounts upward (with higher quality scores leading to increased reductions in payments owed back to CMS). Institutions that will be the most financially successful under TEAM will have to find ways to reduce costs of care in the inpatient and outpatient settings or postdischarge, while also achieving acceptable quality results.

The model also includes measures to help streamline the care continuum. Participants will be required to ensure primary care referrals upon discharge (and may partner with ACOs through gain/loss-sharing to encourage alignment of financial incentives), and the model eliminates the "3-day rule" for qualification for subacute rehab.

Finally, after model year 1, TEAM offers a long overdue voluntary decarbonization and waste reporting initiative with individualized feedback, as well as mandatory equity reporting. While the ACS has called for more meaningful quality measurement and other positive changes to the model, TEAM does represent a step toward the type of more patient-centered

care for which the organization has advocated.

By creating shared goals and incentives for surgeons, hospitals, postacute care, and the full slate of physicians and clinicians involved in each care episode, the model has the potential to cut through the confusion created by myriad competing quality and payment incentives currently in place. If TEAM manages to focus facilities and providers on shared quality goals to succeed, it could create a powerful incentive for hospitals to invest in important patient safety and quality

Table 3. **QARA Calculation Based on Hypothetical Reconciliation Amounts**

Track	Reconciliation Amount	Composite Quality Score	Adjustment Amount	Adjustment % Calculation	Adjustment %	Quality Adjustment Amount	Quality Adjusted Reconciliation Amount
Track 1	\$16,000.00	66.12	Maximum 10%	AA – AA x (CQS/100)	3.39%	\$542.08	\$15,457.92
Track 1	-\$16,000.00	66.12	N/A	N/A	N/A	N/A	-\$16,000.00
Track 2	\$20,000.00	100	Maximum 10%	AA – AA x (CQS/100)	0%	\$0.00	\$20,000.00
Track 2	-\$18,000.00	100	Maximum 15%	AA x (CQS/100)	15%	-\$2700.00	-\$15,300.00
Track 3	\$30,000.00	66.12	Maximum 10%	AA – AA x (CQS/100)	3.39%	\$1,016.40	\$28,983.60
Track 3	-\$24,000.00	66.12	Maximum 10%	AA x (CQS/100)	6.61%	-\$1,586.88	-\$22,413.12

Table 4.

Net Payment Reconciliation Amount:

Based on QARA Calculations

from Table 3

Track	QARA	Limits
Track 1	\$15,457.92	Stop Gain 10%: \$1,545.79
Track 1	-\$16,000.00	Stop Loss 0%: - \$0.00
Track 2	\$20,000.00	Stop Gain 5%: \$1,000
Track 2	-\$15,300.00	Stop Loss 5%: - \$765.00
Track 3	\$28,983.60	Stop Gain 20%: \$5,796.72
Track 3	-\$22,413.12	Stop Loss 20%: - \$4,482.62

Participating hospitals should begin preparing for the arrival of TEAM as soon as possible.

initiatives that are frequently not prioritized in fee-for-service payment models.

What's Next?

Participating hospitals should begin preparing for the arrival of TEAM as soon as possible. While CMS has not yet offered definite rules on some of the finer details, surgeons and hospitals can take steps today to ensure success from day 1.

The first step is to gain an understanding of how the model works, which will dictate how well participants are able to anticipate its effects on their systems. Participants should begin to study their own case volumes to identify the areas and service lines most likely to be affected. For example, a hospital specializing in lower extremity joint replacement that does not have cardiac surgery should focus

on understanding their patient demographics and individual risk factors that are associated with LEJR, as well as their performance on those quality components.

On the inpatient side, hospitals should begin to evaluate their care pathways for specific DRGs to identify opportunities for improvement. In the postdischarge phase of care, hospitals should begin to collaborate with postacute care facilities to engage in the same care analysis.

The ACS in cooperation with Brandeis University and the IAC has developed initial regional reports to help ACS members and quality partners understand how their facilities might be financially impacted based on the criteria in the IPPS final rule. The College also is exploring options for more

detailed, individualized reports that would include estimates of the target prices for each eligible episode category, as well as risk profiles and quality scores for each quality partner. These reports would be generated based on claims data obtained from CMS's Virtual Research Data Center and could be further broken down into individual quality score components, as well as provider-level information. The ACS will continue looking for ways to help its members and their hospitals succeed in the transition to team-based, valuedriven care. 13

Dr. Geoffrey Hobika is a PGY2 surgical resident at the University at Buffalo in NY. He is spending his protected academic research time as an ACS Clinical Scholar and studying surgical health policy.

References

- Are you ready for TEAM—Medicare's mandatory bundled payment model? Build your strategy with IAC's hospital opportunity analysis reports. Available at: https://www. institute4ac.org/wp-content/uploads/2024/09/IAC-TEAM-Report_2-Pager_091224.pdf. Accessed October 1, 2024.
- 2. Department of Health and Human Services. Centers for Medicare & Medicaid Services. Medicare and Medicaid Programs and the Children's Health Insurance Program; Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long-Term Care Hospital Prospective Payment System and Policy Changes and Fiscal Year 2025 Rates; Quality Programs Requirements; and Other Policy Changes. Federal Register. 42 CFR Parts 405, 412, 413, 431, 482, 485, 495, and 512. P. 8734. Available at: https://www.federalregister.gov/ documents/2024/08/28/2024-17021/medicare-and-medicaidprograms-and-the-childrens-health-insurance-programhospital-inpatient#p-8734. Accessed December 9, 2024.
- 3. Department of Health and Human Services. Centers for Medicare & Medicaid Services. Medicare and Medicaid Programs and the Children's Health Insurance Program; Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long-Term Care Hospital Prospective Payment System and Policy Changes and Fiscal Year 2025 Rates; Quality Programs Requirements; and Other Policy Changes. Federal Register. 42 CFR Parts 405, 412, 413, 431, 482, 485, 495, and 512. P. 8849. Available at: https://www.federalregister.gov/documents/2024/08/28/2024-17021/medicare-and-medicaid-programs-and-the-childrens-health-insurance-programhospital-inpatient#p-8849. Accessed December 9, 2024.
- 4. Kamal R, McDermott D, Ramirez G, Cox C. How has US spending on healthcare changed over time? Peterson-Kaiser Health System Tracker. December 23, 2020. Available at: https:// www.healthsystemtracker.org/chart-collection/u-s-spendinghealthcare-changed-time/. Accessed December 9, 2024.

- Centers for Medicare and Medicaid Services. Quality Payment Program Overview. Available at: https://qpp.cms.gov/about/ qpp-overview. Accessed December 9, 2024.
- Centers for Medicare and Medicaid Services. Advanced APM's Overview. Available at: https://qpp.cms.gov/apms/advanced-apms. Accessed December 9,2024.
- Congressional Budget Office. Federal budgetary effects of the activities of the Center for Medicare & Medicaid Innovation. September 28, 2023. Available at: https://www.cbo.gov/ publication/59612. Accessed December 9, 2024.
- Department of Health and Human Services. Centers for Medicare & Medicaid Services. Medicare and Medicaid Programs and the Children's Health Insurance Program; Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long-Term Care Hospital Prospective Payment System and Policy Changes and Fiscal Year 2025 Rates; Quality Programs Requirements; and Other Policy Changes. Federal Register. 42 CFR Parts 405, 412, 413, 431, 482, 485, 495, and 512. P. 8751. Available at: https://www.federalregister.gov/ documents/2024/08/28/2024-17021/medicare-and-medicaidprograms-and-the-childrens-health-insurance-programhospital-inpatient#p-8751. Accessed December 9, 2024.
- Department of Health and Human Services. Centers for Medicare & Medicaid Services. Medicare and Medicaid Programs and the Children's Health Insurance Program; Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long-Term Care Hospital Prospective Payment System and Policy Changes and Fiscal Year 2025 Rates; Quality Programs Requirements; and Other Policy Changes. Federal Register. 42 CFR Parts 405, 412, 413, 431, 482, 485, 495, and 512. P. 8858. Available at: https://www.federalregister.gov/ documents/2024/08/28/2024-17021/medicare-and-medicaidprograms-and-the-childrens-health-insurance-programhospital-inpatient#p-8858. Accessed December 9, 2024.
- 10. Department of Health and Human Services. Centers for Medicare & Medicaid Services. Medicare and Medicaid Programs and the Children's Health Insurance Program; Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long-Term Care Hospital Prospective Payment System and Policy Changes and Fiscal Year 2025 Rates; Quality Programs Requirements; and Other Policy Changes. Federal Register. 42 CFR Parts 405, 412, 413, 431, 482, 485, 495, and 512. P. 8892. Available at: https://www.federalregister.gov/ documents/2024/08/28/2024-17021/medicare-and-medicaidprograms-and-the-childrens-health-insurance-programhospital-inpatient#p-8892. Accessed December 9, 2024.
- 11. Department of Health and Human Services. Centers for Medicare & Medicaid Services. Medicare and Medicaid Programs and the Children's Health Insurance Program; Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long-Term Care Hospital Prospective Payment System and Policy Changes and Fiscal Year 2025 Rates; Quality Programs Requirements; and Other Policy Changes. Federal Register. 42 CFR Parts 405, 412, 413, 431, 482, 485, 495,

- and 512. P. 8892. Available at: https://www.federalregister.gov/documents/2024/08/28/2024-17021/medicare-and-medicaid-programs-and-the-childrens-health-insurance-program-hospital-inpatient#p-8892. Accessed December 9, 2024.
- 12. Department of Health and Human Services. Centers for Medicare & Medicaid Services. Medicare and Medicaid Programs and the Children's Health Insurance Program; Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long-Term Care Hospital Prospective Payment System and Policy Changes and Fiscal Year 2025 Rates; Quality Programs Requirements; and Other Policy Changes. Federal Register. 42 CFR Parts 405, 412, 413, 431, 482, 485, 495, and 512. P. 8751. Available at: https://www.federalregister.gov/ documents/2024/08/28/2024-17021/medicare-and-medicaidprograms-and-the-childrens-health-insurance-programhospital-inpatient#p-8751. Accessed December 9, 2024.
- 13. Department of Health and Human Services. Centers for Medicare & Medicaid Services. Medicare and Medicaid Programs and the Children's Health Insurance Program; Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long-Term Care Hospital Prospective Payment System and Policy Changes and Fiscal Year 2025 Rates; Quality Programs Requirements; and Other Policy Changes. Federal Register. 42 CFR Parts 405, 412, 413, 431, 482, 485, 495, and 512. P. 9005. Available at: https://www.federalregister.gov/ documents/2024/08/28/2024-17021/medicare-and-medicaidprograms-and-the-childrens-health-insurance-programhospital-inpatient#p-9005. Accessed December 9, 2024.
- 14. Department of Health and Human Services. Centers for Medicare & Medicaid Services. Medicare and Medicaid Programs and the Children's Health Insurance Program; Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long-Term Care Hospital Prospective Payment System and Policy Changes and Fiscal Year 2025 Rates; Quality Programs Requirements; and Other Policy Changes. Federal Register. 42 CFR Parts 405, 412, 413, 431, 482, 485, 495, and 512. P. 8764. Available at: https://www.federalregister.gov/documents/2024/08/28/2024-17021/medicare-and-medicaid-programs-and-the-childrens-health-insurance-programhospital-inpatient#p-8764. Accessed December 9, 2024.
- 15. Department of Health and Human Services. Centers for Medicare & Medicaid Services. Medicare and Medicaid Programs and the Children's Health Insurance Program; Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long-Term Care Hospital Prospective Payment System and Policy Changes and Fiscal Year 2025 Rates; Quality Programs Requirements; and Other Policy Changes. Federal Register. 42 CFR Parts 405, 412, 413, 431, 482, 485, 495, and 512. P. 9038. Available at: https://www.federalregister.gov/ documents/2024/08/28/2024-17021/medicare-and-medicaidprograms-and-the-childrens-health-insurance-programhospital-inpatient#p-9038. Accessed December 9, 2024.



Dr. Scott Roth

2023 Changes in Hernia CPT Codes Bring Intended and Unintended Consequences

J. Scott Roth, MD, FACS Blake C. DiPaola Margaret A. Plymale, DNP, RN Daniel L. Davenport, PHD PHYSICIAN PAYMENTS FOR professional services are long overdue for an overhaul. Healthcare policies written by US Congress provide the structure by which physicians receive payment through the Supplementary Medical Insurance Trust Fund often referred to as Medicare Part B.

Since the time of implementation of the Medicare Fee Schedule in 1992, inflationary adjustments to the fee schedule have been infrequent, resulting in costs associated with physician practices to outpace Medicare payments.

According to American Medical Association (AMA) estimates, 2024 payments adjusted for inflation are 29% less than payments in 2006. Although many factors have contributed to these payment reductions, the physician fee schedule is not linked to the Medicare Economic Index, causing a lack of inflationary adjustments annually.

This reality is further complicated by the Omnibus Budget Reconciliation Act of 1989, which specified that any projected increase in Medicare spending exceeding \$20 million is to be offset by other budget cuts. In an era in which Medicare enrollees have expanded at

record levels due to the Baby Boomer generation, healthcare expenses are a critical issue for the federal government. Healthcare expenses remain a frequently discussed policy issue due to the predicted shortfall in the Medicare Hospital Insurance Trust Fund as soon as 2036.

The Centers for Medicare & Medicaid Services (CMS) is tasked with identification of misvalued codes each year. Among the series of existing hernia codes, CPT 49565 was identified as a procedure in which the primary site of service changed from the inpatient to the outpatient setting.

Inherent in a Current Procedural Terminology (CPT) code is not only the operative time, but also the inpatient and outpatient visits. As hernia repairs were increasingly performed outpatient, the inpatient hospital visits associated with the procedure were identified as a potential source for physician overpayment. As a result, the entire family of ventral hernia codes, both open and laparoscopic, was subject to a review of the global physician work to accurately determine the time and effort for each code and accordingly determine the value and payment for each code.

Additionally, in 2015, CMS finalized a policy that would transition 90-day and 10-day global procedural codes to 0-day global procedures to curtail expenditures, stemming from inaccuracies in postoperative visits relative to the number of visits bundled into the payment for many common surgical codes. While this policy was never implemented, it was a culmination of these circumstances that resulted in the changes to the CPT codes for anterior abdominal wall hernia repairs.

Prior to 2023, CPT codes for ventral hernia repair included four codes for open ventral hernia repair and six laparoscopic codes, based on prior repairs and presence or absence of incarceration. An "add-on" code was used for open procedures in which mesh was placed, whereas the placement of mesh was not separately reportable for laparoscopic repairs as mesh placement was deemed inherent at the time of code creation.

These now-legacy codes had been valued by the Resource-Based Relative Value Scale Update Committee (RUC) as 90-day global procedures, thus bundling the work of *All specific references to CPT codes and descriptions are © 2024 American Medical Association. All rights reserved. CPT is a registered trademark of the American Medical Association the day of the procedure and 90 postoperative days into a single payment.

Due to the change in site of service for ventral hernia repair, CMS planned to survey and reassess the value of the existing codes. As a response, the surgical advisors to the AMA CPT Editorial Panel created a new series of codes to better represent the work of ventral hernia repair.

The newly created codes implemented in 2023 include six primary ventral hernia codes and six recurrent ventral hernia codes distinguished by size and incarceration status (see Table, page 45). As the use of mesh was considered standard practice, the work of mesh placement was included within the code descriptions for all ventral hernia repairs.

Additionally, an add-on code for mesh removal was created to address the time and effort to remove a prior mesh. The new codes were created based on hernia characteristics rather than technical approach, thus unifying coding among open, laparoscopic and robotic approaches.

The new codes also specified two new codes for parastomal hernia repair, previously coded as an incisional hernia. Furthermore, recognizing the heterogeneity in hernia postoperative recovery along with the awareness of CMS's interest in addressing potential overpayment associated with postoperative care for surgical

procedures, the new codes were created as 0-day global procedures. Accordingly, the ventral hernia codes allow for postoperative inpatient and outpatient patient visits to be coded using evaluation and management (E/M) codes.

Following the new CPT code creation in 2023, the codes were valued by the AMA RUC based on survey data, and work relative value units (wRVUs) were assigned accordingly (see Table, page 45). Compared to the 2022 codes, the wRVU values in 2023 for the technical component of the hernia repair saw reductions in total wRVU values for many procedures, although several of the more complex procedures received higher valuations.

For example, larger hernia defect size is now given a higher wRVU due to the addition of CPT codes differentiated by defect size. However, the total wRVU for a procedure inclusive of postoperative visits was difficult to predict due to the variability in the length of hospitalization and postoperative office visits among hernia repair patients.

Significance of Hernia CPT Code Changes

In the study by DiPaola et al. published in the *Journal of the American College of Surgeons* in October 2024, the impact of the hernia CPT code changes to the wRVUs for ventral hernia repairs at a tertiary care referral

center was compared between 2022 and 2023. The wRVU value was chosen as a representative of payment as many surgeons are compensated based on wRVUs generated, although wRVUs represent only a portion of the total RVUs for a procedure.

Payment from CMS is based on the calculation of a conversion factor adjusted annually, \$33.29 in 2024. In this study, most of the hernia repairs were performed with an open technique, approximately half of the procedures involved myofascial advancement flaps or component separation techniques, 9% of the procedures involved parastomal hernias, and more than half of the hernias were greater than 10 cm in greatest dimension.

The wRVUs generated from the primary procedural code, addon codes, and E/M codes within the first 90 postoperative days were compared between the two cohorts. Highest wRVU codes were at 100% value, secondary procedures were adjusted to 50% of the code value, and addon codes were assigned 100% of the wRVU value, consistent with typical payer practices. Upon comparison, the wRVUs associated with the primary ventral hernia repair codes pre-2023 were less than the total wRVUs in the post-2023 cohort.

However, the deletion of CPT code 49568 (placement of mesh) in 2023 resulted in less wRVUs associated with the procedure in the 2023 cohort. The new

Table. Hernia CPT Codes with Associated wRVU Values

CPT Code	Description	Unadjusted wRVUs
2022 CPT code		
Open approach		
49560	Repair ventral hernia initial reducible	11.92
49561	-	
49565	Re-repair ventral hernia reducible	12.37
49566	Re-repair ventral hernia incarcerated/strangulated	15.53
49570	Repair epigastric hernia reducible	6.05
Adjunct procedure		
49568	Mesh placement	4.88
49572	Repair epigastric hernia incarcerated/strangulated	7.87
49585	Repair umbilical hernia reducible >5 years old	6.59
49587	Repair umbilical hernia incarcerated/strangulated >5 years old	7.08
49590	Repair Spigelian hernia	8.90
Laparoscopic approach		
49652	Laparoscopic ventral hernia repair initial	11.92
49653	Laparoscopic ventral hernia repair initial complicated incarcerated/strangulated	14.94
49654	Laparoscopic incisional hernia repair	13.76
49655	Laparoscopic incisional hernia repair complicated	16.84
49656	Laparoscopic Recurrent incisional hernia repair	15.08
49657	Laparoscopic Recurrent incisional hernia repair complicated	22.11
2023 CPT code	Description	wRVU
Initial		
49591	Repair anterior abdominal hernia 1st <3 cm reducible	5.96
49592	Repair anterior abdominal hernia 1st <3 cm incarcerated/strangulated	8.46
49593	Repair anterior abdominal hernia 1st 3-10 cm reducible	10.26
49594	Repair anterior abdominal hernia 1st 3-10 cm incarcerated/strangulated	13.46
49595	Repair anterior abdominal hernia 1st >10 cm reducible	13.94
49596	Repair anterior abdominal hernia 1st >10 cm incarcerated/strangulated	18.76
Recurrent		
49613	Repair recurrent anterior abdominal hernia <3 cm reducible	7.42
49614	Repair recurrent anterior abdominal hernia <3 cm incarcerated/strangulated	10.25
49615	Repair recurrent anterior abdominal hernia 3-10 cm reducible	11.46
49616	Repair recurrent anterior abdominal hernia 3-10 cm incarcerated/strangulated	15.55
49617	Repair recurrent anterior abdominal hernia >10 cm reducible	16.03
49618	Repair recurrent anterior abdominal hernia >10 cm incarcerated/strangulated	22.67
Parastomal hernia repair		
49621	Repair parastomal hernia reducible	13.70
49622	Repair parastomal hernia incarcerated/strangulated	17.06
Adjunct procedure		
•	Removal noninfected mesh during hernia repair	

2023 mesh removal add-on code resulted in a modest increase in wRVUs relative to the earlier cohort in which this code was not available.

Overall, the reduction in wRVUs associated with the mesh placement code was not fully offset by the additional payment associated with the newly created mesh removal code, explained by the high frequency of mesh placement relative to the far less frequently performed mesh removal. There also were notable differences in the wRVUs generated from postoperative visits both in the inpatient and outpatient setting. Average postoperative outpatient visits increased from 1.6 visits to 2.3 visits, and 12% of patients were billed for inpatient hospital stay days in 2023, an average gain of 0.9 wRVUs. Collectively, the culmination of the changes in CPT codes resulted in no difference in total wRVUs in the studied population.

While the 2023 codes did not significantly impact wRVUs in this study, this may not be generalizable to all hernia practices. This patient population was unique in that approximately half of the patients underwent concomitant component separation procedures (CPT 15734). Despite the 0-day global period for hernia repairs, when hernia repair is combined with a 90-day global period procedure, coding for postoperative visits is disallowed. This may have significantly impacted the median number of coded postoperative visits in the more contemporary group. Most patients in the study

underwent repair of hernias larger than 10 cm in greatest dimension with associated higher wRVU value. Accordingly, practices with a different mix of patients and hernia repair types are likely to see different results. Practices that more commonly repair small incisional hernias may be more likely to see reduced payments.

The 2023 size-based hernia codes require an intraoperative measurement of the hernia defect prior to opening the fascia. While there is potential to overestimate the size of the hernia defect, in this study, the percentage of hernia defects greater than 10 cm based upon intraoperative measurements correlated highly with the measurement of the hernia defect on preoperative computed tomography.

The new ventral hernia repair codes are impacting physician payment. The 15 new codes have helped to address some of the shortcomings associated with the previous coding scheme, but with some unintended consequences. Right sizing wRVU values for complex care is essential to ensure access for challenging patients. The 0-day global period allows for payment for complex or prolonged postoperative care, previously uncompensated. Nevertheless, the impact of the CPT code changes on patient access to care and the financial stability of surgical practices requires ongoing evaluation. (B)

Disclaimer

The thoughts and opinions expressed in this column are solely those of the authors and do not necessarily reflect those of the ACS.

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Bibliography

2024 Annual Report of the Board of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds. Available at: www.cms.gov/oact/tr/2024. Accessed December 20, 2024.

Childers CP, Maggard-Gibbons M. inaccuracies in postoperative inpatient stays assumed in the valuation of surgical RVUs. *Ann Surg.* 2021;273(1):13-18.

DiPaola BC, Mooney RE, Sairajeev SV, Butler L, et al. Impact of 2023 ventral hernia repair CPT code changes on work relative value units in a tertiary hernia referral center. *J Am Coll Surg*. October 9, 2024. doi: 10.1097/ XCS.0000000000001224. Epub ahead of print.

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New NQF Playbook Provides Guidance for Hospital-Onset Bacteremia

Lenworth M. Jacobs Jr., MD, MPH, FACS

The devastating impact of the ongoing war in Ukraine, which reignited in 2022, has caused significant challenges for healthcare workers who are doing their best to treat the wounded.

THE LOSS OF LIFE has been tragic. The use of drones to identify and target both injured soldiers and the frontline medical personnel taking care of them has resulted in significant delays in providing definitive care for the injured patients.

In previous conflicts, injured patients were immediately evacuated by helicopter to mobile Army surgical hospitals or forward surgical hospitals. In fact, the management of the injured soldier was very similar to the treatment that patients received in civilian trauma centers. It typically involved control of hemorrhage, extensive debridement of the nonviable tissue, and damage control surgery—which helps identify and control intra-abdominal bleeding and enteric contamination. Patients were immediately started on the appropriate antibiotic and airlifted to a regional medical center or military trauma center in the US.

Delays in treating and transporting patients, which has been a major compounding factor in the Ukrainian conflict, has demonstrated the importance of timely, rapid, and accurate diagnoses to treat life-threatening infections.

Currently, patients are usually moved at night (and later by train) to avoid being noticed and potentially fired upon by the drones. This delay can mean some patients are waiting anywhere from 16 to 24 hours from the time of injury to when they are appropriately treated. These setbacks can lead to prolonged contamination with bacteria from agrarian field contaminants.

Infection is a real problem in a patient who is hypotensive and has had significant hemorrhage. The chance of a systemic infection in this situation is then compounded by insufficient availability of antibiotics. The confluence of severe, hemorrhagic insults, hypotension, delays in evacuation, delays in transportation to definitive care, and unavailability of antibiotics has resulted in increased morbidity and mortality.

This array of factors has sharply focused the need to think about infection surveillance in healthcare-associated infections that patients can acquire while being treated in any acute care setting. The need for impactful guidance on how to proactively manage infections in healthcare, whether in conflict-laden regions or here at home in acute care settings, has never felt more important.

The National Quality Forum (NQF), an affiliate of The Joint Commission, has published a free resource that will help organizational leaders and care teams implement or improve hospital-onset bacteremia and fungemia (HOB) prevention,

identification, and treatment initiatives. These bloodstream infections—in which bacteria or fungal pathogens are detected by blood culture specimens collected on day 4 or later of a hospital admission—can worsen a patient's condition by potentially leading to sepsis and often can be fatal.

The resource, "Hospital-Onset Bacteremia and Fungemia Playbook," includes basic and advanced identification strategies, relevant examples of HOB management with supporting documentation, and a sample framework for HOB root cause analysis.

Learn more about the playbook on the NQF website at qualityforum.org/Publications/2024/9/Hospital-Onset_Bacteremia_and_Fungemia_Playbook.aspx. (3)

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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NCDB Publishes New Annual Report on Cancer Care

Elizabeth B. Habermann, PHD, MPH Courtney N. Day, MS Bryan E. Palis, MA Judy C. Boughey, MD, FACS

The first annual report on cancer trends and outcomes from the National Cancer Database (NCDB), "ACS Cancer Programs Annual Report from 2021 Participant User File," was published last month in the *Journal of the American College of Surgeons* (*JACS*).

THE ACS CANCER RESEARCH PROGRAM developed this introductory report to broadly distribute the information available in the NCDB (a hospital-based registry jointly sponsored by the ACS and the American Cancer Society), including the overall number of cancer cases in its 2021 participant user file (PUF), the frequency of different cancers and patient demographic, tumor, socioeconomic, and geographic characteristics associated with the most common solid malignancies. Within the initial report, information was provided specific to breast, colon, and pancreatic cancer.

The clinically focused narrative of these reports leveraged the strength of the NCDB to examine changes in practice and patient survival across a continuum ranging from more common to rare diseases. In contrast to the Surveillance, Epidemiology, and End Results (SEER) Program Annual Report to the Nation on the Status of Cancer—where the focus on rates and incidence draws from the population-based design of its set of registries¹—the NCDB annual reports will facilitate a more comprehensive view of how nearly 74% of cancer diagnoses are managed across 24% of all hospitals in the US.

Key metrics for quality improvement comprehensive of operative mortality, trends with in-patient stay, and how trends in first course treatment impact long-term outcomes stratified by biomarkers are all described in the report for its target audience. Clinicians and researchers may use the report to not only better understand trends, but also to generate broad hypotheses for topics of further investigation using the case-level PUF. The goal is for this to be the first of an ongoing series of reports describing the NCDB annual PUFs as they're released while highlighting different disease sites and cancer populations with each publication.

Breast Cancer

Breast cancer is the most common malignancy among women in the US. The NCDB captures 81.9% of breast malignancies with 264,095 adult cases of newly diagnosed breast cancer identified in 2021. Since diagnosis year 2004, there has been an

observed increase in early stage disease and slightly less advanced/metastatic disease, attributable to agesensitive changes with mammograms and screening guidelines.

The NCDB annual breast cancer report demonstrated that diagnoses made during 2018–2021 had a median age of 63, 99.2% women, with 74.8% identified as White. The insurance status of these breast cancer patients who visited a Commission on Cancer (CoC)-accredited hospital comprised of 47.5% of patients privately insured with only 6.8% on Medicaid, highlighting that differences in socioeconomic status may exist between accredited and nonaccredited hospitals.

Neoadjuvant systemic therapy has increased in use for early stage breast cancer. The use of neoadjuvant endocrine therapy has been shown to improve breast-conserving surgery rates in patients with ER+/HER2- breast cancer. Use of neoadjuvant endocrine therapy more than doubled from 3.3% and 3.6% prior to the pandemic to 7.7% in 2020. It also remained higher than baseline at 5.0% in 2021.

In patients who underwent mastectomy, the median inpatient stay was 24 hours between 2018 and 2021. Breast cancer generally has high survival rates, which is especially accurate in patients diagnosed with early stage and ER+/HER2- status.

Colon Cancer

Colon cancer impacts fewer than 30 in 100,000 men and women in the US.² While more common in older adults, individual risk factors may influence age at diagnosis.² The NCDB captures 73% of all newly diagnosed colon cancers, and in 2021, case details from 70,774 adult cases were collected.

This malignancy impacts both men and women equally, with most patients being diagnosed with stage II or III. There was a decrease in stage I diagnoses between 2004 (24%) and 2021 (20%) with a corresponding increase in stage IV disease during the same period, from 21% to 26%.

The 30-day operative mortality rate was 3.3%, with planned and unplanned readmission rates at 5.3% in 2021. Colon cancer was most commonly grade II (68.1%). Biomarker status remained stable from

Future reports will be released from each NCDB PUF and broadly focus on topics of contemporary practice guidelines, trends and outcomes with rare and common malignancies, and in different populations.

2018 to 2021 and included microsatellite instability (MSI) stable (77.8%), Kirsten rat sarcoma (KRAS) abnormal (43.3%), and carcinoembryonic antigen (CEA) positive (51.6%). Long-term 60-month survival rates were highest for stage I (>80%), KRAS normal (>40%), CEA negative (>70%), unstable high disease MSI (>65%).

Pancreatic Cancer

Pancreatic cancer is relatively rare, affecting 13 out of 100,000 persons³ and accounting for 3% of all cancers and 7% of all cancer deaths.⁴ In 2021, the NCDB collected data on 40,817 adult cases of newly diagnosed primary pancreatic cancer, representing 76.4% of all pancreatic cancers diagnosed in the US. The mean age of pancreatic diagnoses in 2021 was 70, with slight male predominance (51.9%). Nearly half of all diagnoses from 2021 were still stage IV.

However, there was an increase in stage I disease noted between 2004 (9%) and 2021 (28%). The use of chemotherapy in stage I tumors increased between 2017 and 2021, by nearly 10%. The median inpatient stay after surgery was 6 days in 2021, with planned and unplanned readmissions at 7.5%. Thirty-day operative mortality rates are 2.3%. Grade I and neuroendocrine tumors had the highest observed 60-month survival rates at approximately 64% and 53%, respectively.

The findings presented in this article represent only a select portion of the information presented in this first NCDB annual report. Future reports will be released from each NCDB PUF and broadly focus on topics of contemporary practice guidelines, trends and outcomes with rare and common malignancies, and in different populations.

These reports will provide broader access to aggregate findings from the more than 80 disease sites

captured in the NCDB, leveraging the clinical detail from accredited hospitals of the CoC, enhancing understanding of the most recent state of cancer diagnoses and care in the US. **(B)**

Dr. Elizabeth Habermann is a professor of health services research at the Mayo Clinic in Rochester, MN, where she also serves as deputy director of research in the Mayo Clinic Robert D. and Patricia E. Kern Center for the Science of Health Care Delivery and the Robert D. and Patricia E. Kern Scientific Director of the center's Surgical Outcomes Program. She is Chair of the ACS Cancer Data Modeling Committee.

References

- National Cancer Institute Surveillance, Epidemiology, and End Results Program Annual Report to the Nation on the Status of Cancer. Available at: https://seer.cancer.gov/report_to_nation/. Accessed on November 11, 2024.
- American Cancer Society. Key statistics for colorectal cancer. Available at: https://www.cancer.org/cancer/types/colon-rectal-cancer/about/key-statistics.html. Accessed on October 3, 2024.
- American Cancer Society (2024). Key statistics for pancreatic cancer. Available at: https://www.cancer.org/cancer/types/ pancreatic-cancer/about/key-statistics.html. Accessed on October 3, 2024
- Kennedy J. How common is pancreatic cancer? Pancreatic Cancer Action Network. Available at: https://pancan.org/news/ how-common-is-pancreatic-cancer/. Accessed on October 3, 2024.

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TQIP Conference Outlines Impact of Effective Communication on QI

Tony Peregrin

The 2024 Trauma Quality Improvement Program (TQIP) Annual Conference, held November 12–14 in Denver, Colorado, drew 2,300 in-person and 419 virtual attendees—the meeting's highest attendance in its 14-year history.







PARTICIPANTS experienced presentations describing the many facets of quality improvement in the trauma care setting. Two Executive Sessions addressed considerations for implementing trauma center activation fees and approaches for leveraging the financial value of trauma programs. Educational programming anchored to the meeting's theme, "Enhancing Quality through Communication," included hands-on improvisation workshops and an inspiring trauma survivor story.

On-demand registration remains open through April 14, 2025.

TQIP Update

"Communication in our space is a pain point," said Avery B. Nathens, MD, PhD, MPH, FACS, FRCSC, Medical Director of ACS Trauma Quality Programs. "You're here because you want to advance care in your hospitals by working better together as a team." He cited a 2022 study of the TQIP Mortality Reporting System that revealed nearly half (49%) of 395 deaths during a 2-year period had a communication-related opportunity for improvement.

Dr. Nathens described two approaches for developing a culture of safety in healthcare. The Safety I model assumes events unfold in a linear fashion and focuses on ensuring that as few occurrences as possible can go wrong, while the Safety II model assumes environments are unpredictable and that it is unrealistic to develop standard operating procedures for all potential scenarios.

"The Safety I approach features protocolized care in a fairly narrow bandwidth. It's tightly regulated. This might make sense in an environment that's highly predictable with low variability—

that's not our environment," explained Dr. Nathens, adding that the Safety II model, which is the more resilient approach, views humans as a resource (rather than the cause of problems) capable of an adaptive communication style.

Dr. Nathens also provided an update on trauma quality programs, starting with what he called a re-imagining of TQIP. "Our goal is to identify the clinical content that trauma centers can use to improve trauma care and get a better sense of how we can deliver the reports in a format that is much more actionable."

This approach is based on feedback culled from stakeholder interviews representing 60 different trauma centers. A notable long-term goal for the reports could include a transition from a hybrid model to a digital first model, he said, a move that would include additional stakeholder input.







Left: Dr. Zain Hashmi

Right: From left: Toni von Wenckstern, Dr. Patricia Turner, Dr. A. Britton Christmas, and Dr. Trey Eubanks. Moving from TQIP reports and data collection to the topic of Verification, Review, and Consultation Program standards, Dr. Nathens noted that this year was the first using the *Resources for Optimal Care of the Injured Patient (2022 Standards)*. An estimated 280 site visits have been conducted thus far, with more than 80% of those being reverification visits.

"These standards have been challenging to navigate for many of you, and we are doing our best to make sure there's clarity around those standards," he said.

He outlined content updates to the recently released Best Practices Guidelines for the Management of Trauma Brain Injury, and he offered a highlevel preview of the Best Practices Guidelines for the Management of Urological Injuries, which is under review and expected to be released in spring 2025.

Dr. Nathens also described the development of the ACS Stop the Bleed course (version 3), which will be available in the first quarter of 2025, and offers a focus on both rural and urban communities with more images and less verbiage to enhance engagement with international learners.

Positioning Your Trauma Center for Success

This year's Executive Track featured two sessions that offered strategies for achieving fiscal responsibility, managing resource allocation, and connecting quality improvement initiatives to economic growth.

"The financial insolvency of trauma centers is a population-health problem," said John W. Scott, MD, MPH, FACS, a trauma surgeon and associate professor of surgery in the Department of Surgery at the University of Washington in Seattle.

He also said that some states use taxes and fees to fund their trauma systems—but many do not. Trauma centers lose approximately \$1 billion annually, and 339 of 1,125 trauma centers closed between 1990 and 2005, often due to financial distress, leading to several trauma "access deserts" and likely increased mortality.

"The solution that came in 2002 is commonly referred to as 'trauma activation fees," said Dr. Scott.
"There's some promise and there's some peril regarding trauma activation fees. There's been a significant reduction in closures, and for many hospitals, the trauma center went from being a cost

center to a revenue center."

The fact that these fees are set by hospitals or states allows administrators to tailor them to specific needs based on the setting.

"So, have they worked? They work—but that's not the story you hear these days," said Dr. Scott, referring to mainstream media and peer-reviewed reports that suggest trauma activation fees often are applied when not indicated, outlier trauma centers are charging exorbitant prices, and other concerns.

To mitigate misconceptions regarding trauma activation fees, Dr. Scott recommended benchmarking trauma activation fees against other hospitals in the market and being fully transparent when justifying the fees charged by the center.

Notably, the ACS Board of Regents approved a statement in June 2024 regarding trauma activation fees, in which the College asserts that trauma activation fees are necessary for the viability of trauma centers to ensure optimal care for patients.

In a presentation that examined the benefits of avoidable interfacility patient transfers, Zain G. Hashmi, MD, FACS, assistant professor of surgery and director of teletrauma in the Division of Trauma and Acute Care Surgery at The University of Alabama at Birmingham, revealed that nearly 30 million Americans lack timely access to verified trauma centers.

"This reality leads to our current challenge where patients are initially evaluated at a nontrauma center and then transported to a Level I or Level II trauma center," he said. "A large proportion of these patients are rapidly discharged without any critical interventions. These constitute potentially preventable interfacility transfers or secondary over-triage."

According to Dr. Hashmi, 20%–50% of all trauma transfers are potentially avoidable, which is notable considering that estimates suggest transfer can cost anywhere from \$20,000 to \$65,000 per patient care episode.

"When you couple this with Dr. Scott's data showing that 1 in 7 trauma patients are at risk of catastrophic health expenditures, this incremental cost surpasses most of our patients' annual incomes, making matters much worse," he said, asserting that "simply adding more resources is not the solution—the solution, in one word, is communication."

He called for "purpose-driven communication" to curb potentially avoidable interfacility transfers, specifically through region-based solutions such as participation in the Rural Trauma Team Development Course from the ACS Committee on Trauma, development of subspecialty clinics for nontransferred patients, and enhanced implementation of teletrauma resources.

Jorie Klein, MSN, MHA, BSN, RN, director of the EMS/Trauma Systems Section of the Texas Department of State Health Services, discussed best practices for trauma centers to align with state leadership, specifically via monthly stakeholder calls organized by trauma center level, to discuss costs associated with trauma center readiness, trauma rule amendments, transfers, and region-specific issues.

In a presentation that defined the role of hospital system leadership in advancing trauma system growth, Nirav Patel, MD, FACS, vice chair for quality and patient safety at the University of Arizona College of Medicine in Phoenix, suggested following a reverse engineer model, which involves dismantling current processes to gain an understanding of the business side of hospital administration and provides opportunities to uncover inefficiencies.

"Lead from the bottom line," said Dr. Patel, underscoring the importance of periodizing top goals when making decisions. "Be micro-ambitious. We try to bite off too much, too fast. Pick your battles and have a phased, multidimension strategic plan."

Dollars and Sense

ACS Executive Director and CEO Patricia L. Turner, MD, MBA, FACS, provided opening remarks for the second Executive Session, stating that trauma quality verification effectiveness has been shown to reduce mortality by 25%.

"It is also more cost effective when patients are cared for in a Level I trauma center versus a center without a trauma designation," said Dr. Turner. "Having a plan is the best way to reduce mortality and reduce costs—and we want to help you do this. We hope that all of you will have conversations at your home institutions to help bring forward this notion of enhanced quality for everyone—for every patient at every institution."

The first step in determining a trauma center's value is to examine how administrators view it—as a cost center, a profit center, or a value center, according to A. Britton Christmas, MD, MBA, FACS, medical director of trauma at Atrium Health's F. H. "Sammy" Ross Jr. Trauma Center in Charlotte, North Carolina.

"A value center is what we really want to be because you're bringing more than just money to the table, but you have to know how to communicate that," said Dr. Christmas.

He described how quality improvement initiatives not only reduce mortality rates, but they also can lead to decreases in variable costs by improving resource use and aligning incentives.



"There's some promise and there's some peril regarding trauma activation fees."

Dr. John Scott



Jeff Evans

"This is where you adopt best practices, where your TQIP reports really come in, your guidelines, and standardization—the goal is to reduce errors and increase quality and efficiency," said Dr. Christmas.

One of the best approaches for achieving buy-in from administrators is to acknowledge when a quality improvement project fails to deliver results. "If you've got a quality initiative and it is not going well—dump it and walk away because what it'll also do is save your credibility when the next ask comes up," he said.

The two remaining presenters—Trey Eubanks, MD, FACS, president and surgeon-inchief at Le Bonheur Children's Hospital in Memphis, Tennessee, and Toni von Wenckstern, MS, RN, vice president of Trauma Service Line and Life Flight at Memorial Hermann Health System in Houston, Texas—provided the CEO's perspective for setting trauma center priorities, and offered practical approaches for making an effective pitch to the C-suite.

Keynote Address: Developing the Expeditionary Mindset

Jeff B. Evans, PA-C, a practicing emergency medicine physician assistant and expedition guide, delivered the 2024 TQIP Keynote Address in which he described the value of communication and teamwork as demonstrated by his experience guiding the first blind man to the top of Mount Everest.

After agreeing to lead
Erik Weihenmayer up the earth's
highest mountain, Evans was
discouraged by colleagues who
feared both would perish as a
result of the extreme altitude—
which can lead to oxygen
deprivation, increased heart rate,
and fatigue—as well as the risk of
frostbite and perilous falls.

There were many events during their arduous ascent that pushed both climbers to their physical and mental limits, but Evans described one incident in particular that demonstrated what he called the "expeditionary mindset," a style of leadership that is tethered to building trust among team members.

While it is fairly common to use climbing ladders to cross hazardous sections of Mount Everest, at one point, they were unable to use a ladder to cross one of the shorter gaps that was approximately 3 to 6 feet in length.

"When I encounter those, I usually just jump," said Evans, noting that Weihenmayer had no choice but to put faith in his guide and literally jump blindly across a crevasse that was thousands of feet deep.

"Trust is developed over time by sharing a difficult objective, whatever that may be. The worthy objectives are the ones that really take us to uncomfortable situations where we are forced to lean into each other and that is when trust is developed," he explained.

According to Evans, the expeditionary mindset approach to leadership duplicates the skills of the mountain guide to lead teams. Managers adhering to this model have the ability to adequately assess resources, consider how the team is acclimating as they move, recognize potential "storms" (stressors) that could impede progress, and then determine the best way to move forward in a safe and efficient way.

After an almost-3-month climb, the team made it to the top of Mount Everest where they spent a total of 20 minutes before beginning their descent.

"The view is completely overrated," joked Weihenmayer. But his wisecrack actually took on a new meaning for Evans regarding the secret to successful team building.

"Life doesn't take place on the summit. It takes place on the

Geralyn Ritter



sides of the 'mountain,'" he said. "On our journey, I learned a lot about trust and communication, but I didn't learn any of that during those 20 minutes on the summit. The sides of the mountain are where we fall down and that is where we stand back up, brush ourselves off, and recalibrate. It's when we check in with our people—are you good? Okay. Let's go."

Surviving Survival: The Trauma Patient Perspective

Geralyn Ritter was returning from a business trip in May 2015, when Amtrak 188 derailed just outside of Philadelphia. The crash killed eight individuals and injured hundreds more, including Ritter who suffered abdominal, chest, pelvic, and orthopaedic injuries so severe she was not expected to live.

In a matter of moments, Ritter went from being an influential senior executive at one of America's largest companies to an immobilized intensive care unit patient on a ventilator, completely dependent on others for her care.

"I had about six of my more-than-25 surgical procedures in the first 10 days, and I didn't realize how the survival journey was just getting started," admitted Ritter, who outlined ways her care could have been improved. Specifically, she suggested that enhanced counseling for postdischarge would have set realistic expectations for inpatient rehabilitation, pain management (level and duration), physical limitations/return to work, and mental health risks.

"One of the biggest surprises during my recovery had to do with the importance of focusing on mental health," she said. "I had started to think of myself as this collection of broken parts, and one of my doctors told me she recommends that all her trauma patients receive treatment for post-traumatic stress disorder (PTSD)."

Ritter asked caregivers to keep in mind that PTSD is "not often associated with accidental trauma—at least in the minds of the patients themselves—and that stigma around the condition persists." She also suggested helping patients find a balance between "optimism and cold hard realism" is essential for building resilience.

Using Improv to Improve Communication

After Michael Smith, MD, was given improv lessons as a surprise gift, he quickly realized the potential of incorporating those skills into his work as a physician and educator.

In 2018, Dr. Smith—an associate professor and academic hospitalist at the University of Nebraska Medical Center in Omaha—developed five workshops for faculty development at his institution, and since then, he has led hundreds of improv workshops for healthcare professionals across the US.

At the TQIP Annual Conference, Dr. Smith co-led three breakout sessions focused on enhanced interdisciplinary communication, communication in the trauma bay, and communication with families.

"The same skills that I use to create humor with my improv scene partners all come from connection," explained Dr. Smith. "I use those same skills in some of the most serious situations in the hospital, whether it's a palliative care discussion or a serious diagnosis discussion—



Dr. Michael Smith

those same skills help me connect with patients and build a reality together."

According to Dr. Smith, improv skills that can enhance communication in healthcare include the ability to ignore distractions and focus on the person in front of you, and enhanced active listening, which allows clinicians to temporarily deactivate the urge to share their own opinions in order to absorb what a patient or colleague is saying in the moment.

"People won't care about what you know—until they know that you care," he said.

The 2024 TQIP Annual Conference on-demand content (general and breakout sessions) will be available for both in-person and on-demand registrants this month.

The 2025 TQIP Annual Conference will take place November 8–10, in Chicago, Illinois. **B**

Dr. Thomas Varghese Is Named *JACS* Editor-in-Chief



FOR ONLY THE eighth time in the 119-year history of the *Journal of the American College of Surgeons (JACS*), the publication is welcoming a new Editor-in-Chief.

Cardiothoracic surgeon Thomas K. Varghese Jr., MD, MS, MBA, FACS, will formally step into the prestigious role on March 1, succeeding Timothy J. Eberlein, MD, FACS, who has served as *JACS* Editor-in-Chief since 2004.

"JACS is one of the world's oldest surgical scientific journals. There is an outstanding foundation of excellence built by all the prior Editors-In-Chief and the JACS editorial team," Dr. Varghese said.

Dr. Varghese is chief of the section of general thoracic surgery and professor (tenure track) in the Department of Surgery at the University of Utah Health in Salt Lake City, as well as chief value officer (inpatient and ambulatory) at the Huntsman Cancer Institute, also in Salt Lake City. His previous editorial positions include editorial board member and deputy editor of digital media and scholarship for *The Annals of Thoracic Surgery*, editorial board member for *Perioperative Care and Operating Room Management*, and editorial board member for *CTSNet*.

"In every aspect of my professional career and my involvement in journals and academic publishing, I've always looked through the lens of, 'How can we do better?', 'What are we learning?', 'How do we communicate this?', 'How do we learn from the

community around us?" said Dr. Varghese, who will begin shadowing Dr. Eberlein this month.

Vision for JACS

With an impressive vision for *JACS*, Dr. Varghese plans to create a space where those who are committed to improving surgical science can come together, learn from each other, and detail the new advances in the House of Surgery that will transform services, systems, and the lives of patients.

Recognizing that, for the first time in history, five different generations are together in the workplace, he acknowledged "generational themes" that require strategic consideration.

"People are living longer. People are retiring at later stages," Dr. Varghese said. "The older generations historically like things on paper, but they're embracing the digital formats. The younger generations never looked at anything in hard copy and prefer the digital formats. And then, of course, you throw in the disruptive technology—our smartphones—that we use ubiquitously for almost everything we do, from starting our cars to ordering groceries. Beyond all that, though, how do people best learn?"

Dr. Varghese is passionate about making *JACS* as user-friendly as possible by embracing digital media, bringing high-quality information to every reader, and further improving the quality of their interaction with the information.

"The key is to make sure we're flexible with all these different formats. It's really about delivering surgical expertise to your fingertips. That's the goal—to get the best of science in *JACS*, and then deliver it to our readers in the format they want, and that may change from time to time," he said.

Background

According to Dr. Varghese, everything about him is "a little bit unconventional." His journey to becoming a cardiothoracic surgeon and leader in academic publishing has not been straightforward.

"And honestly, I've enjoyed that. It's made for a challenging path at times, but I've always embraced the opportunities," he said.

Dr. Varghese was born in India and moved with his family to the US when he was just 1 year old. While growing up in the suburbs of Chicago, Illinois, he found a love of basketball. In fact, he dreamed of becoming a professional basketball player. Early in his high school playing years, though, he tore ligaments in his right knee and needed surgery. It was that encounter with the health system that opened his eyes. Dr. Varghese found himself fascinated by all the phases needed for a successful result—everything that happened before, during, and after the operation, and everyone who was involved in his care.

"That was my first exposure to the medical field," said Dr. Varghese. "The biggest thing I realized was it wasn't just the surgeon. It was the team. I lost count of the number of people who were involved in my care—from preoperative to the actual surgery to postoperative rehab recovery. That's when I started thinking about pursuing a career in the medical field."

Another change in his life occurred after his sophomore year in high school: Dr. Varghese and his family moved back to India. "So I grew up in the US as an immigrant and moved back to India as an immigrant," he shared.

He continued playing basketball in college and medical school, and was elected to several leadership positions, including captain of the basketball team, editor of the combined yearbook for the five colleges of the Government Medical College, Trivandrum— University of Kerala in India, and final-year medical school class president.

Dr. Varghese earned his medical degree from Trivandrum, Kerala, where he also completed his internship. He returned to the US after medical school, attending Northwestern University in Chicago for his general surgery residency and a research fellowship in the Division of Organ Transplantation, and then the University of Michigan in Ann Arbor for a cardiothoracic surgery fellowship. Dr. Varghese also earned a master of science degree in clinical investigation from Northwestern and an executive master of business administration degree from The University of Utah.

"Different perspectives and passionate debates will make our journal better."

Dr. Thomas Varghese

Along the way, Dr. Varghese developed a passion for academic publishing, which he says stems from his love of and respect for the scientific method: looking at a problem, concept, or phenomenon, developing a hypothesis, designing an experiment to test the hypothesis, examining the results, and then communicating to the world about what you found.

"That's the whole scientific method, and I am passionate about that process," he said.

Dr. Varghese revealed that his "superpower" is the fact that he has the greatest parents and amazing support from his wife and family. He credits much of his success and fortitude to the love and guidance he's received from them. For example, his mom always reminds him to make sure you're in a room where you're surrounded by people smarter than you.

"I've always used that as a basic core principle in my life. I've sought to surround myself with people much smarter than I am—people who are able to provide unique vantage points and different perspectives. And it's been critical, I believe, to my success," he said.

Another important life and professional lesson that Dr. Varghese learned from his parents is to be open to different viewpoints and perspectives that you may not have contemplated or that challenge you.

"Whatever your differences of opinion are, at the end of the day, celebrate or sit down with a cup of chai. Respect each other and come together. In science, that really benefits us, because you need contrarians. You need people to push back on what's going out there," explained Dr. Varghese. "Different perspectives and passionate debates will make our journal better, and we want to create an environment that becomes a destination for talented people to be able to share their science and thrive."

Service with the ACS

For the ACS, Dr. Varghese has served as a Governor-at-Large on the ACS Board of Governors (BoG), Chair of the BoG Nominating Committee for the Board of Regents, Vice-Chair of the BoG Best Practices Workgroup, member of the BoG Quality, Research, and Optimal Patient Care Pillar, member of the BoG Telehealth & Informatics Workgroup, and Utah Chapter Governor.

"Dr. Varghese's commitment to the advancement of surgical research and his extensive ACS involvement over the years has positioned him well to lead the *Journal of the American College of Surgeons*," said ACS Executive Director and CEO Patricia L. Turner, MD, MBA, FACS. "His vision will build upon the excellent work over the last 20 years by Dr. Tim Eberlein. We thank Dr. Eberlein for his many years of service and his important work on behalf of the *Journal*, and we welcome Dr. Varghese as we look to the next phase of scientific publishing encompassing all disciplines within the House of Surgery."

The first issue under Dr. Varghese's editorship is expected to publish in April 2025. **B**

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Call for Nominations for ACS Treasurer

THE ACS 2025 Nominating Committee of the Board of Regents (BoR) will accept nominations for the position of ACS Treasurer through **March 31, 2025.**

Responsibilities

The responsibilities of the position include:

- The Treasurer shall oversee, in conjunction with the Chief Financial Officer, the funds of the College under the supervision of the Finance Committee and shall make such reports to the Finance Committee, the BoR Executive Committee, and the BoR as may be required.
- The Treasurer will attend the meetings of the BoR and will have a reporting relationship with the Finance Committee and ACS Executive Director.
- The College shall purchase a bond or insurance coverage to ensure the faithful performance of the duties of the office of Treasurer. In the absence or inability to act as the Treasurer, the duties of the Treasurer shall be performed by such person and in such manner as the Finance Committee may direct.
- The Treasurer shall serve as the Chair of the Investment Subcommittee.
- The Treasurer shall serve an initial 3-year term and may serve a maximum of two 3-year terms.

Criteria for Consideration

The Nominating Committee of the Board of Regents (NCBR) will use the following guidelines when considering potential candidates:

- Loyal members of the College who have demonstrated outstanding integrity and medical statesmanship, along with impeccable adherence to the highest principles of surgical practice.
- Demonstrated leadership qualities that might be reflected by service and active participation on

ACS committees or in other components of the College.

- Nominees must have prior experience serving on a financial committee, preferably of a nonprofit organization; additional experience serving on an investment committee is desirable.
- Nominees must be able to read and understand financial statements and exhibit astute business
- Members of the NCBR recognize the importance of achieving representation of all who practice surgery.
- The ACS encourages consideration of women and other underrepresented minorities for all leadership positions.

Nomination Process

All nominations must include:

- A letter of nomination
- A current curriculum vitae
- A personal statement from the candidate detailing ACS service
- Name of one individual who can serve as a reference

Any attempt by a candidate or on behalf of a candidate to contact members of the NCBR will be viewed negatively and may result in disqualification. Applications submitted without the requested information will not be considered.

Nominations must be submitted by **March 31**, **2025**, via the online form at *www.surveymonkey*. *com/r/Treasurer25*. For more information, contact Ken Puttbach at kputtbach@facs.org. ①

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ACS Revises Statement on Physicians Acting as Expert Witnesses

THE ACS BOARD of Regents approved a revised Statement on the Physician Acting as an Expert Witness at its October 2024 meeting. An initial statement on the topic was released in 2000 and subsequently was revised in 2011

In today's medico-legal climate, expert witnesses, serving either the defendant or plaintiff, play an essential role. As a result, the Board of Governors Physician Competency and Health Workgroup charged an experienced and committed group of Fellows to revisit and update the ACS statement to reflect legal changes and evolving medical and social expectations.

The group reviewed the literature and statements from other organizations and sought the input of legal advisors.
Stanley W. Ashley, MD, FACS, the Frank Sawyer Professor of Surgery at Harvard Medical School in Boston, Massachusetts, and William Doscher, MD,

FACS, associate professor of surgery at Zucker School of Medicine at Hofstra/Northwell in Hempstead, New York, co-led the group.

"Through a process of informed and thoughtful consensus, we learned from each other and made significant revisions and additions to the existing document," Dr. Ashley said. "The revised statement should provide needed guidelines and a framework for Fellows choosing to play the essential role of expert witness."

Qualifications for Experts

While the core elements of the 2024 revised statement are familiar, there was a substantial focus on strengthening the language used for the recommended qualifications.

In the question of licensure, the revised statement notes that the physician expert witness "must" have a "a current, valid, and unrestricted state license to practice medicine at the time of the alleged occurrence," whereas earlier versions said "should." In addition, the statement explained that a witness must be a diplomate of a specialty board relevant to the subject matter of the case, and the 2024 revision is updated to align with ACS membership qualifications.

Remaining consistent are requirements for having accredited hospital privileges at the time of the procedure, familiarity with standards of care, and physician documentation and frequency of time serving as a witness.

Behavioral Guidelines

The behavioral guidelines retain the charge for physician experts to remain impartial, fair, and honest, exercising their expertise and experience to provide evenhanded and ethical testimony in the case.

The revised statement, however, provides additional

information on specifically not acting as a coach to witnesses, defendants, or plaintiffs in cases for which they have been called—they "should only provide facts and information and be a neutral educator that helps juries understand technical aspects of cases."

Reflecting the importance of the physician expert acting in accordance with ACS values, one of the notable additions is the inclusion of information on the ACS Central Judiciary Committee and a link to the ACS Expert Witness Affirmation. The College accepts complaints about expert witness testimony that may be in violation of its guidelines and qualifications, which could constitute a violation of one or more of its Bylaws and lead to disciplinary action.

Fellows are encouraged to review the revised statement

in its entirety. In addition, an article will be published in the *Journal of the American College of Surgeons* that will provide additional insight into the revision, as well as tips and pearls for those acting as expert witnesses.

The revised Statement on the Physician Acting as an Expert Witness and other ACS statements are available at facs.org/statements.

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Member News

Jea Directs Neurosurgery at OU Health



Andrew Jea, MD, MBA, MHA, FACS, is chair of the Department of Neurosurgery at The University of Oklahoma (OU) College of Medicine and clinical service chief at OU Health in Oklahoma City. A pediatric neurosurgeon, Dr. Jea has served as OU Health chief of pediatric neurosurgery since 2020. He also has held the positions of vice chair of the Department of Neurosurgery at the OU College of Medicine, residency program director, and interim chair of the department.

Libutti Leads Rutgers Cancer Institute



Steven K. Libutti, MD, FACS, has been named the inaugural William N. Hait Director of Rutgers Cancer Institute in New Brunswick, New Jersey. The position is named in honor of the institute's founding director. With the Cancer Center since 2017, Dr. Libutti also serves as senior vice president of oncology services for RWJBarnabas Health, and vice chancellor for cancer programs at Rutgers Biomedical and Health Sciences/School of Public Health.

Miller Chairs Dartmouth Orthopaedics



Anna N. Miller, MD, is chair of the Department of Orthopaedics at Dartmouth Hitchcock Medical Center and the Geisel School of Medicine at Dartmouth in Lebanon and Hanover, New Hampshire, respectively. Previously, Dr. Miller was the Jerome J. Gilden, MD Distinguished Professor and vice chair of orthopaedic surgery at Washington University School of Medicine in St. Louis, Missouri. She also served as inpatient medical director at Barnes-Jewish Hospital in St. Louis, Missouri, and was an adjunct associate professor in the departments of biomedical engineering and orthopaedic surgery at Wake Forest University School of Medicine in Winston-Salem, North Carolina.

Yorkgitis Is Chief of Acute Care Surgery in Indiana



Brian K. Yorkgitis, DO, PA-C, FACS, is chief of the Division of Acute Care Surgery in the Department of Surgery at the Indiana University School of Medicine in Indianapolis. Dr. Yorkgitis previously was an associate professor of surgery at the University of Florida (UF) and an acute care surgeon at UF Health Jacksonville. He also served as associate chair for community outreach for the Department of Surgery, associate director of UF Health TraumaOne Flight Services, medical director of pediatric trauma and the PICU at UF Health Jacksonville, and associate medical director of adult trauma.



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.

Telem Is SAGES President-Elect



Dana A. Telem, MD, MPH, was elected presidentelect of the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES). SAGES represents more than 7,000 surgeons who bring minimal access surgery, endoscopy, and emerging techniques to patients worldwide. Dr. Telem is the section head of general surgery, associate chair for quality and patient safety, and the Lazar J. Greenfield Professor of Surgery at Michigan Medicine in Ann Arbor.

Kennedy Takes Over Georgetown Surgical Oncology



Timothy J. Kennedy, MD, MBA, FACS, is the John S. Dillon Chair in Surgical Oncology and chief of surgical oncology at MedStar Georgetown University (GU) Hospital in Washington, DC. He also will serve as surgeon-in-chief at GU Lombardi Comprehensive Cancer Center. Previously, Dr. Kennedy was director of the Minimally Invasive Complex Surgical Oncology Program at the Rutgers Cancer Institute and a professor of surgery at Rutgers Robert Wood Johnson Medical School in New Brunswick, New Jersey.



Is your hospital ready for the new CMS Age Friendly Measure?

Beginning in January, hospitals participating in the Centers for Medicare & Medicaid Services (CMS) Hospital Inpatient Quality Reporting Program will have to comply with this new regulatory requirement.

The ACS Geriatric Surgery Verification Program (GSV) gives hospitals the tools to fulfill the requirements of the new measure while improving surgical care for older adult patients. GSV includes evidence-based practices that enable hospital teams to deliver optimal care and help patients achieve their care goals.



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Verification





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

ACS Cancer Programs Annual Report from 2021 Participant User File

Elizabeth B. Habermann, PhD, MPH, Courtney N. Day, MS, Bryan E. Palis, MA, and colleagues

This inaugural annual report from the National Cancer Database (NCDB) provides an overview of data in the 2021 adult Participant User Files (PUF), as well as the PUFs for breast, colon, and pancreatic cancer. The report summarizes new observations and recent trends of cancer diagnoses, patient demographics, and treatment.

Surgical Management of Penetrating Carotid Artery Injury: Preoperative Level of Consciousness Does Matter

Morihiro Katsura, MD, MPH, Dominik A. Jakob, MD, FACS, Kelly Boyle, MD, and colleagues

This study's findings suggest that preoperative level of consciousness may help in planning operative strategies for penetrating carotid artery injury. In patients with an initial Glasgow Coma Scale score of ≥9, definitive repair of the carotid artery, including arterial reconstruction with a graft, should be pursued instead of ligation.

Surgical Recovery through the Lens of Patients with Colorectal Disease: A Qualitative Study in an Enhanced Recovery after Surgery Setting

Yaxin Li, MSc, Rana Hajar, Leah Gramlich, MD, and colleagues

Surgical recovery from the patient perspective occurred throughout three phases and was multidimensional. The primary goal was returning to normal routines and activities, and the endpoint of recovery was not fixed but dynamic. Several factors were identified as promoters of either active or passive recovery.

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