Surgeon stewardship
of the opioid epidemic
COVER STORIES: ACS Resident and Associate Society:
Surgeon stewardship of the opioid epidemic

Surgeon stewardship of the opioid epidemic: An introduction
Nicolas J. Mouawad, MD, MPH, MBA, RPVI

The general surgeon’s role in enhancing patient education about prescription opioids
Madeline Torres, MD; Mariam Eskander, MD, MPH; Jenny Held, MD; Yu-Wei Chang, MD; and Jennifer Harris, MD, PhD

Postoperative opioid prescriptions:
How surgeons can alleviate the opioid crisis
Yewande Alimi, MD, MHS; Konstantinos P. Economopoulos, MD, PhD; Woodson Smelser, MD; April Tanner, MD; Monisha Sudarshan, MD, MPH; and Heidi Hon, MD

Surgeons and the opioid epidemic:
Treatment and education strategies for the practicing surgeon
Benjamin Flink, MD, MPH; Eileen M. Duggan, MD, MPH; Madalyn G. Neuwirth, MD; Lauren B. Nosanov, MD; Jacob A. Petrosky, MD; Austin D. Williams, MD, MSED; and Luke V. Selby, MD, MS

Surgical leadership is required to reverse the opioid crisis
Christopher F. McNicoll, MD, MPH, MS; Brian K. Yorkgitis, DO; Naveen F. Sangji, MD, MPH; Alisha D. Reiss, MD; Kaylene Barrera, MD; and Hari B. Keshava, MD, MS

Preoperative communication promotes opioid stewardship
Sara Scarlet, MD; Christopher F. McNicoll, MD, MPH, MS; Christina Colosimo, DO; Edward Shipper, MD; Heather J. Logghe, MD; and John C. Hardaway, MD, PhD

Reframing surgical leadership in 2017:
Surgeon-scientist or surgeon-advocate?
Naveen F. Sangji, MD, MPH; Christopher F. McNicoll, MD, MPH, MS; Divya Sood, MD; and Annie Ehlers, MD, MPH
**STATEMENTS**

Statement on Gender Salary Equity 57

Statement on the Opioid Abuse Epidemic 58

Revised Statement on the Development and Use of Proprietary Guidelines for Accountable Patient-Centered Care 60

Revised Statement on the Rationale for Emergency Surgical Call 62

**COLUMNS**

Looking forward 10

David B. Hoyt, MD, FACS

What surgeons should know about... Health insurance audit processes, penalties, and appeals 64

Lauren Foe, MPH

Coding and practice management corner: Unlisted procedures: Strategies for successful reimbursement 71

Kenneth Simon, MD, FACS; Samuel Smith, MD, FACS; Teri Romano, RN, MBA, CPC, CMDP; and Jan Nagle, MS, RPh

ACS Clinical Research Program: Current role of immunotherapy in urologic cancers 74

Maxwell V. Meng, MD, FACS, and Judy C. Boughey, MD, FACS

Your ACS benefits: Next generation SSR helps surgeons comply with regulatory mandates and improve performance 78

Ulrike G. Langenscheidt, MS

A look at The Joint Commission: Improper sterilization and high-level disinfection of equipment challenges organizations 80

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

NTDB data points: “Gone viral”: Trauma and hepatitis C 82

Richard J. Fantus, MD, FACS

Letters to the Editor 84

**NEWS**

Dr. Timothy Chuter receives 2017 ACS Jacobson Innovation Award 86

2017 Leadership Summit: Leading from behind, building resiliency, and strengthening nontechnical skills 88

Tony Peregrin

Key ACS issues, including health care reform, dominate 2017 Advocacy Summit 95

Kevin R. Walter

ACS delegation influences AMA policy at HOD meeting 99

John H. Armstrong, MD, FACS, and Jon H. Sutton, MBA

Residents, prepare to take your ACS membership to the next level 103

Chapter news 104

Luke Moreau and Brian Frankel

Coming next month in JACS and online now 110

**MEETINGS CALENDAR**

Calendar of events 112
The American College of Surgeons is dedicated to improving the care of the surgical patient and to safeguarding standards of care in an optimal and ethical practice environment.

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

Editor-in-Chief
Diane Schneidman

Director, Division of Integrated Communications
Lynn Kahn

Senior Graphic Designer/Production Manager
Tina Woelke

Senior Editor
Tony Peregrin

News Editor
Matthew Fox

Editorial and Production Assistant
Kira Plotts

Editorial Advisors
Charles D. Mabry, MD, FACS
Leigh A. Neumayer, MD, FACS
Marshall Z. Schwartz, MD, FACS
Mark C. Weissler, MD, FACS

Front Cover Design
Tina Woelke

Bulletin of the American College of Surgeons (ISSN 0002-8045) is published monthly by the American College of Surgeons, 633 N. Saint Clair St., Chicago, IL 60611. It is distributed without charge to Fellows, Associate Fellows, Resident and Medical Student Members, Affiliate Members, and to medical libraries and allied health personnel. Periodicals postage paid at Chicago, IL, and additional mailing offices. POSTMASTER: Send address changes to Bulletin of the American College of Surgeons, 3251 Riverport Lane, Maryland Heights, MO 63043. Canadian Publications Mail Agreement No. 40035010. Canada returns to: Station A, PO Box 54, Windsor, ON N9A 6J5.

Copyright © 2017 by the American College of Surgeons, all rights reserved. Contents may not be reproduced, stored in a retrieval system, or transmitted in any form by any means without prior written permission of the publisher.

Officers
Courtney M. Townsend, Jr., MD, FACS
Galveston, TX
PRESIDENT
J. David Richardson, MD, FACS
Louisville, KY
IMMEDIATE PAST-PRESIDENT
Hilary A. Sanfey, MB, BCH, MPH, FACS
Springfield, IL
FIRST VICE-PRESIDENT
Mary C. McCarthy, MD, FACS
Dayton, OH
SECOND VICE-PRESIDENT
Edward E. Cornwell III, MD, FACS
Chicago, IL
SECRETARY
William G. Cioffi, Jr., MD, FACS
Chicago, IL
CHIEF FINANCIAL OFFICER

Officers-Elect
(take office October 2017)
Barbara L. Bass, MD, FACS
Houston, TX
PRESIDENT-ELECT
Charles D. Mabry, MD, FACS
Houston, TX
FIRST VICE-PRESIDENT-ELECT
Basil A. Pruitt, Jr., MD, FACS
San Antonio, TX
SECOND VICE-PRESIDENT-ELECT

Board of Governors/Executive Committee
Diana L. Farmer, MD, FACS
Sacramento, CA
CHAIR
Steven C. Stain, MD, FACS
Albany, NY
VICE-CHAIR
Susan K. Mosier, MD, MBA, FACS
Lawrence, KS
VICE-CHAIR
Daniel L. Dent, MD, FACS
San Antonio, TX
Francis D. Ferdinand, MD, FACS
Wynnewood, PA

Nicole S. Gibran, MD, FACS
Seattle, WA
S. Robert Todd, MD, FACS, FCCM
Houston, TX

Advisory Council to the Board of Regents
(Past-Presidents)
Kathryn D. Anderson, MD, FACS
Eastvale, CA
W. Gerald Aumen, MD, FACS
Boston, MA
L. D. Britt, MD, MPH, FACS, FCCM
Norfolk, VA
John L. Cameron, MD, FACS
Baltimore, MD
Edward M. Copeland III, MD, FACS
Gainesville, FL
A. Brent Eastman, MD, FACS
Rancho Santa Fe, CA
Gerald B. Healy, MD, FACS
Wellesley, MA
R. Scott Jones, MD, FACS
Charlottesville, VA
Edward R. Laws, MD, FACS
Boston, MA
LaSalle D. Leffall, Jr., MD, FACS
Washington, DC
LaMar S. McGinnis, Jr., MD, FACS
Atlanta, GA
David G. Murray, MD, FACS
Syracuse, NY
Patricia J. Numann, MD, FACS
Syracuse, NY
Carlos A. Pellegrini, MD, FACS
Seattle, WA
Richard R. Sabo, MD, FACS
Beverly, MA
Seymour I. Schwartz, MD, FACS
Roanoke, VA
Frank C. Spencer, MD, FACS
New York, NY
Andrew L. Warshaw, MD, FACS
Boston, MA

Executive Staff
EXECUTIVE DIRECTOR
David B. Hoyt, MD, FACS
DIVISION OF ADVOCACY AND HEALTH POLICY
Frank G. Opelka, MD, FACS
Medical Director, Quality and Health Policy
Patrick V. Bailey, MD, FACS
Medical Director, Advocacy

Christian Shalgin
Director
AMERICAN COLLEGE OF SURGEONS FOUNDATION
Shane Holleit
Executive Director
ALLIANCE/AMERICAN COLLEGE OF SURGEONS
CLINICAL RESEARCH PROGRAM
Kelly K. Hunt, MD, FACS
Chair
CONVENTION AND MEETINGS
Robert Hope
Director
DIVISION OF EDUCATION
Ajit K. Sachdeva, MD, FACS, FRCS
Director
EXECUTIVE SERVICES
Maxine Rogers
Director, Leadership Operations
FINANCE AND FACILITIES
Gay L. Vincent, CPA
Director
HUMAN RESOURCES AND OPERATIONS
Michelle McGovern
Director
INFORMATION TECHNOLOGY
Brian Harper
Interim Director
DIVISION OF INTEGRATED COMMUNICATIONS
Lynn Kahn
Director
JOURNAL OF THE AMERICAN COLLEGE OF SURGEONS
Timothy J. Eberlein, MD, FACS
Editor-in-Chief
DIVISION OF MEMBER SERVICES
Patricia L. Turner, MD, FACS
Director
M. Margaret Knudson, MD, FACS
Medical Director, Military Health Systems Strategic Partnership
Girma Teferra, MD, FACS
Director, Operation Giving Back
PERFORMANCE IMPROVEMENT
Will Chapleau, RN, EMTP
Director
DIVISION OF RESEARCH AND OPTIMAL PATIENT CARE
Clifford Y. Ko, MD, MS, MSIS, FACS
Director
David P. Winchester, MD, FACS
Medical Director, Cancer
Michael F. Rotondo, MD, FACS
Medical Director, Trauma
Author bios*

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

DR. ALIMI (a) is a postgraduate year (PGY)-3 general surgery resident, department of surgery, Medstar Georgetown University Hospital, Washington, DC. She is Secretary, Resident and Associate Society of the ACS (RAS-ACS) Membership Committee.

DR. ARMSTRONG (b) is affiliate associate professor of surgery, University of South Florida Morsani College of Medicine, and former Florida Surgeon General and Secretary of Health (2012–2016). He is a member of the American College of Surgeons (ACS) Health Policy and Advocacy Group, and Past-Chair, ACS Professional Association political action committee (ACSPA-SurgeonsPAC).

DR. BARRERA (c) is a PGY-6 general surgery resident, State University of New York, Downstate, Brooklyn. She is a member of the RAS-ACS Advocacy and Issues Committee.

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

DR. CHANG (e) is a PGY-1 general surgery resident, University of Kentucky Medical Center, Lexington. He is a member of the RAS-ACS Education Committee.

DR. COLOSIMO (f) is a PGY-2 general surgery resident, Sky Ridge Medical Center, Parker, CO. She is Secretary, RAS-ACS Communications Committee.

DR. DUGGAN (g) is a research fellow, vascular anomalies lab, Boston Children’s Hospital, MA. She is a member of the RAS-ACS Education Committee.

DR. ECONOMOPOULOS (h) is a PGY-1 general surgery resident, department of surgery, Duke University, Durham, NC. He is a member of the RAS-ACS Education Committee.

DR. EHLERS (i) is a PGY-7 general surgery resident, department of surgery, University of Washington, Seattle. She is a member of the RAS-ACS Advocacy and Issues Committee.

continued on next page
Author bios continued

**DR. ESKANDER** (j) is a PGY-3 general surgery resident, Beth Israel Deaconess Medical Center, Boston. She is Vice-Chair, RAS-ACS Education Committee.

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

**DR. FLINK** (l) is a PGY-4 general surgery resident, Emory University, Atlanta, GA. He is a member of the RAS-ACS Education Committee.

**MS. FOE** (m) is Regulatory Associate, ACS Division of Advocacy and Health Policy, Washington, DC.

**MR. FRANKEL** (n) is Manager, International Chapter Services and Special Initiatives, ACS Division of Member Services, Chicago.

**DR. HARDAWAY** (o) is a PGY-6 surgical oncology fellow, Roger Williams Medical Center, Providence, RI. He is Chair, RAS-ACS Communications Committee.

**DR. HARRIS** (p) is a PGY-5 general surgery resident, University of Kentucky Medical Center. She is a member of the RAS-ACS Education Committee.

**DR. HELD** (q) is a PGY-3 general surgery resident, U.S. Navy Medical Center, Portsmouth, VA. She is a member of the RAS-ACS Education Committee.

**DR. HON** (r) is a PGY-4 general surgery resident, department of surgery, St. Luke’s University Hospital Network, Fountain Hill, PA. She is Chair, RAS-ACS Membership Committee.

**DR. KESHAVA** (s) is a PGY-5 general surgery resident, Cleveland Clinic, OH. He is Secretary, RAS-ACS Education Committee.

*continued on next page*
MS. LANGENScheidt (t) is Manager, Surgeon Specific Registry, Continuous Quality Improvement, ACS Division of Research and Optimal Patient Care, Chicago.

DR. LOGGHe (u) is a physician, Allies for Health, Reno, NV. She is a member of the RAS-ACS Advocacy and Issues Committee.

DR. McNICOLL (v) is a PGY-3 general surgery resident, University of Nevada, Las Vegas School of Medicine. He is Secretary, RAS-ACS Advocacy and Issues Committee.

DR. MENg (w) is professor of urology and chief of urologic oncology, department of urology, University of California, San Francisco.

MS. LANGENscHiEDT (t) is Manager, Surgeon Specific Registry, Continuous Quality Improvement, ACS Division of Research and Optimal Patient Care, Chicago.

DR. LOGGHe (u) is a physician, Allies for Health, Reno, NV. She is a member of the RAS-ACS Advocacy and Issues Committee.

DR. McNICOLL (v) is a PGY-3 general surgery resident, University of Nevada, Las Vegas School of Medicine. He is Secretary, RAS-ACS Advocacy and Issues Committee.

DR. MENg (w) is professor of urology and chief of urologic oncology, department of urology, University of California, San Francisco.

MR. MOREAU (x) is Manager, Domestic Chapter Services, ACS Division of Member Services.

DR. MOuAWAD (y) is chief, vascular and endovascular surgery; vice-chair, department of surgery, McLaren Bay Region, Bay City, MI; and assistant clinical professor of surgery, Michigan State University, East Lansing. He is Chair, RAS-ACS.

MS. NAGLE (z) is an independent consultant in Chicago who assists the ACS with American Medical Association (AMA) Current Procedural Terminology (CPT) coding education and health data analyses.

DR. NEuwIRTH (aa) is a PGY-4 general surgery resident, department of surgery, Hospital of the University of Pennsylvania, Philadelphia, and a member of the RAS-ACS Education Committee.

DR. NOSANOv (bb) is a PGY-3 general surgery resident, department of surgery, MedStar Washington Hospital Center, DC. She is a member of the RAS-ACS Education Committee.

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

continued on next page
MR. PEREGRIN (dd) is Senior Editor, 
Bulletin, ACS Division of Integrated 
Communications, Chicago.

DR. PETROSKY (ee) is a graduate, general 
surgery residency program, Cleveland 
Clinic Foundation. He is a member of 
the RAS-ACS Education Committee.

DR. REISS (ff) is a general surgeon, 
Wayne HealthCare, Greenville, 
OH. She is Vice-Chair, RAS-ACS 
Advocacy and Issues Committee.

MS. ROMANO (gg) is a consultant with 
Karen Zupko & Associates, Inc., Chicago, a 
consulting firm that provides International 
Classification of Diseases, 10th Revision, 
Clinical Modification, and CPT coding 
educational programs for the ACS.

DR. SANGJI (hh) is a surgical critical 
care fellow, Massachusetts General 
Hospital, Boston. She is Chair, RAS-ACS 
Advocacy and Issues Committee.

DR. SCARLET (ii) is a PGY-5 general surgery 
resident, University of North Carolina 
at Chapel Hill. She is a member of the 
RAS-ACS Communications Committee.

DR. SELBY (jj) is a PGY-4 general 
surgery resident, department of surgery, 
University of Colorado, Denver, and Chair, 
RAS-ACS Committee on Education.

DR. SHIPPER (kk) is a PGY-5 general 
surgery resident, University of Texas Health 
Science Center, San Antonio, and Vice-Chair, 
RAS-ACS Communications Committee.

DR. SIMON (ll) is a physician surveyor, 
division of accreditation and operations 
at The Joint Commission and serves on 
the ACS General Surgery Coding and 
Reimbursement Committee (GSCRC).

DR. SMELSER (mm) is a PGY-3 urology 
resident, department of urology, 
University of Kansas Medical Center, 
Kansas City. He is a member of the 
RAS-ACS Membership Committee.

continued on next page
Author bios continued

**DR. SMITH** (nn) is a pediatric surgeon and the Boyd Family Professor of Surgery, University of Arkansas for Medical Sciences, and section chief for pediatric general surgery and surgeon-in-chief, Arkansas Children’s Hospital, Little Rock. He is a member of the ACS GSCRC and ACS advisor to the AMA CPT Editorial Panel.

**DR. SOOD** (oo) is a PGY-5 general surgery resident, University of California, San Diego. She is a member of the RAS-ACS Advocacy and Issues Committee.

**DR. SUDARSHAN** (pp) is a PGY-7 cardiothoracic surgery fellow, department of surgery, Mayo Clinic. She is a member of the RAS-ACS Membership Committee.

**MR. SUTTON** (qq) is Manager, State Affairs, ACS Division of Advocacy and Health Policy.

**DR. TANNER** (rr) is a PGY-3 otolaryngology resident, department of otolaryngology, University of North Carolina Hospitals. She is a member of the RAS-ACS Membership Committee.

**DR. TORRES** (ss) is a PGY-2 general surgery resident, Penn State Milton S. Hershey Medical Center, Hershey, PA. She is a member of the RAS-ACS Education Committee.

**MR. WALTER** (tt) is Manager, DC Communications, ACS Division of Integrated Communications.

**DR. WILLIAMS** (uu) is a PGY-3 general surgery resident, department of surgery, Lankenau Medical Center, Wynnewood, and a postdoctoral research fellow, Perelman School of Medicine, University of Pennsylvania. He is a member of the RAS-ACS Education Committee.

**DR. YORKGITIS** (vv) is assistant professor of surgery, University of Florida College of Medicine, Jacksonville. He is a member of the RAS-ACS Advocacy and Issues Committee.
The Maintenance of Certification (MOC) requirements established by the American Board of Medical Specialties (ABMS) and its member boards, such as the American Board of Surgery (ABS), have been in place for approximately 12 years. Since then, MOC has been the source of considerable controversy and conflict.

The American College of Surgeons (ACS) leadership and our colleagues at the ABS, other boards, and other medical associations understand that the existing MOC process is burdensome for many practicing clinicians and are taking steps to address these concerns. Some individuals feel that these efforts have proven ineffective and are now calling upon state legislatures to take action. I believe that this approach is foolhardy and that the profession itself is best positioned to resolve these issues.

Standards and controversy
Over the years, the ABS requirements for MOC have called for diplomates to submit information on the following every three years:

- Professional standing as evidenced by a full and unrestricted medical license and hospital or surgery center privileges

- A total of 90 hours of Category 1 Continuing Medical Education (CME) credits relevant to the physician’s practices over a three-year cycle, with at least 60 of the 90 credit hours including self-assessment

- Practice assessment demonstrated through participation in a local, regional, or national outcomes registry or quality assessment program

In addition, diplomates must successfully complete a recertification examination every 10 years. This high-stakes recertification exam is the source of much of the debate, with some surgeons and other physicians arguing that it does little to measure whether a clinician is able to provide quality care.

In a memorandum sent July 7 to all diplomates from ABS chair Mary E. Klingensmith, MD, FACS, and ABS executive director Frank R. Lewis, MD, FACS, the ABS announced that MOC reporting requirements for the first three components will change immediately to reporting only every five years instead of three, and self-assessment CME will be reduced by 50 percent. In 2018, diplomates will be offered alternatives to the 10-year exam.

The ACS has a long history of advocating for and setting standards relating to quality patient care, and a key qualification for Fellowship in the College is certification from an ABMS surgical specialty board, an American Osteopathic Surgical Specialty Board, or the Royal College of Surgeons of Canada. The College’s Statements on Principles reaffirm that Fellows should engage in many of the activities outlined in the MOC requirements. Specifically, the College expects Fellows to commit to lifelong learning through self-study, formal CME, and periodic assessment of their clinical practices.

The College maintains that board certification and MOC are valid means of verifying that surgeons have the educational background and competencies needed to provide quality care. This verification process is integral to ensuring that health care professionals have the rare privilege of self-regulation.

Legislative route
Some physicians have sought legislative remedies for their complaints about the MOC process. In April 2016, Oklahoma enacted legislation that prohibits failure to comply with MOC mandates as a reason to exclude a physician from hospital staff appointment or from insurance company panels. Other states have since followed suit. Perhaps the most sweeping legislation has been introduced in Texas, where state Senate bill S.B. 1148 would restrict the ability of the medical profession to set professional standards and would implement a state registration system for any entity that provides MOC to physicians.
The leaders of the major medical and surgical organizations agree that legislation like the Texas bill interferes with the profession’s ability to govern itself. Going the legislative route will serve only to erode our ability to self-regulate and will open the door to greater government interference than we already are experiencing. State and federal governments lack the knowledge or expertise to determine whether a physician is adequately prepared and credentialed to provide quality care.

Addressing your concerns
We are much better off settling our differences within the house of medicine than doing this on a piecemeal basis in all 50 states. The boards, medical and surgical associations, the Council of Medical Specialty Societies, hospitals, payors, and medical educators are working together to develop thoughtful alternatives to the current MOC requirements. In addition to replacing the high-stakes 10-year exam with more frequent but lower-stakes outcome assessments and changing reporting requirements, other possible modifications include offering new opportunities for surgeons to learn how to perform complex operations, providing “just in time” learning tools, and disseminating critical new knowledge alerts. New assessment programs will focus on high-value, practice-relevant learning, and diplomates will be solicited to help design the new program.

According to Jo Buyske, MD, FACS, who will assume the role of ABS executive director when Dr. Lewis retires later this year, “The ABS is committed to changing its policies regarding lifelong learning and certification in the interests of better serving both our diplomates and the public. Our goal is to have the best combination of practice-pertinent, timely, and valuable assessment tools to assure our patients that board-certified surgeons are knowledgeable and up-to-date. We plan to work with the diplomates and with the College and other societies in what will be an ongoing project of quality and service improvement.”

Every surgeon’s responsibility
A major premise of the recently released ACS Optimal Resources for Surgical Quality and Safety manual is that surgeons should engage in lifelong learning and continuous quality improvement activities—that they should analyze their outcomes to identify areas of improvement in their practices. The College maintains that these are important responsibilities for all surgeons to fulfill, regardless of what predetermined requirements the boards or any other entity may impose.

We are practicing in an era that holds surgeons to a greater level of accountability and transparency. Patients expect us to be competent professionals and assume that we hold ourselves to high standards of excellence. Today’s surgeon and the surgeon of the future need to lead safe, reliable teams that integrate surgical and nonsurgical skills as part of systems of care. Evidence-based practice, public reporting of outcomes data, and continuous professional development will be integral activities for all surgical practices.

Surgeons have a responsibility to maintain top-level skills and leading-edge knowledge. In addition to continually attaining didactic knowledge, we have a unique need to acquire new skills and technical competencies, and we must demonstrate to patients and other stakeholders that we are capable of providing optimal care.

Going forward, we will need to redefine professionalism with an emphasis on collaboration over autonomy, evidence over authority, measurement over assertion, transparency over control, and the public good over our self-interests. By working together, I believe we can come to agreement on how to achieve these goals without government intervention and the loss of our ability to self-regulate. ♦
The Opioid Epidemic

by Nicolas J. Mouawad, MD, MPH, MBA, RPVI

Surgeon stewardship of the opioid epidemic:
An introduction

by Nicolas J. Mouawad, MD, MPH, MBA, RPVI
Surgeons are uniquely positioned to effect change at the national, state, and local levels but, most importantly, directly at the patient level.

The management of health care and health care institutions has changed dramatically in recent decades. The discussions on value-based care and the focus on the patient experience—from the initial consultation, throughout the perioperative period, and followed by discharge and rehabilitation—have forced a paradigm shift in how value is evaluated. Value is now quantifiable with metrics for assessment.

In 1996, the American Pain Society (APS) introduced the concept of “pain as the fifth vital sign.” In 2001, The Joint Commission released its pain management standards, which catapulted this concept to the forefront of patient care. The Joint Commission protocol essentially required that health care professionals ask patients about their pain and identify whether it was undertreated. Moreover, pain is a component of the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), the patient satisfaction survey that the Centers for Medicare & Medicaid Services (CMS) uses as a component of hospital reimbursement, thereby creating a financial incentive for hospitals to maintain high HCAHPS scores.

Most Americans agree that the U.S. is in the midst of an opioid epidemic. According to the Centers for Disease Control and Prevention, opioid abuse costs the nation approximately $78.5 billion annually due to lost productivity, the costs associated with substance abuse and addiction treatment, and the financial toll on the criminal justice system.

Nearly 40 percent of all outpatient prescriptions that surgeons write are for opioids, a rate that is second only to that of pain medicine specialists (49 percent). Hence, surgeons are uniquely positioned to effect change at the national, state, and local levels, but, most importantly, directly at the patient level.

According to many health care industry experts, linking reimbursement to patient satisfaction for pain control results in overprescribing; furthermore, aggressive management of pain should not be equated with the delivery of quality health care as made manifest by better HCAHPS scores. The bipartisan Promoting Responsible Opioid Prescribing (PROP) Act (H. R. 4499) was introduced by Rep. Alexander Mooney (R-WV) in February 2016 to ensure that pain management questions on patient surveys would be omitted from the Medicare reimbursement formula. The bill has been endorsed by a number of health care associations, including the American Medical Association, the American Hospital Association, the American Society of Addiction Medicine, the American Osteopathic Association, the Physicians for Responsible Opioid Prescribing, and the American Association of Orthopaedic Surgeons, among others. The U.S. Senate has followed suit with a companion bill, S. 2758, introduced by Sen. Ron Johnson (R-WI) in April 2016.

ACS efforts

The American College of Surgeons (ACS) Division of Advocacy and Health Policy and the ACS Division of Education have done a great deal of work to address the opioid epidemic, ultimately resulting in the ACS Statement on the Opioid Abuse Epidemic (see page 58). The guiding principles outlined in the statement include the following:

- Promote the use of prescription drug monitoring programs (PDMPs)
- Support research and training developed in collaboration with specialists in pain management for safe prescribing practices of opioids and nonopioid analgesics
- Recognize and address issues specific to military veterans
- Change the direct relationship between provider reimbursement and patient pain control
- Support patient safety legislation

A critical gap in knowledge and communication has been identified in perioperative pain management, particularly education and resources aimed at the use of opioids in individuals undergoing surgery. With
that in mind, the Division of Education is developing a new educational curriculum called Opioids and Surgery: Use, Abuse, and Alternatives. The program comprises professional and patient education materials aimed at supporting comprehensive training for surgical professionals and provides evidence-based data to help physicians meet the necessary guidelines for health literacy, surgical safety, and informed consent.

The four standing committees of the Resident and Associate Society of the ACS (RAS-ACS) have unanimously selected the opioid crisis as the overarching theme for the August issue of the Bulletin. Surgical trainees are at the forefront of this epidemic, and as Chair of the RAS-ACS, I am impressed by the fact that RAS-ACS members have demonstrated such keen interest in tackling this crisis head on. It is a testament to their commitment to accepting responsibility for policing the profession and protecting our patients.

To further illustrate the enthusiasm and vigor of surgical trainees when it comes to the opioid epidemic, several groups of residents have been studying and surveying the prescribing practices of residents and fellows. By involving the RAS-ACS, we were able to consolidate these efforts into a large national survey that was delivered to 12,047 surgical trainee members. The survey was partitioned into several themes focused on pain management, prescribing practices, knowledge, beliefs and attitudes, and public policy. Data analysis is under way and is expected to be completed in the fall 2017.

The political arena, changes in health policy, and public health crises, such as the opioid epidemic, are all salient topics that continue to galvanize our discipline and reaffirm our cohesive desire to work on behalf of our patients. With specific points that apply to each RAS-ACS standing committee—Advocacy and Issues, Communications, Education, and Membership—members of the RAS-ACS present the following articles describing the effects of the opioid crisis on each area of surgical training and practice. The authors explore the surgeon’s role in enhancing patient education, the use of preoperative communication for opioid stewardship, methods to reverse and alleviate the opioid crisis, as well as treatment and education strategies for the practicing surgeon. As RAS-ACS Chair, it has been both an honor and a privilege to work with these young minds and to help enhance their efforts to lead the House of Surgery in the future.

**REFERENCES**

From 1999 to 2014, more than 165,000 people in the U.S. died from overdoses related to prescription opioids. Improved opioid prescribing practices can lead to safer and more effective acute and chronic pain management for surgical patients while reducing the number of people who misuse, abuse, or overdose from these drugs. One of the most important steps to ensure safe prescription opioid use for outpatients is to identify whether they will require a course of postoperative pain medication or will require a multidisciplinary approach to pain management.

Up to 25 percent of patients receiving long-term opioid therapy in a primary care setting struggle with addiction. Determining if patients have been exposed to narcotics in the past and whether they have developed a tolerance for narcotics is helpful in establishing patient-physician trust and rapport, as well as determining the potential for misuse, abuse, or overdose.

Understanding the patient population within the surgeon’s geographic practice area is important to determine which patients may potentially seek increased opioid use. Improved patient education strategies can help reduce the risk of opioid misuse and abuse. The general surgeon’s role in enhancing patient education about prescription opioids is critical in the fight against the opioid epidemic.
opioid prescriptions versus those who choose not to use narcotic pain management due to social, spiritual, or religious beliefs. Patients who choose to forgo narcotics for perioperative pain management may sacrifice adequate pain control, resulting in increased length of stay and higher risk of perioperative morbidity. An opportunity to better understand and educate these patients may lead to improved pain control, as well as insight into the unique patient populations that struggle with the challenge of achieving adequate pain control postoperatively, particularly when previous opioid dependence has been an issue.

**Opportunities for patient education**

As a result of the rise in opioid-associated deaths and the number of adults regularly using prescription opioid medication, surgeons must now serve as gatekeepers of iatrogenic opioid dependence, especially considering that surgeons reportedly prescribe nearly 37 percent of the total opioid pain medication prescribed to noncancer patients, second only to pain medicine specialists. These statistics show that healthcare professionals are in a unique position to optimize pain management strategies that will decrease frequent and prolonged opioid use. Patient education reportedly decreases the need for postoperative opioid medication and improves patient satisfaction. Every patient encounter is a chance to educate patients about pain management expectations, modalities of pain control, and the risks of opioid pain medications. Interdisciplinary strategies that incorporate the surgeon, pain management specialists, nurses, physical and occupational therapists, ancillary staff, families, and other patient support systems are ideal approaches to controlling patient pain while minimizing opioid use.

**Preoperative encounter**

Patient education regarding pain control should begin at the initial clinical evaluation and consultation and should be reinforced during the preoperative visit. Patients should be informed about their procedure, the degree and extent of expected perioperative pain, recovery time, and expectations for pain management in the outpatient setting during recovery. Patients should be counseled to expect adequate pain control based on function, such as the ability to sleep, ambulate, and eat. Additionally, patients should be reminded that zero pain is an unrealistic expectation. Hill and colleagues recommend setting patient expectations regarding the number of opioid pills that they will require and subsequently receive to decrease the number of pills prescribed postoperatively. Patient education is best provided in a personal, face-to-face encounter with culturally and linguistically appropriate written, video, and web-based educational materials.

The preoperative visit also allows the surgeon to assess the patient’s history for dependence or tolerance to opioids and previous or current use disorders that may increase the need for opioid medications in the postoperative period. For example, patients who chronically use opioids for long-term pain control frequently require special attention for controlling current postsurgical pain and for addressing the continued management of their chronic pain. Some patients who have struggled with addiction in the past may be hesitant to use opioids due to fear of recidivism, and their concerns often require the attention of providers trained in this area of pain management. If such concern exists, a preoperative visit with the anesthesiologist is warranted to discuss multimodal therapies, such as nerve blocks, neuraxial anesthesia, and other alternative pain management strategies.

**Postoperative encounter**

The postoperative period is when pain control is a priority and is a good time to revisit patient expectations. Educating patients about their multimodal pain control plan that will include nonopioid medications often helps in building rapport and establishing more defined goals for pain management. The postoperative consult is the time to remind patients that eradicating pain is an unachievable goal and that pain control should be measured based on their ability to perform activities of daily living in the postoperative setting. In addition,
patients should be counseled on how and when to take their medication.

For patients who need to use opioid medications for more than two weeks, a tapering plan should be implemented, decreasing the discharge dose by 20 to 25 percent every one to two days to abate symptoms of severe withdrawal.14 Counseling patients on how to take pain medications (for example, with or without food) and how to manage the side effects should be included in the discharge instructions. During the postoperative visit, patients should also be warned to avoid alcohol and other central nervous system depressants to avoid accidental overdose.9

If surgeons are committed to ending the opioid epidemic, we must not only decrease the number of opioid medications prescribed, but also educate our patients to properly and safely dispose of excess opioid medications. More than 70 percent of pills prescribed to general surgery patients in the acute postoperative period go unused, but only 9 percent of patients dispose of their medications according to U.S. Food and Drug Administration (FDA) guidelines.11 The FDA recommends disposing of opioid pills at Drug Enforcement Administration-approved collection sites, community-based drug “take-back” programs, flushing them down the toilet, placing them in a sealable plastic bag, or dissolving the pills in water and mixing them with compostable materials (such as coffee grounds) and placing the mixture in a sealable bag before placing in the trash.15 Surgeons should provide patients with written instructions on proper disposal guidelines prior to discharge, for their reference at home.

**Subspecialty care**

These same recommendations for opioid education apply to patients who receive care from subspecialty surgeons. However, the unique circumstances of acute, postoperative pain in children, oncology patients, and patients with inflammatory bowel disease (IBD) warrant special consideration. In some instances, the patient’s preoperative anxiety may preclude proper attention to opioid counseling. Providers should tailor the timing of their approach to best fit each patient’s needs. It is important to include the individuals who will assist in caring for the patient upon discharge in any counseling session with the patient.16

Patient education should apply a multidisciplinary approach, and the surgeon should not underestimate the effect of other team members in counseling the patient on pain management. For example, the nurse or team pharmacist responsible for the last interaction with the patient prior to discharge has an opportunity to expand the patient’s knowledge and understanding of appropriate opioid use, weaning, storage, and disposal. It is crucial to remind all members of the health care team that their interactions and time with patients make a difference.

**Pediatric surgery**

While the number of overall opioid prescriptions written for children is relatively low, rates have nearly doubled in the last decade.17 Galinkin and colleagues suggest that dependence, but not necessarily addiction, can occur in children after just one week of opioid use.18 After discharge, the parents or guardians are responsible for dosing and administration of pain medication to children, and it is imperative that health care providers educate parents regarding the balance between pain control and overuse. As with other surgical settings, when possible, this counseling should begin preoperatively and include a multidisciplinary approach.

The safe storage and disposal of opioids is a crucial aspect of patient education, especially in settings where children may access them. With one-fifth of unintentional opioid overdoses in children younger than six years old occurring due to the ingestion of a medication that was prescribed for an adult, proper guardian education about the storage and disposal of opioids is paramount.19 While these conversations are critical in the pediatric surgery setting, they are equally as important to have with any patient who will be prescribed opioids and resides with young children.19

Special consideration should be given to adolescent patients, especially those who may be directly managing their own medication administration. Studies
have shown that depression and preoperative marijuana use are associated with postoperative opioid misuse among adolescents.\textsuperscript{20,21} Preoperative screening for these factors is recommended so that providers can offer necessary resources to mitigate the risk of long-term abuse.

**Surgical oncology**

Cancer patients experience pain at exceedingly high rates,\textsuperscript{22} an estimated 25 percent of this pain is secondary to treatment, including operative procedures.\textsuperscript{23} Chronic opioid use in these patients can cause decreased efficacy, which complicates control of acute, operative pain.\textsuperscript{22} It is vital that patients understand that full disclosure of their baseline opioid use is critical to safe, adequate postoperative pain management, as well as the prevention of withdrawal symptoms.\textsuperscript{24} This conversation should occur preoperatively and involve a nonjudgmental approach to elicit honest patient responses.\textsuperscript{22} Guidance regarding perioperative medication use should be provided, including instructions to take pain medication at home the morning of surgery and information regarding the continued use of the transdermal patch, if applicable.\textsuperscript{22,24}

It is important not only to educate patients about pain medication use, but also about the anticipated level of pain control, reassuring them that the ultimate goal is to adequately control their acute, operative pain rather than mitigate their existing symptoms.\textsuperscript{22} However, in some circumstances, surgical treatment may relieve preoperative pain, such as in cases of pain due to compression.\textsuperscript{23} Patients should, therefore, have a clear understanding that their symptoms will be reevaluated after postoperative healing to assess whether their baseline opioid requirements have changed. Throughout this process, it is important not to lose sight of the ultimate goal—pain control. Published research suggests that cancer patients overall have very low rates of opioid abuse; fear of misuse, by either the patient or provider, should not preclude therapeutic dosing.\textsuperscript{23}

**Colorectal surgery: IBD**

Opioid counseling in patients with IBD poses a unique challenge for health care providers. Studies suggest that these patients use preoperative opioids at high rates and are at increased risk for misuse.\textsuperscript{22} This risk appears to be more significant for patients with Crohn’s disease than ulcerative colitis.\textsuperscript{26,27} High rates of narcotic usage for these patients are an independent predictor of increased readmissions; emergency department visits; and high treatment charges, defined as more than $30,000 in the year after the index admission.\textsuperscript{28}

Increased rates of abuse for patients with IBD also

### TABLE 1. CHART TEMPLATE FOR EDUCATING PATIENTS ON OPIOID OPTIONS

<table>
<thead>
<tr>
<th>Generic name</th>
<th>Brand name</th>
<th>Route of administration</th>
<th>Common dose</th>
<th>Length of effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxycodone (immediate release)</td>
<td>Oxycodone</td>
<td>Orally</td>
<td>5 mg</td>
<td>4–6 hours</td>
</tr>
<tr>
<td>Oxycodone/acetaminophen</td>
<td>Percocet</td>
<td>Orally</td>
<td>5 mg oxycodone/325 mg acetaminophen</td>
<td></td>
</tr>
<tr>
<td>Hydrocodone/acetaminophen</td>
<td>Vicodin Lortab Lorset HD</td>
<td>Orally</td>
<td>5 mg hydrocodone/325 mg acetaminophen</td>
<td>4–6 hours</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>Dilaudid</td>
<td>Orally</td>
<td>2 mg</td>
<td></td>
</tr>
<tr>
<td>Hydrocodone</td>
<td>Hycodan</td>
<td>Orally</td>
<td>5 mg hydrocodone</td>
<td></td>
</tr>
<tr>
<td>Codeine/acetaminophen</td>
<td>Tylenol #3</td>
<td>Orally</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morphine</td>
<td>MorphaBond (extended release) Arymo (extended release)</td>
<td>Orally</td>
<td>15 mg</td>
<td>12 hours</td>
</tr>
<tr>
<td>Methadone</td>
<td>Methadose Dolophine</td>
<td>Orally</td>
<td>5 mg</td>
<td>8 hours</td>
</tr>
<tr>
<td>Oxycodone (extended release)</td>
<td>OxyContin</td>
<td>Orally</td>
<td>10 mg</td>
<td>12 hours</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>Actiq Fentora Abstral Duragesic</td>
<td>Orally, transdermal (skin patch)</td>
<td>No recommended dose</td>
<td>Dependent on route of administration</td>
</tr>
</tbody>
</table>
are seen in patients with underlying psychiatric disorders and chronic functional abdominal pain syndromes. Although the literature regarding operative pain control in this population is scarce, it is reasonable to assume that, as in other subsets of chronic pain patients, postoperative pain control and opioid withdrawal may be challenging, and adverse effects can be mitigated through proper assessment and counseling. The surgeon should be diligent and educate the patient both preoperatively to discuss realistic expectations of postoperative symptoms, as well as prior to discharge to discuss the following: weaning the patient off of opioids; managing opioid use; caring for unpredictable gastrointestinal function frequently encountered with IBD; and how to contact their provider if problems arise in the outpatient setting. Postoperative opioid use should also be discussed at follow-up appointments and may involve a joint approach between the surgeon and gastroenterologist.

Tools of the trade and patient resources

Making patient educational tools and information available in patient waiting rooms and the office setting can provide an ice-breaker to start the conversation about opioids. It is ideal to include culturally sensitive, inclusive images in these materials, as well as figures and text that are easy to comprehend. Table 1, page 18, is an example of a basic chart with commonly used opioids that physicians can use to develop a pain management plan with a patient.

Implementation of a system-wide initiative within the U.S. Department of Veterans Affairs (VA) has been associated

REFERENCES

in the postoperative period. It is critical to optimizing pain management and, ultimately, taper opioid medications, a multidisciplinary approach to prescribing is necessary. As well as using accessible educational materials to patients regarding prescriptions, as well as using accessible educational materials to patients regarding prescriptions, as well as using accessible educational materials to patients. Building rapport to create a dynamic and open physician-patient relationship and keeping lines of communication open to discuss side effects, efficacy, and tapers regimen is crucial to prescribing opioids safely. Providing accessible educational materials to patients regarding prescriptions, as well as using a multidisciplinary approach to prescribe and, ultimately, taper opioid medications, is critical to optimizing pain management in the postoperative period.

REFERENCES, CONTINUED

Postoperative opioid prescriptions: How surgeons can alleviate the opioid crisis

by
Yewande Alimi, MD, MHS; Konstantinos P. Economopoulos, MD, PhD; Woodson Smelser, MD; April Tanner, MD; Monisha Sudarshan, MD, MPH; and Heidi Hon, MD

For the first time in the 145-year history of the office of the U.S. Surgeon General, the nation’s leading physician issued a call to action letter to 2.3 million health care professionals in 2016 requesting that they play a role in addressing the rising opioid epidemic.1 The opioid crisis has evolved over the last few decades, culminating in reports indicating that one in every 25 U.S. adults uses prescription opioids regularly.2 This article looks at the possible causes of this epidemic, summarizes state and federal initiatives aimed at resolving the problem, and offers suggestions for treating pain effectively in different patient populations.

How did we get here?
One contributor to the prescription opioid crisis was the relaxation of prescribing regulations in the 1990s. This change in policy was based on unclear scientific evidence supporting the safety and effectiveness of opioids even for chronic noncancer pain.3 Another contributing factor was the consumer demand for pain relief, a movement fueled by continuous pharmaceutical marketing efforts. The increase in opioid prescriptions resulted in a nearly four times higher overdose death rate in 2010 than in the preceding decade.4,5 More recent research supports rising problems related to liberal opioid prescribing practices, including opioid hyperalgesia, abuse, and opioid-related accidents and deaths.6

Nearly 8.9 percent of the American population ages 12 or older reportedly engage in illicit drug use.6 When analyzing trends, the nonmedical use of psychotherapeutics increased 178 percent between 1998 and 2010, compared with 56 percent for marijuana and 17 percent for cocaine during that time frame.6 Specifically, OxyContin use more than tripled to 2.8 percent in 2010 from 0.8 percent in 2005.7

Overdose deaths have reached startling numbers, with 30,000 opioid-related fatalities in 2015, outnumbering motor vehicle-related accidents and the peak of mortality from the human immunodeficiency virus epidemic.8,9

Surgeons are well positioned to address the opioid epidemic at many checkpoints, but especially during the dispensation of outpatient narcotic prescriptions. Estimating patients’ pain medication needs is an inexact science, as evidenced by nearly 80 percent of filled prescriptions that are incompletely used.10 With little information on how to correctly dispose of excess...
opioids, this situation contributes to illicit use. Nearly 55 percent of illicit opioid users reported obtaining the medications from friends or family for free, 11.4 percent bought them from a friend or relative, 4.8 percent stole them, and 17.3 percent obtained the drug through a prescription. Decreased opioid abuse is an important step toward controlling overall illicit drug abuse, as almost 75 percent of heroin users reported introduction to heroin through prescription painkillers.

**State and federal initiatives**

Many efforts at the federal and state levels have been implemented to combat the opioid crisis in the U.S. State-level efforts have focused on patient and provider education and enhanced access to naloxone (in addition to training on its use), medication assistance programs, and implementation of prescription drug monitoring programs. Educating the general public or targeted populations about the risks of addiction helps mitigate misuse, because patients are less likely to abuse these medications if they are perceived to be harmful.

Guidelines for providers who prescribe opioids also have been developed, although they can vary widely. The Centers for Disease Control and Prevention (CDC) has issued the only standardized guideline for the use of prescription narcotics to control chronic pain. Surgeons should be familiar with these guidelines as we often operate on patients with chronic pain syndromes. Furthermore, provider education about the reversal agent naloxone and its proper distribution has increased steadily and the U.S. Department of Health and Human Services has identified naloxone as one of three major priorities in battling the opioid crisis. Opioid overdose education and community naloxone distribution is aided by educating bystanders, friends, family members, acquaintances, and first responders to recognize the signs of an opioid overdose and to administer naloxone. Most states have reduced the opioid crisis by increasing access and distribution of naloxone kits. While health care professionals may provide prescriptions for naloxone to family members, most states allow pharmacists to dispense naloxone kits without a prescription.

Not only can reversal agents help reduce overdoses, but the use of a medication assistance program that uses methadone, buprenorphine, and extended release injectable naltrexone has proven effective in decreasing mortality and opioid use. Approximately 1,200 facilities across the U.S. have opioid treatment programs that provide such assistance. The number of patients who received methadone and buprenorphine prescriptions has increased in recent years, rising to more than 306,000 patients in 2011 from 7,020 in 2003. These medications have proven beneficial and have helped individuals regain some normality in their lives.

Other methods that are useful in alleviating the opioid crisis include monitoring the use of narcotics. Prescription drug monitoring programs (PDMPs) were first developed in 1939 at the state level to help tackle opioid misuse in the U.S. PDMPs are electronic databases available to providers to help monitor the prescription of medications with high potential for abuse, such as Level II and Level III opioids. States that have implemented PDMPs have experienced a decrease in opioid deaths.

**Turn the Tide campaign**

State-level and perioperative-focused initiatives may not be enough to ameliorate the negative effects of the opioid crisis. In his open letter to health care professionals mentioned at the beginning of this article, U.S. Surgeon General Vivek H. Murthy, MD, introduced the Turn the Tide Rx initiative. The campaign calls upon clinicians to pledge their commitment to the following:

- Educate themselves to treat pain safely and effectively
- Screen patients for opioid use disorder and help them find appropriate evidence-based treatment
- Educate members of their community on addiction and help them understand that addiction is a chronic illness—not a moral failing
The strength of this initiative is its focus on engaging all stakeholders—including health care providers, policymakers, educators, law enforcement officers, and the larger community—in a collaborative effort to change the course of the opioid epidemic.

The Turn the Tide Rx pocket guide includes information for providers that outlines the CDC guidelines on chronic pain management. This pocket guide serves as a valuable resource for physicians, particularly young surgeons, as they may encounter many chronic opioid users and may inadvertently enable or facilitate behaviors consistent with narcotic abuse or addiction. Participating in national campaigns like the Turn the Tide Rx initiative should be an ethical obligation for all surgeons.

Protocols for perioperative pain management

Considering that nearly 17.3 percent of opioid-dependent people initiated use through a physician-provided prescription, new and innovative approaches to maximizing perioperative pain control while minimizing use of excessive narcotics or medications with highly addictive potential are warranted.

Initially, the Enhanced Recovery After Surgery (ERAS) concept evolved as a byproduct of colorectal surgery research in an effort to decrease postoperative adverse events, length of stay, and bowel-related complications. The American College of Surgeons (ACS) has introduced the ERAS approach to hospitals throughout the U.S. through the Agency for Healthcare Research and Quality (AHRQ) Safety Program for Improving Surgical Care and Recovery (ISCR). The ISCR program supports hospitals in implementing perioperative evidence-based pathways to meaningfully improve clinical outcomes, reduce hospital length of stay, and improve the patient experience, and is a collaborative effort between the Johns Hopkins Medicine Armstrong Institute for Patient Safety and Quality, Baltimore, MD, and the College.

Intrinsic to this initiative is an effort to limit the use of narcotic pain medication. Together, colorectal surgeons and urologists have been on the cutting edge of ISCR implementation, with significant improvements not only regarding complications and length of stay, but also in overall use of

REFERENCES


continued on next page
The Opioid Epidemic

narcotic pain medications during the postoperative period of convalescence.22,23 Studies demonstrate that these protocols lower overall use rates and duration of opioid analgesic use following surgery.24

Understanding pain

Integral to the education of both young and practicing surgeons is a basic understanding of the neuroanatomy of pain. Understanding the biochemical properties of tolerance, physical dependence, and addiction is paramount to responsible opioid prescribing. Tolerance is defined as the biophysical modulation of opioid receptors after chronic exposure. With chronic opioid exposure, the receptors require an increased amount of activation for the same result. As a consequence, escalating amounts of narcotics are needed to achieve the same level of pain relief.25,26 Physical dependence is the manifestation of withdrawal symptoms due to cessation of the medication. Physiologically, this will occur in all patients to a varying degree. The most pronounced symptoms of withdrawal include diaphoresis, agitation, tachycardia, vomiting, and diarrhea. Addiction is characterized by behavioral changes, such as seeking out the medication despite personal harm to themselves or others.26

Management of acute surgical pain poses several unique challenges. Recognizing the overlay of acute and chronic pain in the postoperative period can be difficult. Due to tolerance, postoperative pain control in patients with chronic pain will require increased amounts of narcotics to provide relief. Because opioid-tolerant patients experience more pain postoperatively, especially in the first 24 to 48 hours, recommendations include preoperative planning that involves input from the patient’s caretakers, and multimodal agents like nonsteroids and acetaminophen.27-29

When developing a pain management plan, it is important to consider specific patient populations with respect to narcotic use. Exercise caution when administering opioids in elderly patients, for example, due to changing pharmacokinetics and pharmacodynamics associated with both aging and polypharmacy.30 Patients with cardiac and pulmonary comorbidities are susceptible to increased cardiac and respiratory depression.31 Renal and liver disease can prolong clearance and metabolism, leading to longer medication half-life and adverse events.32-34 In

REFERENCES, CONTINUED


continued on next page
patients with obstructive sleep apnea (OSA), additive central depression and decreased neuromuscular tone can worsen obstruction and pulmonary complications.35,36 Because of a high percentage of undiagnosed OSA patients in the general population, clinical perioperative suspicion should remain high.35,37 Successful pain management strategies to help the surgeon with these populations include developing individualized plans, decreasing dosage amounts, and increasing intervals between administration.34,36,37

Patients with underlying mental illness and addictions can be especially challenging due to the biopsychosocial interactions of previous life experiences, current expectations, hypersensitivity to pain, and ineffective coping mechanisms.26,38,39 Setting patient expectations, shared decision making, and aggressive multimodal pain control postoperatively may improve pain outcomes.28,29,38,40

Multiple health care associations including the College, the American Pain Society (APS), the American Society of Anesthesiology, and the CDC have devised guidelines to help physicians manage acute pain (see statement on page 58).28 Setting patient expectations is a common theme for achieving overall improved pain control with less opioid use, decreased anxiety, improved patient satisfaction, and even decreased length of stay postoperatively.28,29,40,41 Strategies include engaging patients in preoperative discussions on pain control, shared decision making, and development of the postoperative pain plan.40 These discussions may reveal previous patient experiences, including personalized pain control that has worked well in the past. Documenting these discussions will help ensure continuity of care. It is also important to anticipate the expected length of acute postoperative pain and educate the patient on specialized chronic pain resources.

**Alternative treatment modalities**

The most recent APS postoperative pain management guidelines, released in 2016, present evidence-based nonnarcotic interventions that should be employed for all patients.28 The underlying principle guiding multimodal therapy is the synergy gained by the use of multiple agents resulting in an opioid-sparing effect.28,42-44 Therefore, the APS recommends routine scheduled nonopioid analgesics as part of the pharmacologic regimen. Cyclooxygenase (COX) inhibition

**REFERENCES, CONTINUED**


continued on next page
prevents the generation of inflammatory mediators, like prostaglandins, that further increase the propagation of nociceptive pain. Nonsteroidal anti-inflammatory drugs (NSAIDs) block this conversion and provide significant reduction in pain. When Tylenol and NSAIDs are combined, postoperative pain control improves, resulting in decreased opioid intake. Other nonopioid options include gabapentin or pregabalin, the selective COX-2 inhibitor Celecoxib, and the intraoperative use of ketamine. Gabapentin is thought to decrease the neuropathic component of pain and, as previously mentioned, COX inhibition effects nociceptive pain, thus together having an additive, synergistic effect. Pre-incisional tissue infiltration of local anesthesia, anesthesia-administered nerve blocks and epidurals, transcutaneous electrical nerve stimulation, and cognitive behavioral strategies all represent additional interventions that can be employed.

Evidence supporting the use of these multimodalities abounds in the medical literature, and it is beyond the scope of this article to fully explore each modality. Surgeons should familiarize themselves with all the possible perioperative interventions that are available to reduce pain and opioid use, specifically starting with consensus guidelines like those provided by the APS and the ACS.

Conclusion

The over-prescription of narcotics in the U.S. has resulted in an opioid crisis. Surgeons will play an important role in addressing and mitigating this scourge. Continued efforts aimed at patient education regarding narcotics will be critical, and a team approach involving the patient, physicians, and other members of the health care team are essential to successfully curbing opioid misuse. Eradicating the opioid epidemic is a moral and ethical obligation for all surgeons in all specialties.

REFERENCES, CONTINUED

42. Khobrani MA, Camamo JM, Patanwala EA. Effect of intravenous acetaminophen on post-anesthesia care unit length of stay, opioid consumption, pain, and analgesic drug costs after ambulatory surgery. PT. 2017;42(2):125-139.
Surgeons and the opioid epidemic:
Treatment and education strategies for the practicing surgeon

by
Benjamin Flink, MD, MPH; Eileen M. Duggan, MD, MPH; Madalyn G. Neuwirth, MD; Lauren B. Nosanov, MD; Jacob A. Petrosky, MD; Austin D. Williams, MD, MSEd; and Luke V. Selby, MD, MS

HIGHLIGHTS
• Explains the effect of implicit biases on assessment and treatment of patients’ pain
• Describes how ERAS protocols as used in the AHRQ/ACS ISCR program across many specialties reduce rates of opioid use
• Summarizes the need for formal curricula for pain management in postoperative patients
• Outlines the role of multidisciplinary communication and care coordination in pain management

Pain as the fifth vital sign is a movement that began in the 1990s, seemingly in response to inadequate attention to patients’ pain. While it is generally recognized that the abundance of narcotic prescriptions written by physicians is at the root of a growing epidemic, some public health experts attribute the rise in these prescriptions to this initiative launched by the Veterans Health Administration. Although opioids have traditionally been the workhorse of pain relief for both acute and chronic pain, the current pattern of use and abuse has spurred a new focus on multimodality treatment, including preoperative and postoperative regimens, for the safe and adequate treatment of pain.
A surgeon’s perception of a patient’s pain is subject to inherent biases, which have been shaped and molded by experience. Unlike the patient, physicians cannot rely on internal cues and must make external assessments and judgments based on whether the patient is being truthful, what is an acceptable or expected amount of postoperative pain, reasonable treatment measures, and what may be drug-seeking behavior. There are several ways to approach pain treatment to shift the mind-set regarding postoperative pain management; however, the largest body of evidence-based protocols is issued through the Agency for Healthcare Research and Quality (AHRQ) Safety Program for Improving Surgical Care and Recovery (ISCR), which the American College of Surgeons (ACS) recently launched in collaboration with the Johns Hopkins Medicine Armstrong Institute for Patient Safety and Quality, Baltimore, MD. Formerly known as the AHRQ Enhanced Recovery After Surgery (ERAS) program, ISCR provides multidisciplinary strategies for effective perioperative pain management and requires therapeutic agreement among surgeons, anesthesiologists, as well as patients and their families.

Implicit bias and the perception of pain
A major hurdle facing physicians who seek to alter their prescribing patterns is a lack of awareness regarding the effect of their implicit biases on assessment and treatment of patient pain. Although many facets of patient care are likely to be influenced by the subtle attitudes, assumptions, and stereotypes that constitute an individual’s unconscious judgment, the evaluation of pain is uniquely susceptible to these biases given the subjective nature of an individual’s response to painful stimuli. Factors known to influence a provider’s assessment of patient pain include patient-reported symptom severity, judgments regarding patients’ trustworthiness, the provider’s preconceived notion of how painful a particular procedure “should be,” prior clinical experience in managing various disease states, and the degree of empathy that a prescriber feels toward any given patient or patient population. Most often, internal conflict arises when patient reports of pain symptoms are incongruent with objective clinical signs.

Although visual aids, such as the Wong-Baker FACES Pain Rating Scale, may diminish the subjective nature of a patient’s pain complaints, physicians are trained to approach these assessments with some skepticism. Although a clinician would be justified to question the reliability of a comfortably resting patient who cries out in “10/10” pain upon stimulation, studies have demonstrated a correlation between patient appearance and how trustworthy they seem to their physician. Furthermore, pain judgment biases have been shown to be rooted in clinicians’ perceptions of patient ethnicity, age, gender, skin color, socioeconomic status, and attractiveness. Unsurprisingly, many of these same factors influence the prescribing patterns of analgesic agents.

One factor shown to mediate implicit attitudes about pain assessment is clinician experience. Previous experience is of particular relevance when considering the capacity of surgeons to appropriately manage postoperative pain. Whereas inexperienced trainees may underestimate the pain associated with fascial sutures or “minor” anorectal procedures, they may be equally as likely to overmedicate a “squeaky wheel” patient on a busy call night. On the other hand, experienced providers may consciously or unconsciously undertreat patients who remind them of prior drug-seeking individuals or they may fall into the trap of overtreating pain complaints to achieve improved patient satisfaction scores. One common thread in many of these potential scenarios is the physician’s failure to appreciate implicit biases. Use of procedure-specific ERAS protocols is among the recently proposed methods to combat implicit biases.

Opioid treatment of chronic pain
Opioids are the traditional treatment for acute surgical pain, but they are poor treatment choices for chronic pain. Approximately 11.2 percent of adults in the U.S. experience chronic pain, 3 to 4 percent of whom are maintained on chronic opioid therapy.
The patient pain management challenges that health care professionals face are, in part, the result of their limited education in the treatment of pain. This deficit becomes most noticeable when practice patterns are examined following the introduction of pain management education. In one study, introduction of opioid management training...
procedure-specific recommendations enabled surgeons to reduce the number of narcotic pills that they prescribe by more than 50 percent; patients who received opioids were adequately managed by the initial prescriptions in 80 percent of the 246 cases studied. Unfortunately, formal curricula for pain assessment and management in postoperative patients is lacking in both breadth and standardization. Though some courses have demonstrated improvements in analgesic prescribing patterns after implementation of a mandatory palliative care curriculum for residents, no nationally recognized or mandated pain management courses are available to surgical residency programs. Furthermore, residents receive minimal training and education in multimodality analgesic administration.

Most residents learn pain management strategies from those surgeons who have gone before them. This trend extends to both analgesic selection and appropriate dosing for each level of pain severity and tends to favor opioid use. Beyond this exposure, junior-level resident pain management strategies typically are subject to trial and error, often with arbitrary increases or decreases in dosages based on the subjectively reported level of pain, with the addition of nonopioid analgesics chosen in a “dealer’s choice” fashion. Patients with preoperative chronic pain or with symptoms that fail to be controlled with conventional methods are often referred to pain management specialists while they are in postoperative recovery.

To mitigate the growing crisis, surgeons need to develop a deeper understanding of the relationship between symptoms, prescribing patterns, educational interventions, and subsequent outcomes. The University of Toronto, ON, has instituted a multidisciplinary transitional pain service to manage patients with chronic postoperative pain and reduce opioid use. The university’s pain research unit found that 70 out of 200 consecutive patients continued to have pain at three months, and researchers noted continued use of oral opioid agents in 27 percent of postoperative patients with persistent pain. Although these patients reported pain levels that were lower than those patients taking nonopioid agents for persistent pain, opioid users reported lower overall health, mood, and ability to return to work. Although the findings presented by the University of Toronto’s pain research unit highlight important issues surrounding over-prescribing of narcotics to postoperative patients, insufficient attention is paid to the risk of developing dependence or chronic postoperative pain, let alone strategies for

REFERENCES

A general approach to improved treatment of surgical pain

Surgeons striving to improve patients’ postoperative pain while minimizing opioid use should consider the following strategies:

• Preoperative discussion regarding the expected postoperative pain and treatment

• Preoperative review of the risks of opioid therapy

• Early referral to a pain management specialist for patients with prolonged or atypical pain, and preoperative collaboration with a pain management specialist for patients who are already receiving chronic opioid therapy

• Use of opioid-sparing regimens in the perioperative period (for example, ERAS protocol via ISCR collaboration)

• Review of the expected postoperative pain course at the postoperative visit with an emphasis on the appropriate time at which the patient should no longer be requiring opioids

Pain is a necessary but undesirable consequence of surgery. Consequently, surgeons are responsible for understanding effective treatment of acute pain as well as the care of surgical patients with an acute exacerbation of chronic pain. Internal implicit biases about level and degree of postoperative pain from both surgeons and patients must be reconciled. The presence of chronic opioid use must be accounted for when tailoring postoperative analgesia, with an emphasis on early collaboration with pain management specialists. We must use our best judgment to provide appropriate therapy and should implement strategies such as ERAS protocols to reduce prescribing of narcotic medications. Expansion and standardization of resident education may aid in a physician-led attempt to address the growing opioid epidemic in the U.S.

REFERENCES, CONTINUED

Surgical leadership is required to reverse the opioid crisis

by
Christopher F. McNicoll, MD, MPH, MS;
Brian K. Yorkgitis, DO;
Naveen F. Sangji, MD, MPH;
Alisha D. Reiss, MD;
Kaylene Barrera, MD;
and
Hari B. Keshava, MD, MS

HIGHLIGHTS
• Describes the role surgeons have in reversing the opioid crisis
• Summarizes federal and state regulations governing opioid prescribing practices
• Outlines research and advocacy efforts to diminish opioid misuse

Physicians reviewing the most commonly prescribed medications at Kaiser Permanente Southern California made an alarming discovery in 2009: the most commonly prescribed drugs were not for hypertension or diabetes but for pain. OxyContin, even as a nonformulary drug, was near the top of the list. A task force was convened to investigate and revise the opioid prescribing practices in the organization. In an article published in The Atlantic earlier this year, “The California doctors who found a way to quit overprescribing opioids,” Sam Quinones relates how the Kaiser group made meaningful progress toward reducing opioid prescriptions through system changes.1 By implementing reforms and educating prescribers, the routine postoperative analgesic prescription dropped from 60 tablets of a brand name opioid to just 18 generic opioid pills.

The Kaiser example emphasizes the leadership role that physicians and surgeons can play in reversing the opioid crisis through identification of problems, education of colleagues, and enactment of practice-changing guidelines. There is an urgent need for leadership today as opioid-related adverse events have reached epidemic levels.2 Outpatient...
opioid prescriptions have increased dramatically in the U.S. from 76 million in 1991 to 219 million in 2011, and the number of opioid prescriptions sometimes eclipses a state’s population. More opioids are consumed per capita in the U.S. than in any other country. As surgeons, we manage acute postoperative pain with opioids in both opioid-naive and opioid-dependent populations. Consequently, surgeons can be considered the gatekeepers of the opioid epidemic and thus have a duty to develop responsible prescribing practices and strategies.

This article summarizes the scope of the opioid crisis and describes the recent changes to federal and state regulations governing opioid prescribing practices. It also offers several brief profiles that illustrate how individual surgeons are mitigating the effects of the opioid crisis through research and advocacy.

Scope of the problem
The Centers for Disease Control and Prevention (CDC) organizes opioids into the following four categories:

• Natural opioid analgesics/semi-synthetic opioid analgesics, including morphine, codeine, oxycodone, hydrocodone, hydromorphone, and oxymorphone

• Methadone

• Synthetic opioid analgesics, such as tramadol and fentanyl

• Heroin

From 2014 to 2015, overdose deaths from synthetic opioid analgesics in the U.S. increased 72 percent, and heroin overdose deaths increased 21 percent. Overall, opioids accounted for 33,091 deaths in the U.S. in 2015—the equivalent of 91 people per day dying from opioid-related causes, or quadruple the number of people who were dying from opioid-related causes in 1999. The rise in the number of opioid-related deaths coincides with a fourfold increase in the number of prescription opioids sold in the U.S.

As of 2011, drug poisonings and overdoses have surpassed motor vehicle crashes as the leading cause of unintentional injury deaths in the U.S. In 2014, 5.9 deaths per 100,000 Americans were due to opioid analgesic overdoses, while 10.8 deaths per 100,000 were from motor vehicle-related injuries and 10.3 per 100,000 were firearm-related. To combat the growing death toll of the opioid epidemic, it is necessary to understand not only the scope, but also the origins of the crisis.

Chronic opioid use often begins with acute pain. The American Pain Society publicized the idea of measuring pain as a vital sign in the 1990s. The U.S. Department of Veterans Affairs (VA) and other health care systems, networks, and institutions quickly adopted this recommendation. In 2001, the Joint Commission on Accreditation of Healthcare Organizations (now The Joint Commission) included the concept of pain as the “fifth vital sign” in how to implement Standard RI.1.2.8 in The Comprehensive Accreditation Manual for Hospitals, which states that “patients have the right to appropriate assessment and management of pain.” The societal shift toward treating pain more vigorously was noticed by pharmaceutical companies, which then aggressively marketed pain-relieving opioids to both physicians and patients. Sadly, the heightened focus on pain management coincided with a rise in both opioid prescriptions and overdoses. As opioid deaths rise, states implemented prescription drug monitoring programs (PDMPs) and regulated pain management clinics to curb abnormal prescribing practices and to shut down so-called pill mills.

Despite efforts to reduce prescription opioid misuse, many Americans continue to take them for nonmedical reasons. Unable to obtain opioids from physicians, patients turn to what are referred to as diverted prescription opioids or illicitly produced opioids. According to 2008–2011 data from the U.S. National Survey on Drug Use and Health, diverted opioids are often freely given to users from friends or family (54 percent), stolen or purchased from friends
or family (16 percent), purchased from a drug dealer (4 percent), or they are provided to users in some other way (6 percent), with the rest of the population misusing opioids prescribed by their physician (20 percent).\textsuperscript{15} Deaths related to synthetic opioid overdoses rose by 72 percent from 5,544 in 2014 to 9,580 in 2015, and deaths from natural and semi-synthetic opioids rose 2.6 percent to 12,727 in 2015.\textsuperscript{2} Heroin overdoses also have risen by 21 percent during the same time, reaching 12,989 deaths in 2015.\textsuperscript{2} Analyzing 2002–2011 data from the U.S. National Survey on Drug Use and Health, up to four out of five heroin users in the U.S. have misused prescription opioids before using heroin, underscoring the importance of preventing initial prescription opioid misuse.\textsuperscript{16}

Surgeon prescribing practices are germane to any discussion of the opioid epidemic, as more than one-third of the average surgeon’s prescriptions are for opioids.\textsuperscript{17} Surgeons prescribed opioids to approximately 80 percent of patients who underwent an elective, low-risk operation such as a knee arthroscopy, with increases in prescriptions and dosages from 2004 to 2012.\textsuperscript{18} Furthermore, studies examining patients who underwent low-risk procedures revealed that opioid prescriptions were associated with a greater likelihood of long-term use.\textsuperscript{19,20} A study of 1.3 million opioid-naive noncancer patients with acute pain indicated that patients with an opioid prescription for at least one day had a 6 percent chance of continued opioid use after one year and a 3 percent likelihood after three years.\textsuperscript{21} In a study of 39,000 patients who underwent a major operation such as coronary artery bypass graft surgery via sternotomy, 3 percent of opioid-naive patients continued to use opioids more than 90 days after their operation.\textsuperscript{22} Because of the risk of chronic dependence, the opioid prescribing patterns of surgeons are now the subject of close examination, and state regulations are being implemented with or without surgeon involvement.

Policies that have affected opioid prescribing patterns, such as mandatory use of a PDMP, have shown notable success for chronic opioid use at the state level.\textsuperscript{23} Another policy that affects opioid prescribing patterns is the development of guidelines that instruct physicians in appropriate use of prescription opioids for chronic pain.\textsuperscript{24} However, guidelines for the management of acute postoperative pain require further delineation.

### Regulatory policy

Regulations pertaining to prescription opioid medications have been enacted at both the federal and state levels.

#### Federal regulation

The U.S. Drug Enforcement Administration (DEA) has implemented several important opioid-related policy changes. In October 2014, the DEA rescheduled hydrocodone from Schedule III to a more restrictive Schedule II substance under the Controlled Substances Act. Prescriptions for hydrocodone decreased by 22 percent in the first year after the change.\textsuperscript{25} Then, in October 2016, the DEA reduced the amount of Schedule II opioid medications that can be manufactured by 25 percent or more, thereby decreasing the total supply of these medications available for distribution.\textsuperscript{26}

In response to a July 2012 petition from the Physicians for Responsible Opioid Prescribing, the U.S. Food and Drug Administration (FDA) changed the mandatory labeling for extended-release or long-acting opioids, removing the previously accepted treatment indication for moderate pain.\textsuperscript{27} As of May 2014, the new indication for these medications is for pain “severe enough to require daily, around-the-clock, long-term opioid treatment and for which alternative treatments are inadequate.”\textsuperscript{27} Additionally, the FDA has called for further post-marketing surveillance studies on these agents by the manufacturers, as well as mandatory provider education programs.\textsuperscript{28} Other federal interventions were included in the Affordable Care Act, calling for states to develop PDMPs and increase funding for substance abuse treatment programs.\textsuperscript{29}

On July 22, 2016, President Obama signed the Comprehensive Addiction and Recovery Act, which calls for implementing incremental steps to combat the opioid epidemic.
epidemic. If fully funded, this law would expand access to evidence-based therapies to treat patients who have disorders related to certain opioids, including methadone, buprenorphine, and naltrexone.\textsuperscript{10}

State regulation
Several states have enacted regulations to reduce opioid-related adverse events. For example, as of April, 49 states and the District of Columbia have enacted PDMP regulations (although some are not fully operational at press time), each with specific requirements regarding opioid access and use. The only state without a PDMP is Missouri, though the Missouri General Assembly considered PDMP legislation in the 2017 legislative session.\textsuperscript{31} After mandating use of PDMPs, New York and Tennessee showed a reduction in patients seeking prescriptions from multiple providers by 75 percent and 36 percent, respectively.\textsuperscript{23}

A total of 17 states now require licensed physicians to undergo supplemental opioid prescribing or addiction education for licensure (see Figure 1, this page).\textsuperscript{32} Several other states require that health care professionals undergo this training if they are responsible for pain management or addiction treatment. Unfortunately, physicians in training are often overlooked as controlled substance prescribers and, therefore, miss out on additional educational opportunities. The reason that residents and fellows are excluded from many studies examining physician prescribing habits is that they often use their training facility’s DEA registration rather than using DEA registration under their own name.

Other initiatives at the state level aimed at addressing the opioid epidemic include Florida, which enacted regulations curtailing clinics and providers from dispensing painkillers from their offices beginning in 2010, resulting in a 52 percent decrease in overdose deaths from oxycodone.\textsuperscript{33} Recently, Connecticut, Maine, Massachusetts, New Jersey, New York, Rhode Island, and Vermont passed laws limiting the length of opioid prescriptions for acute pain, with the most common limit being seven days.\textsuperscript{34} In all, 22 states, plus Guam, Puerto
Rico, and the District of Columbia, require prescribers of controlled substances to obtain a state-issued controlled dangerous substance (CDS) license (see Figure 1, page 35). This mandate allows the states to monitor a practitioner’s prescribing practices of controlled substances.

Massachusetts deserves special mention for leading opioid prescribing policy changes at the state level by requiring that prescribers complete training in pain management and addiction, among other requirements. Physicians must adhere to specific documentation requirements if a patient is prescribed more than a seven-day supply of opioids. Patients may request a partially filled prescription at the pharmacy, and the pharmacist is expected to explain the implications of this prescription to the consumer. For Schedule II opioids, physicians must document that they discussed the risks of opioids with their patients. When prescribing extended-release, long-acting opioids, the prescriber and the patient must enter into a written pain management agreement. Policymakers in Massachusetts also established a benchmarking mechanism for prescribers to monitor and compare their opioid prescribing patterns against similar specialty or practice types. These data allow the Board of Registration in Medicine to investigate and notify physicians who deviate from their peers.

Surgeon advocates

The previous U.S. Surgeon General, Vivek Murthy, MD, sent an open letter in August 2016 to U.S. physicians asking them to “treat pain safely and effectively” by correctly identifying and appropriately treating patients for opioid use disorder, calling on health care providers to “shape how the rest of the country sees addiction by talking about and treating it as a chronic illness, not a moral failing.” As prescribers of pain medications for acute postoperative pain, surgeons have been working to reduce the consequences of the opioid epidemic, both before and after the Surgeon General’s call for action.

An example of a surgeon who is leading the charge in reversing the opioid epidemic is DuPage County Coroner Richard A. Jorgensen, MD, FACS. In 2013, he created the DuPage Narcan Program, the first overdose prevention program of its kind in Illinois. The use of naloxone (Narcan)
by nonmedical personnel such as police officers is permitted under legislation passed by the Illinois General Assembly in 2010. Funded through private donations, grants, and local revenues, the program resulted in 145 “saves” from opioid overdoses in 2016. Individual surgeons, like Dr. Jorgensen, are working tirelessly throughout the U.S. to eradicate the source of diverted drugs by encouraging careful prescribing habits and competently treating the patients most deeply affected by opioid addiction.

Fellows of the American College of Surgeons (ACS) have been instrumental in leading efforts to prevent and treat the epidemic. Atul A. Gawande, MD, MPH, FACS, a general and endocrine surgeon, Brigham and Women’s Hospital, Boston, MA, and a leader in the discussion of surgical quality improvement, recently weighed in on the importance of surgical leadership in controlling the opioid crisis. For example, although all states allow electronic prescription writing for opioids, less than 10 states require it, and more than 90 percent of physicians’ practices do not use electronic prescriptions for these drugs. Dr. Gawande exhorts surgeons to take the lead in the implementation of electronic opioid prescriptions, even without a government mandate.

Jennifer F. Waljee, MD, MPH, MS, FACS, assistant professor, plastic surgery, and Michael J. Englesbe, MD, FACS, associate professor, transplant surgery, University of Michigan, are using grant funding to explore innovative ways to reduce excess opioid prescriptions and subsequent diversion. Through the Michigan Opioid Prescribing Engagement Network (also known as Michigan-OPEN), Drs. Waljee and Englesbe are promoting preoperative discussions with patients regarding postoperative pain expectations, organizing the collection of excess opioid medications, and educating surgeons to prescribe fewer opioids. Drs. Waljee and Englesbe also recently published their research showing 6 percent of opioid-naive patients (no opioid prescriptions filled between one to 12 months before an operation) were still taking opioids more than 90 days after a surgical procedure. By identifying patient-level risk factors for persistent postoperative opioid use, such as tobacco use, anxiety, depression, chronic pain, and others, these surgeons are contributing to a deeper understanding of the opioid epidemic. This research is crucial in advocating

REFERENCES, CONTINUED

for effective policies and regulations with insurance companies and state and federal governments.

ACS efforts
Under the leadership of Executive Director David B. Hoyt, MD, FACS, the ACS is developing a collection of educational materials for patients and surgeons called Opioids and Surgery: Use, Abuse and Alternatives.43 By creating an evidence-based resource that will inform preoperative discussions, aid in the identification of patients at high risk for potential abuse, and highlight nonopioid treatment options, the ACS Division of Education is advocating for improved pain management strategies aimed at preventing Americans from becoming victims of the opioid crisis.

Through its Division of Advocacy and Health Policy (DAHP), the ACS continually tracks opioid-related legislative proposals at both the state and federal levels. The DAHP not only advocates for policy changes that benefit surgical patients and surgeons, it also communicates the relevant details of these laws to the ACS membership through the Bulletin, ACS NewsScope, and other communication platforms. For example, a 2013 Bulletin article summarized state legislative efforts to enhance PDMPs and improve Continuing Medical Education (CME) requirements.44 In December 2016, a Bulletin article updated readers on new state laws for PDMPs, CME, and prescribing limitations for opioids.45 Furthermore, the efforts of the DAHP to support $1 billion of state grant funding for opioid research and treatment through the 21st Century Cures Act were highlighted in a January 2017 article.46

ACS chapters have been active in grassroots advocacy for opioid-related state laws, due in large part to the ACS grant program for state capital lobby days.47 Through these state lobby days, the Connecticut, Indiana, Metro Chicago, New York, Ohio, Oregon, Tennessee, and Wisconsin Chapters advocated on behalf of their patients and surgeons for practical opioid-related legislation under consideration in their respective states.47 Surgeon participation in state lobby days is crucial for productive change in the opioid crisis, and the surgical community is indebted to the participants for their selfless contribution of time and money.
Most recently, in June the ACS Board of Regents approved a Statement on the Opioid Abuse Epidemic (see page 58), which supports the following: the use of fully functional and interoperable prescription drug monitoring programs; research and training for safe prescribing practices of opioids and nonopioid analgesics; addressing issues specific to military veterans; detaching the relationship between provider reimbursement and patient pain control; and supporting patient safety legislation. With this statement, the ACS outlines the principles for alleviating the opioid epidemic, and demonstrates that it will represent the surgeon’s voice in the search for solutions.

A common goal
Other surgical and medical organizations have also developed policies and guidelines with the common goal of diminishing the opioid epidemic. The American Academy of Orthopaedic Surgeons (AAOS) and the American Association of Neurological Surgeons (AANS) released statements in 2015 and 2016, supporting and making recommendations regarding the CDC’s guideline for Prescribing Opioids for Chronic Pain.48,49 In November 2016, the AANS and the AAOS both petitioned the 114th U.S. Congress to provide the maximum funding for the programs designated under the Comprehensive Addiction and Recovery Act.50

Through its Task Force to Reduce Opioid Abuse, the American Medical Association has been promoting evidence-based strategies to combat the opioid epidemic.51 Advocacy efforts have been led by multidisciplinary pain management societies like the Academy of Integrative Pain Management (AIPM), which gathers extensive information on state and federal regulations and advocates for effective pain policies. Through these organizations, surgeons are educating fellow surgeons and advocating for policy changes and funding of legislation to reverse the opioid epidemic.

The future direction of the opioid epidemic depends on the efforts of individual surgeons, in both the treatment of patients and the support of evidence-based state and federal policies. Addressing this nationwide crisis will require sustained efforts by all stakeholders, including surgeons. By advocating for evidence-based legislation that addresses...
Conclusions

The opioid crisis began after an earnest effort by physicians to relieve pain and has taken years to evolve into the complex health problem it is today. The physicians in Southern California in 2009 were understandably surprised by the prevalence of opioid prescriptions at Kaiser Permanente. However, no physician or surgeon should be shocked by the magnitude of opioid prescriptions and overdoses in 2017. Opioid-related deaths exceed liver cancer and prostate cancer deaths in the U.S. And while Pandora’s box has been opened with regard to opioid misuse, hope remains that the medical community can remedy the opioid epidemic through education and advocacy efforts.

Federal and state regulation may help guide physicians into making the right choices for patients, but productive legislation requires expert recommendations. Surgeons can become involved with these efforts through their local ACS chapters and through collaboration with the DAHP to advocate for constructive policies. Members of the ACS can continue to work with legislators to support or modify bills in their home states, while appropriately treating individual patients daily who suffer from acute and chronic pain.

Surgeons and surgical organizations have previously led the way in initiatives to reduce mortality and morbidity from surgical, medical, and systems processes. To curb the opioid epidemic, it will take strong individual and organizational leadership, and, fortunately, many dedicated surgeons are willing to take up the mantle. With sustained advocacy research and policy implementation, surgeons can shut the lid on the opioid epidemic.

Acknowledgment

The authors would like to thank Justin Rosen, Congressional Lobbyist, Division of Advocacy and Health Policy, Washington, DC, for his review of the content of this article.
Preoperative communication promotes opioid stewardship

by Sara Scarlet, MD; Christopher F. McNicoll, MD, MPH, MS; Christina Colosimo, DO; Edward Shipper, MD; Heather J. Logghe, MD; and John C. Hardaway, MD, PhD

HIGHLIGHTS

• Summarizes strategies for improving communication in the preoperative stage
• Illustrates the importance of opioid risk assessment
• Describes the role of informed consent in opioid stewardship
early 40 percent of the outpatient prescriptions that surgeons write are for opioids, a prescribing rate second only to that of pain medicine specialists (49 percent). As a result, surgeons are uniquely positioned to address the opioid epidemic.

Up to 10 percent of opioid-naive patients (specifically those who are not receiving chronic opioid therapy on a daily basis) who receive a postoperative narcotic prescription require opioids to control pain symptoms at one year from surgery. Notably, data suggest that surgeons vastly overprescribe narcotics after procedures, with unused pills inevitably stored in patients’ medicine cabinets where they can be accessed by anyone for nonmedical purposes. Improper disposal of medications is a major source of opioids among individuals who abuse them, a practice known as diversion.

Despite the ubiquity of pain among the ill and injured, education regarding optimal opioid prescribing practices has historically been little more than an afterthought in medical school and surgical residency curricula. According to a 2016 article in the New England Journal of Medicine, “...many physicians admit that they are not confident about how to prescribe opioids safely, how to detect abuse or emerging addiction, or even how to discuss these issues with their patients.” Filling this educational gap is perhaps one of the greatest obstacles surgeons face in terms of addressing the opioid epidemic. Not only must the surgical community develop a better understanding of the magnitude of the opioid epidemic, but it is essential that surgeons assume responsibility for safely and appropriately prescribing these powerful medications. Because surgeons are central to the genesis and management of surgical pain, it is our professional duty to be responsible stewards of opioids and to play a key role in crafting the medical community’s response to the opioid epidemic.

Similar to the multimodal approach that has proven efficacious to manage pain, the health care community must adopt a multifaceted approach to ensure that we are addressing the biological, psychological, and social factors that contribute to the opioid epidemic. We anticipate that heightened awareness will inform opioid prescribing practices for surgeons, and that targeted patient education will lead to more responsible use and disposal of opioids.

Opioid stewardship, in the form of surgeon-led preoperative discussions, may be a powerful tool in reducing the immense societal costs of the opioid epidemic. In this article, the authors discuss several strategies surgeons can use in the preoperative period to facilitate more effective communication with patients regarding risk assessment, expectations for pain management, and the harms associated with opioid analgesics.

Defining the problem

Despite recent efforts to develop multimodal analgesic regimens to control perioperative pain symptoms, opioids remain the most common pain relievers patients use in the postoperative period. Ideally, opioid analgesics are one aspect of multimodal postoperative analgesic regimens. However, opioids are often used independently. In patients with pain symptoms refractory to nonopioid treatments, opioids can greatly alleviate pain symptoms and significantly improve quality of life. However, like any medical treatment, opioids carry a risk. Even moderate opioid use, as recommended after successive operations, can result in misuse, addiction, and diversion. Prolonged postoperative opioid use is associated with increased morbidity, poor quality of life, increased risk of traumatic injury, cardiac events, and delayed wound healing. Notably, surgical patients who suffer from opioid-related complications accrue greater hospital costs, higher readmission rates, and longer hospital lengths of stay.

The art of communication is the language of leadership.
—James Humes

V102 No 8 BULLETIN American College of Surgeons
Opioid misuse and dependence is associated with significant morbidity and mortality. More than 500,000 people died from opioid overdose in 2000–2015. Unintentional drug overdoses have become the leading cause of accidental death in the U.S., surpassing motor vehicle-related deaths, unintentional falls, and fatal firearm injuries. Of the 33,091 opioid-related deaths in 2015, 61 percent were attributed to prescription medications. In 2011, 366,181 emergency department visits were attributed to opioid overdose, an increase from 168,379 in 2005. As frequent prescribers of opioids, it is essential that surgeons recognize the morbidity and mortality associated with taking these medications. Given that patients often receive opioid pain medications postoperatively, these individuals may be particularly susceptible to these harms.

The surgeon’s contribution to diversion
Opioid-related deaths and injuries have risen concurrently with opioid prescription sales, and undoubtedly, the prescribing practices of surgeons have contributed to this situation. Between 2007 and 2012, surgeons wrote 9.8 percent of opioid prescriptions in the U.S. Although surgeons write only a fraction of all opioid prescriptions, the average dose of opioids prescribed postoperatively appears to be rising. Wunsch and colleagues found that the average morphine equivalent dose prescribed after four common low-risk surgical procedures had increased to 247 in 2014 from 219 in 2004 (p < 0.001). Another factor contributing to opioid diversion is related to individuals who misuse prescription pain medications after receiving them from someone they know. In 2015, 53.7 percent of people who misused prescription pain medication received them from a friend or relative.

Studies suggest certain patients are at higher risk for long-term postoperative opioid use. In a population-based study from Canada on long-term postoperative opioid use, patients were associated with an increased risk of opioid use at 90-days postoperatively if they met the following criteria:

- In the lower-fifth income bracket
- Have comorbidities such as diabetes
- Heart failure
- Pulmonary disease
- Preoperative use of benzodiazepines, antidepressants, and antihypertensive medications

Genetic factors also have a strong correlation with potential opioid addiction. Preoperative screening of patients for known risk factors offers surgeons an opportunity to educate at-risk patients and to consult specialists for recommendations regarding pain management in the perioperative period.

Changing the preoperative dialogue
Patient-centered preoperative communication is integral to setting realistic expectations for postoperative pain, developing successful nonopioid analgesic regimens, reducing opioid consumption during the postoperative period, and reducing the number of opioid pills at risk for diversion. Through shared decision making, patients can play an active role in determining the pain management plan that best addresses their medical and psychological history.

Risk assessment
Understanding risk factors that predispose patients to opioid abuse can help surgeons to identify patients who may require preoperative interdisciplinary consultation. Essential components of a thorough risk assessment include a comprehensive understanding of previous and existing mental health and substance abuse issues, knowledge of pharmacologic treatments for substance abuse (such as methadone and buprenorphine), and an awareness of family history of substance abuse. High-risk patients, including those with complex substance abuse histories, should be...
referred for interdisciplinary consultation, which may include specialists in psychiatry, psychology, anesthesiology, acute or chronic pain management, pharmacy, and social work. In addition to understanding patient risk factors, physicians should inquire about the presence of children and adolescents in the household, as well as relationships with individuals suffering from drug addiction. If opioids are part of the postoperative pain management plan, surgeons should discuss safe storage and disposal methods of unused pills to reduce the likelihood of diversion. Surgeons should be sensitive to concerns regarding patient privacy and fear of discrimination as they engage in these discussions. Patients should be informed that disclosures are confidential and conducted for the safety of all involved.

Tools are emerging to assist providers in identifying patients who may be at risk for opioid dependency. The Opioid Risk Tool (ORT), available via the National Institute on Drug Abuse, is a validated self-report screening tool developed for use in chronic pain clinics, based on known risk factors for substance abuse (see Table 1, this page). Although this tool has not been specifically applied or validated in the perioperative setting, it could be useful during the preoperative consultation. Studies aimed at validating and refining such screening and risk-assessment tools are needed to identify patients at risk for postoperative opioid dependency.

Setting expectations in the surgical clinic
Surgeons are responsible for discussing expectations for pain management before an operation. Specifically, surgeons must

### TABLE 1. PATIENT RISK FACTORS FOR OPIOID ABUSE

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family history of substance abuse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Illegal drugs</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Prescription drugs</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Personal history of substance abuse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Illegal drugs</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Prescription drugs</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Age between 16 and 45 years</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>History of preadolescent sexual abuse</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Psychological disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention-deficit disorder, obsessive-compulsive disorder, bipolar disorder, schizophrenia</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Depression</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Scoring total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

set realistic expectations for perioperative pain levels and symptom control. Most surgeons anticipate that patients will experience a degree of pain following an operation, whereas patients often perceive pain as a complication. A qualitative study published in 1997 concluded that most “patients expected pain after surgery but the intensity of the pain they experienced was often significantly greater than anticipated” and that inadequate information regarding expectations for pain control was a contributing factor. Not only should surgeons convey realistic expectations for perioperative pain for professional reasons, but studies have demonstrated that patients want to be informed. A U.K. study examined patient perceptions of pain and recovery during the perioperative period and demonstrated that “patients wanted information on procedures, sensory-temporal matters, coping, and reassurance in that order and most preferred to receive this as outpatients prior to admission.”

Several educational strategies have been used to help physicians and patients work together to set expectations for perioperative pain control, including booklets, videos, and structured discussions with physicians, psychologists, and nurses—all of which have been studied with varying results. The advent of social media and other web-based platforms, including apps, has increased the physician’s ability to educate a diverse patient population with different levels of health care literacy.

Surprisingly, when some patients are educated in the differences in the safety and efficacy profiles of opioid and nonopioid pain management strategies, they may decline opioid prescriptions. In a study on the importance of communication in postoperative pain management, 90 percent of patients (n = 69) declined a prescription for hydrocodone after receiving preoperative education two weeks before an operation.

Studies show that preoperative pain management planning is reinforced with a family-centered approach. Grondin and colleagues demonstrated a reduction in postoperative pain and anxiety and an increase in the use of positive coping strategies (for example, positive attitude toward recovery) during the postoperative period when family members were involved in the preoperative discussion.

Preoperative discussions regarding postoperative opioid use should also focus on developing a strategy for safe disposal of leftover medications. Patients should understand strategies for safe disposal, which may include local take-back programs at pharmacies and police stations, as well as emerging methods, such as drug deactivation systems. One example of a drug deactivation system is the Deterra pouch—a small bag containing carbon capable of deactivating opioid medications—that is beginning to be used in medical clinics and even by patients in their own homes.

Improved recovery models
Interdisciplinary collaboration with other health care professionals leveraged anesthesiologists’ expertise in pain management and led to the formation of Enhanced Recovery After Surgery (ERAS)—the forerunner of the new Agency for Healthcare Research and Quality (AHRQ) Safety Program for Improving Surgical Care and Recovery (ISCR), which the American College of Surgeons (ACS) recently launched in collaboration with the Johns Hopkins Medicine Armstrong Institute for Patient Safety and Quality, Baltimore, MD. These programs call for a multidisciplinary approach to perioperative patient education, including discussions of pain management focused on improving coping strategies, limiting narcotic use, accelerating recovery, reducing complications, and shortening length of stay. Originally developed in 2001, ERAS has been increasingly recognized as highly effective in reducing opioid use throughout recovery and can be tailored to patients undergoing diverse surgical procedures ranging from craniotomy to amputation. Importantly, these pathways maximize multimodal analgesic regimens, mental health optimization, expectation setting, and patient education to improve pain control. A key contributor
to the success of ISCR protocols is patient participation in preoperative discussions regarding expectations for postoperative pain.

Whenever possible, surgeons should use ISCR principles of pain management to enhance perioperative care and reduce narcotic use.

**Informed consent platform**

Informed consent is an essential element of quality medical care. Classic tenets of informed consent include a discussion of the recommended procedure and its rationale, as well as the risks and benefits of the procedure, any alternative treatments, and what may happen if no treatment is provided. Despite patient concerns regarding postoperative pain and the potential for opiate addiction, the data suggest that pain is rarely discussed during the informed consent process. A 2016 survey of 552 patients who had completed an informed consent demonstrated that although 65 percent of patients wanted to know the risk of developing chronic pain after an operation, 34 percent did not know the risk of chronic postoperative pain when interviewed.

In addition to managing patient expectations, full disclosure regarding risks of acute opioid therapy is important from a medicolegal perspective. Cheatle and Savage argue that because individual patient vulnerability to opioid misuse and addiction is unpredictable, informed consent on the opioid issues of tolerance, dependence, and hyperalgesia is essential to minimizing patient-physician conflict and limiting liability. Although satisfying legal requirements is sufficient motivation for informed consent, surgical informed consent that honors patient autonomy will include a thorough discussion of opioid-related risks and benefits and will use educational interventions when necessary.

In this way, informed consent can be a powerful tool that can help surgeons structure their patient-centered conversations to set realistic expectations and effectively motivate and facilitate an opioid-sparing pain management strategy.

**REFERENCES**


continued on next page
The future of opioid stewardship

The end of the opioid epidemic will be actualized through opioid stewardship by all physicians. To reach that goal, surgeons must restructure training programs and Continuing Medical Education programs to prioritize recommended opioid prescribing practices. Specifically, education on how to conduct effective perioperative discussions—including informed consent and expectation management of postoperative pain—is warranted.

Educational interventions to address the opioid epidemic traditionally have focused on filling knowledge gaps regarding practice management guidelines without emphasizing the role of effective communication, which is necessary to successfully implement these guidelines. Notably, a randomized controlled trial among internal medicine residents from five different programs demonstrated the benefit of a training intervention that taught shared decision making and communication skills.37 The University of Washington, Seattle, offers Collaborative Opioid Prescribing Education for Risk Evaluation and Mitigation Strategy—an online, interactive curriculum that incorporates communication training and is offered at no cost to surgeons and other health care professionals who treat patients with chronic opioid pain.38 Incorporating strategies into graduate medical education that help trainees communicate more effectively with their patients could serve as an important step in preparing the next generation of surgeons to tackle the opioid crisis.

To ensure a lasting effect on future opioid prescribing practices, we also must look beyond the bedside. Promoting opioid stewardship necessitates change at many levels, including at the health care systems level. In contrast to more traditional paradigms of morbidity and mortality, the definition of successful health outcomes now incorporates more patient-centered outcomes. Going forward, it is integral that surgeons

REFERENCES, CONTINUED


continued on next page
REFERENCES, CONTINUED


Conclusion
The complexity of the opioid epidemic cannot be underestimated. Meaningful reduction in opioid use disorders necessitates a diverse and multifaceted approach. The surgical community must acknowledge the potential harms of opioid therapy and tailor our practices to ensure that opioid analgesics are used responsibly. Improving physician-patient communication in the preoperative setting is a potentially powerful preventive strategy.

Surgeons are positioned to play a leadership role in reducing opioid-related deaths, as well as the societal and individual tolls of opioid addiction. Through special attention to communication, patient education, opioid risk assessment and addiction screening, preoperative planning and expectation management, and reduced opioid prescriptions, surgeons can significantly limit their contribution to iatrogenic opioid dependence. ♦

not only study these outcomes, but that we develop targeted interventions to reduce the patient experience of pain, which has a considerable effect on quality of life.38

Undoubtedly, these changes will need to be considered within the context of the complex U.S. health care system, as well as regulations issued by hospital accreditation organizations and state and federal governments. In the future, surgeons will need to engage with policymakers to ensure the development of meaningful initiatives that translate to tangible benefits for our profession and our patients.
Reframing surgical leadership in 2017: Surgeon-scientist or surgeon-advocate?

by Naveen F. Sangji, MD, MPH; Christopher F. McNicoll, MD, MPH, MS; Divya Sood, MD; and Annie Ehlers, MD
The Advocacy and Issues Committee of the Resident and Associate Society of the American College of Surgeons (RAS-ACS) hosts an annual Symposium at the ACS Clinical Congress, featuring a debate on controversial topics in health care and surgical practice. This year’s symposium will focus on “Reframing Surgical Leadership in 2017: Surgeon-Scientist or Surgeon-Advocate?” and will take place 3:00–5:00 pm Sunday, October 22, at the San Diego Convention Center, CA.

The symposium will be moderated by ACS Governor David Spain, MD, FACS, and will feature two speakers: Amalia Cochran, MD, FACS, Chair, ACS Professional Association political action committee (ACSPA-SurgeonsPAC); and Caprice Greenberg, MD, MPH, FACS, past-president of the Association for Academic Surgery (AAS). Both speakers will present their views on leadership and help lead the session’s discussion. They will be joined by two resident/fellow winners of the RAS Symposium Essay Contest.

In advance of the upcoming RAS Symposium, this article provides some historical perspective on this topic and addresses the two models of surgical leadership as they exist today.

**Background on the issues**

A changing regulatory environment has led to diminished individual surgeon autonomy in the operating room (OR) and in patient care. Historically, the surgeon was regarded as the “captain of the ship” inside and outside the OR. In 2017, the surgeon is one of many members of multidisciplinary health care teams and often has limited autonomy. The emphasis today is on quality, safety, and outcomes. As a result, every aspect of surgical care is scrutinized—from our training models, to our patient care practices, to our OR attire. Although surgeons welcome changes that improve patient outcomes, many of our colleagues are troubled by the increasing regulatory and administrative burdens that lead to further loss of autonomy. How can surgeons preserve their role as leaders in patient care? Some members of our community advocate for increased surgeon involvement in health care policy and politics, business, and regulation. Other surgeons want to revive the traditional roles of service, education, and innovative research.

These varying perspectives ultimately lead to the question of what surgical leadership should look like in the 21st century. Should we strengthen our commitment to surgical education and research, as surgeon-scientists, or should we strive for a seat at the table of business and politics and engage our communities as surgeon-advocates? What is the ideal balance to strike in the health care landscape as it appears in 2017?

**Surgeons as leaders**

The term “leader” traditionally has been applied to anyone who heads a group. Today, the definition of leader and leadership have evolved to include management of people, skill sets associated with developing social influence, creating a vision, and the ability to motivate others. The captain of the ship metaphor originated in the legal environment to assign liability for patient outcomes to the decisions made by the operating surgeon. Although this legal standard has lost favor in courts since the 1950s, the concept remains popular as an expression of the idea that the surgeon is a leader in all aspects of the care of the surgical patient.

The traditional model of the surgeon-leader—developed in renowned surgical departments around the world decades before the first use of captain of the ship as a legal term—is defined by the provision of excellent care to patients while also conducting research to find innovative answers to clinical questions. In academic environments, this surgeon-leader model has been a requirement for surgeons who hope to achieve what has traditionally been regarded as the pinnacle of surgical leadership—an appointment as chair of surgery. Resident trainees since the time of William S. Halsted, MD, FACS, have internalized this model as the ultimate example of surgical leadership. However, the increasing complexity of a health care system governed by myriad regulations has underscored the importance
of physician advocacy. A brief review of the history of modern surgical leaders provides examples of the various pathways to leadership that are available to young surgeons and surgical trainees.

The surgeon-scientist model
Surgery was not always a scientifically rigorous profession. Upon the chartering of the Royal College of Surgeons of England in 1800, a member of the House of Lords remarked that “there is no more science in surgery than in butchering.” Since then, preeminent surgeons like Joseph Lister, MB, FRCSEng, FRCSEd, who applied his understanding of germ theory to prevent sepsis, have worked tirelessly to contribute to scientific progress. Surgeon-leaders must continue to follow the principles of the scientific method—that is, exploring observations to test hypotheses and answer questions—for the benefit of our patients.

ACS founders Franklin H. Martin, MD, FACS; John B. Murphy, MD, FACS; George Crile, MD, FACS; and other physicians sought to advance the quality of surgical care through the establishment of the College, an organization that remains a standard-bearer for promoting evidence-based quality improvement initiatives. ACS President Courtney M. Townsend, Jr., MD, FACS, fosters the College’s mission, which states the College is “dedicated to improving the care of the surgical patient and to safeguarding standards of care in an optimal and ethical practice environment.”

As an extension of the ACS mission statement, the surgeon-leaders of the ACS promote evidence-based care as a mark of professionalism within the field through the annual Clinical Congress and its Scientific Forum, and via carefully developed policy statements and quality improvement projects. Through these efforts, the collective knowledge acquired by surgeon-leaders is bestowed upon each successive generation of trainees, who further strengthen the profession’s scientific rigor.

Medical students and residents are consistently taught the history of surgeons who invented instruments, devised procedures, and advanced the understanding of surgical pathophysiology. Dr. Halsted, widely regarded as the father of surgical residency training in the U.S., first instilled the concept of academic surgery in his trainees at the Johns Hopkins Hospital, Baltimore, MD. A surgeon-scientist who transferred his experiences in Germany to his American pupils, Dr. Halsted wrote that “the hospital, the operating room and the wards should be laboratories, laboratories of the highest order, and we know from experience that where this conception prevails not only is the cause of higher education and of medical science best served, but also the welfare of the patient is best promoted.”

Harvey W. Cushing, MD, FACS, Peter Bent Brigham Hospital, Boston, MA; Samuel C. Harvey, MD, FACS, Yale University, New Haven, CT; Edward D. Churchill, MD, FACS, Massachusetts General Hospital, Boston, and other surgical education leaders created a training environment where residents focused on the patient, with treatments rooted in the knowledge of basic science.

Paraphrasing Francis D. Moore, Sr., MD, FACS, and B. Mark Evers, MD, FACS, the translational research bridge from bedside to bench and back again is best traveled by surgeon-scientists. This concept of real-world surgical training has produced surgeon-scientists who discover medical breakthroughs that are adopted worldwide.

In fact, nine surgeons have been internationally recognized since 1909 for their groundbreaking scientific discoveries by being awarded the Nobel Prize in Physiology or Medicine. Although many of these surgeons are still revered across the globe, they are just a sampling of the dedicated surgeons who have contributed to humankind’s understanding of science, physiology, medicine, and surgery. Surgeon-scientists like Joseph E. Murray, MD, FACS, and Thomas E. Starzl, MD, PhD, FACS, in organ transplantation; Michael E. DeBakey, MD, FACS, and Denton A. Cooley, MD, FACS, in cardiac surgery; Murray F. Brennan, MD, FACS, in sarcoma research; and countless others have discovered cures or treatments for surgical diseases and other maladies that allow patients to live longer, more productive lives.
We also have entered the new era of surgical outcomes research, exemplified by the work that is being carried out by Dr. Greenberg at the University of Wisconsin; Julie Ann Sosa, MD, FACS, at Duke University, Durham, NC; and Karl Bilimoria, MD, MS, FACS, at Northwestern University, Chicago, IL; and many others. While health services and outcomes researchers are not necessarily performing animal-based, basic science, or clinical research, their focus is the same as those of the conventional surgeon-scientist—that is, to improve health care using the scientific method to elevate surgical performance.

The surgeon-scientist model of leadership remains as important today as it has throughout the evolution of modern surgical practice. To lead is to motivate others toward the accomplishment of a common goal. Whether as a bench scientist conducting basic science research, a principal investigator of a clinical trial, or as an outcomes researcher, the surgeon-scientist is a leader in our field, promoting the advancement of health care for the surgical patient. Surgeons must maintain an active role as investigators to develop and improve upon this goal.

The surgeon-advocate model
Although surgeon-scientists have been lauded in the history of our profession, the role of surgeon-advocates historically has received less attention. However, physicians have long served as advocates for the American public both in their practices as well as through advocacy activities in the community at large since the founding of the U.S. In fact, four physicians, including one surgeon, signed the Declaration of Independence.19 Many physicians, including surgeons, have served in the U.S. Congress, as heads of federal agencies, in
Within the College, surgeons have led the effort to formalize advocacy activities through the Division of Advocacy and Health Policy (DAHP), through ACS standing committees, such as the Health Policy and Advocacy Group (HPAG), the Health Policy Advisory Council (HPAC), and the Legislative Committee; and as surgeon champions for issues such as surgical quality improvement, liability reform, rural care access, and trauma system development. ACS Past-President Andrew L. Warshaw, MD, FACS, FRCSEd(Hon), was instrumental in forming the ACS-PAC, an adjunct to the policy arm of the ACS. The ACS-PAC was established in 2002 and provides the infrastructure and support necessary for advocacy and lobbying activities.

Under the leadership of surgeon-advocates, the ACS has successfully promoted legislation that seeks to improve patient safety and quality of care while addressing the concerns of the surgical profession. One of the most significant accomplishments in recent years has been the repeal of the sustainable growth rate and the passage of the Medicare Access and CHIP (Children’s Health Insurance Program) Reauthorization Act (MACRA) of 2015. This legislation averted a more than 20 percent reduction in physician reimbursement, while also writing into law several quality improvement initiatives.

The importance of physician advocacy is widely recognized by professional organizations within the U.S. The American Medical Association’s Declaration of Professional Responsibility states that physicians should “advocate for social, economic, educational, and political changes that ameliorate suffering and contribute to human well-being.” Based on this statement, one proposed definition of physician advocacy developed at the University of Colorado School of Medicine, Denver, is “action by a physician to promote those social, economic, educational, and political changes that ameliorate the suffering and threats to human health and well-being that he or she identifies through his or her professional work and expertise.”

Advocacy can take many forms, and most surgeons act as advocates on a daily basis when caring for patients. Each time a surgeon develops a patient care pathway following surgery, attends a meeting to discuss a quality improvement activity, or participates in a quality improvement activity, they are acting as advocates. Advocacy also involves working with policy makers and professional organizations to promote legislation that supports the well-being of patients and the surgical profession.
or calls an insurance company on behalf of a patient to get preapproval for an operation or medication, that surgeon is advocating for the health and well-being of his or her patient. Surgeons are uniquely suited to serve as advocates because of our close interaction with patients, our understanding of the determinants of health, and the fact that we care for a diverse patient population in the inpatient and outpatient setting, both electively and emergently. This range of experiences allows surgeons to contribute to the development of sound, meaningful health care policy.27

There are many examples of individual surgeon-advocates who have made a major impact on health care and our profession at the national and local levels. Peter Masiakos, MD, FACS, a pediatric surgeon in Boston, helped enact legislation in Massachusetts in 2010 involving restrictions on all-terrain vehicle use based on a patient experience, and is now working to promote firearm safety awareness.28-29 Dr. Cochran, a burn surgeon and immediate past-president of the Association of Women Surgeons, has brought issues of gender pay equity in surgery to the national limelight30 (see statement on page 57). John Maa, MD, FACS, a trauma surgeon in San Francisco, CA, led a collaboration between the California chapters of the ACS and the California Medical Association, which ultimately helped to defeat a statewide ballot measure in 2014 (Proposition 46) that would have raised the cap on noneconomic damages in medical liability lawsuits.31 The list of similar surgeon-led activities is seemingly endless, and young surgeons and trainees are fortunate to have these surgeon-advocate role models to emulate.

The ACS offers many resources for surgeons who are interested in increasing their involvement in advocacy efforts at the national, state, and local levels. Examples include the Leadership & Advocacy Summit in Washington, DC, which several hundred surgeons from across the country attend annually, and the state Lobby Days grant program (see related article on the Bulletin website).32

Who shall lead?

Surgeons have always played an integral role in both research and advocacy efforts. However, the significance of those roles has evolved over time with environmental and regulatory changes. Therefore, the debate as to whether the
future of surgical leadership lies with the surgeon-scientist or the surgeon-advocate is incomplete without an understanding of the present regulatory, legislative, and political environments.

Despite the significant contributions surgeons have made to the advancement of the medical field and science in general, we have traditionally not fared well when it comes to funding. In 2016, the combined surgical specialties received the fifth highest total dollars in National Institutes of Health (NIH) awards, behind all of the other major medical disciplines, including internal medicine, pediatrics, and psychiatry, as well as microbiology/immunology. Most federal funding for biomedical research in the U.S. comes through the NIH, and after a steady rise in NIH appropriations in the 1990s, during the last decade, the NIH budget has suffered significant reductions. In fact, the NIH budget, adjusted for inflation, has decreased by more than 19 percent since 1995. Since the NIH budget directly correlates with the department’s ability to fund investigators, the grant application success rate has fallen by more than 33 percent in that same period, with the brunt of that decline falling on new investigators, leading to a reduced ability for young surgeons to pursue careers as surgeon-scientists.

However, federal funding of biomedical research has continued to garner bipartisan support, as evidenced by the nearly unanimous passage of the 21st Century Cures Act in 2016. This legislative measure provided an extra $4.8 billion in funding for the NIH, $1.8 billion of which was dedicated to cancer research. Although the political landscape at present is uncertain, the call to increase funding for biomedical research is widely supported by scientists, professional organizations such as the ACS, and the lay public. This consensus exemplifies how the work of surgeon-scientists and surgeon-advocates often intersect.

Interestingly, a recent study of the members of the Association for Academic Surgery and Society of University Surgeons revealed that funding constraints are not the biggest perceived barrier to surgeon participation in research. While 22 percent of more than 1,000 surveyed surgeons indicated that the NIH pay line is too restrictive, most surgeons suggested that clinical and administrative duties and a desire to maintain a work-life balance were the biggest deterrents to their participation. Surgeons cite these same

REFERENCES, CONTINUED


continued on next page
barriers to their participation in advocacy activities.\textsuperscript{40} Surgeon-led efforts to streamline burdensome administrative requirements by amending reimbursement models, such as MACRA’s Merit-based Incentive Payment System, overlap in the areas of patient care, research, and advocacy.\textsuperscript{41} One of the direct results of such advocacy efforts would be to free up some of the time that is currently dedicated to administrative requirements and redirect that to patient care and our academic pursuits.

Unquestionably, surgeons and surgical trainees are overburdened. We are expected by virtue of our chosen profession to be adept in the OR and in clinics, remain current with medical literature, manage teams, participate in quality improvement efforts, and, in academic environments, conduct research. Adding an expectation that surgeons serve as advocates seems almost all-consuming. However, with health care reform legislation under debate in Congress at press time, the future of the nation’s health care system is at stake. It is increasingly important that surgeons join the conversation and embrace the role of surgeon-advocate to support optimal care of the surgical patient and the well-being and stability of the surgical profession.

Many opportunities for engagement in advocacy activities are available to surgeons and residents, ranging from serving on a local hospital board to participating in lobbying events such as the College’s Advocacy Summit. For residents and young surgeons specifically, joining one of the RAS workgroups is a viable way to get involved in advocacy work.

The models of leadership have evolved over time; however, the promise of a surgeon as a leader in the community has remained unchanged through the generations. Some of us may find ourselves more inspired to pursue research, while others will seek roles in advocacy, education, or service. Many surgeon-leaders will combine some of these efforts as a multifaceted approach to providing leadership for the profession and the patient community. The charge remains to strive for excellence in the care of the surgical patient and to honor our profession as we do so. ♦

\textbf{REFERENCES, CONTINUED}


The American College of Surgeons (ACS) Women in Surgery Committee, in partnership with the Association of Women Surgeons, developed the following Statement on Gender Salary Equity, which the ACS Board of Regents approved at its June 2017 meeting in Chicago, IL.

Despite improvements in explicit gender discrimination, substantial pay differentials exist between male and female surgeons even after adjusting for factors such as age, years of experience, specialty, work hours, and productivity.1-4 The American College of Surgeons supports pay equity among surgeons, regardless of gender.

The following guidelines provide a framework for a pay equity policy.5

• Employers should promote transparency in defining the criteria for initial and subsequent physician salaries. To ensure equitable compensation, performance reviews and benchmark salaries of all surgeons should be reviewed routinely in both academic and clinical practice settings. Policies, procedures, leadership practices, and organizational culture should be assessed to ensure compliance with pay equity requirements. In addition, any identified pay disparity should be remedied.

• Implicit bias and compensation determination training should be provided for all individuals in a position to determine salary. These programs should specifically focus on how subtle differences in the evaluation of male and female surgeons may impede compensation and career advancement. Compensation training should provide a thorough understanding of compensation policies, how rates of pay are determined, and how to communicate compensation.

• Nondepartmental oversight of compensation models, metrics, and actual total compensation for all employed physicians should be encouraged. Information about compensation, including summary data by rank, years of employment, and gender should be made available to all surgeons within the department. Educational programs also should be established to help promote an understanding of self-worth and self-confidence. Both genders should be empowered to negotiate an equitable salary. These educational efforts should be extended to residents and medical students so that essential negotiation skills are fostered early in training. ♦

REFERENCES
The use and abuse of both prescription and illicit drugs has increased dramatically in recent years and has become a major public health concern. According to the Centers for Disease Control and Prevention, the number of overdose deaths involving opioids, both prescription and heroin, has quadrupled since 1999. Coinciding with this increase, the sale of prescription opioids nearly quadrupled from 1999 to 2014. A most alarming result of these practices is the increased accessibility of addictive opioids.

Surgeons have a responsibility to minimize their patients’ postoperative pain while addressing the societal imperative to avoid overprescribing. There has been wide variation in the limits and restrictions placed on prescribers by payors and state legislatures. Many of the proposed policies will have a significant impact on patient safety and the way surgeons prescribe opioids and may expose specific patient populations to unnecessary suffering.

The ACS is committed to helping to prevent opioid abuse and addiction in surgical patients. The College’s guiding principles are as follows:

• Promote the use of prescription drug monitoring programs (PDMPs) through the following activities:
  – Set expectation that PDMPs are fully functional and interoperable with electronic health records
  – Establish state/federal grant programs to enhance PDMPs
  – Reduce barriers to PDMP access by nonphysician licensed independent practitioners and physicians’ designated agents

Surgeons have a responsibility to minimize their patients’ postoperative pain while addressing the societal imperative to avoid overprescribing.
The ACS is committed to helping to prevent opioid abuse and addiction in surgical patients.

• Support research and training, developed in collaboration with specialists in pain management, for safe prescribing practices of opioids and nonopioid analgesics through the following activities:

  - Identify patients at high risk for opioid addiction, substance use disorder, or an opioid-related adverse drug event
  - Establish guidelines for acute pain management of the opioid-addicted patient
  - Set expectations and educate patients and caregivers prior to surgery, during discharge, and throughout follow-up
  - Provide evidence-based education and evaluation training programs on opioid and nonopioid alternatives for pain management for the entire surgical team—surgeons, residents, and other health professionals
  - Strengthen postoperative surveillance by both patients and providers to expand the evidence on use, response to alternative therapies, and potential issues with long-term use in acute surgical and palliative care patients

• Recognize and address issues specific to military veterans by establishing the following programs:

  - Fully functional opioid tracking system for Veterans Affairs (VA) patients
  - A system to track prescriptions issued at all federal facilities, including the VA, to outside treating providers and pharmacists
  - Expansion of the VA Opioid Safety Initiative (read more at www.va.gov/PAINMANAGEMENT/Opioid_Safety_Initiative_Toolkit.asp.)

• Change the direct relationship between provider reimbursement and patient pain control through the following efforts:

  - Detach questions regarding pain management on patient satisfaction surveys from physician reimbursement
  - Examine the impact of insurer and state-based government regulations on prescribing practices and patient experience

• Support patient safety legislation that includes the following provisions:

  - Exemptions for the postoperative and/or injured surgical patients who are expected to require opioid analgesics for more than seven days
  - Exceptions from prescriber mandates for patients undergoing cancer treatment, cancer rehabilitation, and palliative care
  - E-prescribing of controlled substances to improve tracking, reduce opportunities for fraud, and limit episodes where patients in pain are without relief
  - Partial filling of opioid prescriptions
  - Disposal programs to prevent misuse or diversion of unfinished prescriptions ♦
Revised Statement on the Development and Use of Proprietary Guidelines for Accountable Patient-Centered Care

The American College of Surgeons (ACS) Board of Governors’ Surgical Care Delivery Workgroup developed the following revised statement, which the ACS Board of Regents approved at its June 2017 meeting in Chicago, IL. The original statement was developed by the Board of Governors and approved by the Board of Regents in 1998 as the Statement on the Use of Proprietary Guidelines by Managed Care Organizations.*

The ACS is committed to protecting the patient’s health and well-being and the physician’s role in delivering efficient, appropriate, and comprehensive health care.

The ACS Board of Governors recognizes new government regulations and alternative payment models are transforming the delivery of care throughout the U.S. To ensure the voice of physicians and surgeons is audible in the new health care landscape, the ACS Board of Governors is proactively putting forth guidelines on the role of the patient, the physician, and the government in health care.

**General concepts about guidelines**

- Guidelines, like medical care, must be evidence-based, reduce unnecessary variation in care, and always put the safety of patients first.

- Guidelines should allow for variations in patient condition and provide options to account for severity of illness and comorbidities.

- Guidelines should allow for local resource and staff considerations, regional differences in community standards of care, and community needs.

- Guidelines should be formulated to consider the totality of an episode of care. For example, discharge criteria should consider the aftercare resources that are available to the patient, such as convalescent care, home care, hospice care, family availability, and so on.

Physicians and surgeons should be involved in the creation, approval, implementation, review, and modification of all guidelines that affect medical care.

• Guidelines should never be used as a basis for disciplinary action or litigation if the physician or surgeon determines that strict adherence to their provisions is not in the patient’s best interest.

Patient role
Patients should have the freedom to choose their own physician and engage in shared decision making regarding their care. Patients should be encouraged to choose care that meets the following criteria:

• Supported by evidence
• Doesn’t duplicate tests or procedures already completed
• Avoids harm
• Truly necessary

Physician role
Physicians and surgeons should be involved in the creation, approval, implementation, review, and modification of all guidelines that affect medical care. Physician leaders at hospitals, physician organizations, and individual practitioners should be diligent in the responsible creation, evaluation, and subsequent implementation of guidelines.

Undesirable or unproven guidelines or portions thereof must be rejected and the objections appropriately documented.

Guidelines that are formulated and maintained through this rigorous process should be followed within reason and in good faith, with the patient’s best interest always at the forefront. Exceptional circumstances and variations in patient condition or circumstances should be anticipated and documented. Patterns of exceptions should lead to refinement of the guidelines.

Government role
Guidelines for specific disease processes developed by governmental agencies or mandated by legislation should follow nationally accepted evidence-based standards of care, have input from physicians, and always put the safety of the patient first.

Appropriate roles for government are the following:

• Reaffirm the physician’s responsibility for patient care
• Ensure patients have access to health care
• Provide for shared decision making between a patient and physician

The ACS believes that the patient has a right to choose a physician and that the physician has a right to freely direct, without interference, the care of the patient. Guidelines may be used to assist the physician, surgeon, and other health care providers in achieving this goal, but should not impede the process or deviate from this purpose.

♦
Revised Statement on the Rationale for Emergency Surgical Call

The American College of Surgeons (ACS) Board of Governors Surgical Care Delivery Workgroup revised the following statement. The original statement was developed by the Board of Governors’ Committee on Socioeconomic Issues in collaboration with the Board of Governors’ Committee on Surgical Practice in Hospitals and Ambulatory Settings. The ACS Board of Regents reviewed and approved the revised statement at its June 2017 meeting in Chicago, IL.

Compassion and our professional ethics mandate that all patients faced with a surgical emergency receive the care they need. The ACS fully supports access to emergency surgical care for all members of our communities, but major issues of surgical manpower and resource utilization represent a threat to continued access. The ACS presents the following analyses and recommendations.

Historical perspective
Emergency surgical call serves to meet patient needs. The Emergency Medical Treatment and Labor Act (EMTALA) regulations support patient care by Medicare-participating hospitals and provide a funding stream to the hospitals by means of the Medicare system. By means of partnership and collaboration with other surgeons within and outside the same practice, surgeons generally have been able to provide such service.

Current environment
Our population has aged steadily. The older the population, the more health care required, both emergent and nonemergent. In addition, a significant number of indigent patients use the emergency room as the sole avenue to medical care. At the same time, the number of surgeons produced by our graduate medical education programs has remained stable for nearly 30 years.* In general surgery, the ratio of surgeons to population

To be able to provide emergency care in a sustainable fashion, surgical practices must remain fiscally viable, professionally attractive, and competitive in retaining and hiring surgeons. The challenges to this effort are myriad.

has been declining steadily since 1985. Other specialties with even fewer providers believe they can no longer meet community demands for their services.* As a result, the chasm between expectations for access to emergency surgical care and the surgeon workforce available to provide such care continues to increase.

The ACS recognizes the need for emergency surgical care.† Hospitals, as mandated by the government, have entered into contracts with the community to provide care, sometimes with limited involvement of the actual care providers in the negotiations. Surgeons feel deeply obligated to care for all individuals who require care. However, the surgeons attempting to provide this care must also be practical in the face of increasing demands.

To be able to provide emergency care in a sustainable fashion, surgical practices must remain fiscally viable, professionally attractive, and competitive in retaining and hiring surgeons. The challenges to this effort are myriad. Emergency surgical care may involve greater risks than care provided during elective, scheduled operations due to an inability to ensure preoperative patient optimization. Emergency surgical patients often have a high risk for complications due to advanced disease states, associated risk factors, and underlying patient comorbidities. Patients and their families may have unrealistic expectations for postoperative outcomes due to an underappreciation of the urgent nature of the surgical disease. The time-sensitive need for intervention may limit the ability to counsel patients and their families on possible outcomes and include input from primary care and other physicians. Occasionally, the acuity of the disease process prompts a patient or family desire to “do everything” when a more palliative approach may be more appropriate.

Due to the nature of patient presentation, emergency surgical care needs to be available on a 24/7 basis. On-call requirements may have a negative impact on the surgeon’s time with family and the ability to provide community service outside of the profession.

The obligation to provide emergency surgery call care must be balanced with the means to do so; cost shifting to the surgeon is an unacceptable option. Unfortunately, this service is increasingly being mandated, and compensation should be appropriate to the commitment. Hospitals and communities must work with surgeons to ensure that lifesaving emergency surgical care continues to be available.

**Recommendations**

The College recommends that health care payors and institutions commit necessary and appropriate support to surgeons for emergency coverage of surgical care.† Whatever model is chosen to provide this patient service, it must account for the disruption involved with being on call regardless of whether actual service is required. Compensation for the service provided must be based on fair value for the risks involved and time allocated. ♦

---

Health care fraud is a persistent and costly problem for both commercial and government payors. The Centers for Medicare & Medicaid Services (CMS) estimates that a significant amount of fee-for-service payments are misspent on improper payments every year. In 2015, the Medicare and Medicaid programs accounted for 99 percent—$88.8 billion—of improper payments reported by the U.S. Department of Health and Human Services (HHS).* An improper payment includes any payment made:

- In an incorrect amount (including overpayments and underpayments)
- To an ineligible provider
- For noncovered services
- For services not received
- For duplicate services
- Without supporting documentation of medical necessity

In addition to improper payments made under CMS, the U.S. Government Accountability Office (GAO) has identified millions of dollars in federal subsidy payments incorrectly made to individuals who were not eligible to enroll in Affordable Care Act (ACA) Health Insurance Marketplace plans.†

This column summarizes the major types of CMS and HHS audits that could affect surgeons, as well as the entities responsible for conducting the audits. It presents a high-level overview of nine common audits:

- Medicare Recovery Audit Contractors (RACs)
- Medicaid RACs
- Unified Program Integrity Contractors (UPICs)
- State Medicaid Fraud Control Units (MFCUs)
- Comprehensive Error Rate Testing (CERT)
- Payment Error Rate Measurement (PERM)
- Supplemental Medical Review Contractors (SMRCs)
- Medicare Risk Adjustment Data Validation (RADV)
- ACA HHS-RADV

In addition to these nine common audits, surgeons also may be subject to Medicare Administrative Contractor (MAC) and RAC prepayment audits, which are conducted on certain types of claims that historically have resulted in high rates of improper payment, as well as HHS Office of the Inspector General (OIG) audits, which investigate instances of potential criminal, civil, and administrative fraud and misconduct related to HHS programs and beneficiaries.

What are the types of audits and what is the focus and scope of each? Who conducts these audits, and how far back can an auditor review submitted payment claims? See Table 1, page 65.

What are the processes, penalties, and appeals processes for each audit? See Table 2, page 68.


<table>
<thead>
<tr>
<th>Name</th>
<th>Scope</th>
<th>Auditor</th>
<th>Look-back period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medicare RACs</strong></td>
<td>Focus: Medicare over- and underpayments</td>
<td>The three Medicare RACs, each responsible for up to two of five U.S. regions, are private companies contracted by CMS. The Regions 1–4 RACs review Medicare claims that were made under Parts A and B for all provider types other than durable medical equipment (DME) and home health/hospice. The Region 5 RAC is dedicated to the review of durable medical equipment, prosthetics, orthotics, and supplies (DMEPOS) and home health/hospice claims nationally. Medicare RACs are paid on a contingency fee basis, receiving a percentage of the improper payments they correct.</td>
<td>Medicare RACs perform audit and recovery activities on a postpayment basis, and claims are reviewable up to three years from the date the claim was filed.</td>
</tr>
<tr>
<td><strong>Medicaid RACs</strong></td>
<td>Focus: Medicaid over- and underpayments</td>
<td>States contract with a private company that operates as a Medicaid RAC to perform audits of Medicaid claims. Individual states determine how each Medicaid RAC will be paid, usually on a contingency fee basis.</td>
<td>Medicaid RACs perform audits and recovery activities on a postpayment basis, and claims can be reviewed up to three years from the date they were filed. Review after this period requires approval from the state.</td>
</tr>
<tr>
<td><strong>UPICs</strong></td>
<td>Focus: Medicare and Medicaid fraud, waste, and abuse</td>
<td>The five UPICs, each responsible for a U.S. region, are private companies contracted by CMS. UPICs have no specific look-back period.</td>
<td></td>
</tr>
<tr>
<td><strong>MFCUs</strong></td>
<td>Focus: Medicaid fraud, waste, and abuse</td>
<td>MFCUs operate in each state, excluding North Dakota and the District of Columbia, and are jointly funded by the state and federal government. Each MFCU receives federal funds equivalent to 75 percent of its total expenditures. MFCUs have no specific look-back period.</td>
<td></td>
</tr>
</tbody>
</table>

*continued on next page*
### TABLE 1. SCOPE, AUDITOR, AND LOOK-BACK PERIOD, CONTINUED

<table>
<thead>
<tr>
<th>Name</th>
<th>Scope</th>
<th>Auditor</th>
<th>Look-back period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CERT program</strong>&lt;br&gt;Focus: Improper Medicare payment rates</td>
<td>The CERT program calculates the rates of improper Medicare fee-for-service payments. CERT program findings are not considered a measure of fraud, as findings are based on a random sample of claims that did not meet Medicare coverage, coding, and billing rules.</td>
<td>The CERT program is operated by two private CMS contractors: (1) the CERT Review Contractor (RC), and (2) the CERT Statistical Contractor (SC).</td>
<td>The CERT program reviews Medicare claims on a postpayment basis. The reviewed claims are limited to those submitted during the current federal fiscal year.</td>
</tr>
<tr>
<td><strong>PERM program</strong>&lt;br&gt;Focus: Improper Medicaid payment rate</td>
<td>The PERM program estimates the rate of improper payments made under Medicaid and the Children's Health Insurance Program (CHIP). Payment error rates are derived from reviews of the fee-for-service, managed care, and eligibility components of Medicaid and CHIP. Individual state error rates are measured and then combined to extrapolate a national error rate. PERM program findings are not considered a measure of fraud, as findings are based on a random sample of claims that did not meet Medicaid coverage, coding, and billing rules.</td>
<td>The PERM program is operated by two private CMS contractors: (1) the PERM SC, and (2) the PERM RC.</td>
<td>The PERM program reviews Medicaid claims on a postpayment basis. The reviewed claims are limited to those submitted during the current federal fiscal year.</td>
</tr>
</tbody>
</table>
| **SMRCs**<br>Focus: Medicare compliance | The SMRC program conducts a nationwide medical review of Part A, Part B, and DME providers and suppliers. SMRCs evaluate medical records and other related documents to determine whether Medicare claims were billed in compliance with coverage, coding, payment, and billing practices. SMRCs currently are performing medical record reviews on the following services and supplies:  
• Inpatient psychiatric facility services  
• Bariatric surgery–morbid obesity  
• Positive airway pressure (PAP) supplies  
• Oxygen and oxygen equipment  
• Nebulizer equipment and related medications and supplies  
• Inpatient rehabilitation facilities  
• Blepharoplasty and other related facial procedures  
• Ophthalmology services  
• Ambulance  
• Hospice  
• Medicare Access and CHIP (Children's Health Insurance Program) Reauthorization Act of 2015 outpatient rehabilitation therapy care  
• Skilled nursing facilities (SNF) and SNF therapy services  
• Chiropractic services  
• Bone marrow and stem cell transplants  
• Outpatient drugs  
• Incorrect place of service | The SMRC program is operated by StrategicHealthSolutions, LLC, a CMS contractor. | SMRCs have no specific look-back period. |
<table>
<thead>
<tr>
<th>Name</th>
<th>Scope</th>
<th>Auditor</th>
<th>Look-back period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medicare RADV</strong>&lt;br&gt;Focus: Medicare Advantage risk adjustment</td>
<td>The Medicare RADV program validates enrollment and health status data from Medicare Advantage (MA) claims to ensure the accuracy and integrity of risk-adjusted payments. Risk adjustment allows MA organizations that enroll less-healthy patients to receive money transferred from MA organizations that cover generally healthier individuals.&lt;br&gt;The Medicare RADV examines whether health plans obtain overpayments by exaggerating the severity of patients' conditions. The RADV process verifies that diagnosis codes submitted for payment by an MA organization are supported by an enrollee's medical records.</td>
<td>CMS runs the Medicare RADV program.</td>
<td>The Medicare RADV program reviews MA claims on a postpayment basis for a period of not more than four federal fiscal years prior to the current federal fiscal year.</td>
</tr>
<tr>
<td><strong>ACA HHS-RADV</strong>&lt;br&gt;Focus: ACA-compliant health plan risk adjustment</td>
<td>The ACA HHS-RADV program validates enrollment and health status data from private health plans that participate in marketplaces under the ACA and that submit data for risk-adjusted payments. Risk adjustment allows insurers that enroll less-healthy patients to receive money transferred from health plans that cover generally healthier individuals.&lt;br&gt;The ACA HHS-RADV examines whether health plans obtain overpayments by exaggerating the severity of patients’ conditions. The RADV process verifies that diagnosis codes submitted for payment by a health plan are supported by an enrollee’s medical records.&lt;br&gt;For the 2016 benefit year, RADV is performed on all ACA-compliant health plans that are offered in the individual and small group marketplaces.&lt;br&gt;Beginning with the 2017 benefit year, ACA-compliant health plans with total annual premiums at or below $15 million will be randomly selected to participate in the RADV process.</td>
<td>The ACA HHS-RADV program is operated by two auditors: (1) an independent auditor selected by the health plan, and (2) a secondary auditor retained by CMS.</td>
<td>The ACA HHS-RADV program reviews claims on a postpayment basis. The reviewed claims are limited to those submitted in the previous federal fiscal year.</td>
</tr>
<tr>
<td>Name</td>
<td>Process</td>
<td>Penalties</td>
<td>Appeals process</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Medicare RACs</strong>&lt;br&gt;Focus: Medicare over- and underpayments</td>
<td>Medicare RACs use proprietary software programs to conduct two types of audits: automated and complex. <strong>Automated audits</strong> occur when a RAC makes a claim determination at the system level without review of a medical record. Automated reviews may only be used when it is clear that (1) the service is not covered under Medicare or is incorrectly coded and (2) a written Medicare policy or coding guideline exists for that service. <strong>Complex audits</strong> occur when Medicare coverage of a service is unclear, requiring the RAC to review medical records or other documentation to make a payment determination. RACs must follow an additional documentation request (ADR) limit—the annual medical record request limit established for each provider based on the number of Medicare claims paid in the previous 12 months—to determine the maximum number of claims that can be included in a single 45-day period. Complex reviews must be completed within 30 days of receiving the medical record documentation from the provider.</td>
<td>No penalties are imposed if the provider agrees with Medicare RAC’s overpayment determination and repays CMS. If a provider misses a deadline in the appeals process, CMS is permitted to automatically recoup the alleged overpayment, plus interest.</td>
<td>A provider has the right to appeal a Medicare RAC’s determination through the five-level Medicare appeals process. The first level of appeal must be filed within 120 days of receipt of an overpayment demand letter. Providers can avoid a Medicare recoupment action if they file the first appeal within 30 days of receiving the letter of demand.</td>
</tr>
<tr>
<td><strong>Medicaid RACs</strong>&lt;br&gt;Focus: Medicaid over- and underpayments</td>
<td>States have discretion in how to coordinate and conduct audits and recoup overpayments. States must set limits on the number and frequency of medical records to be reviewed by the Medicaid RAC.</td>
<td>No penalties are imposed if the provider agrees with determination of an overpayment and repays CMS. If a Medicaid RAC identifies potential fraud, the RAC must refer the case to the state MFCU.</td>
<td>States have flexibility to decide the structure of the process for providers to appeal any adverse determination made by the Medicaid RAC.</td>
</tr>
<tr>
<td><strong>UPICs</strong>&lt;br&gt;Focus: Medicare and Medicaid fraud, waste, and abuse</td>
<td>UPICs perform statistical analyses and medical claims reviews to identify trends and patterns of potential fraud, waste, and abuse from three perspectives: Medicare-only, Medicaid-only, and joint/composite Medicare and Medicaid. UPICs refer Medicare overpayments to the MAC that made the initial claims payment for collection. UPICs coordinate with MACs to track the collection of potential overpayments. UPICs refer Medicaid overpayments to the state Medicaid agency and CMS. UPICs coordinate with state Medicaid agencies to track the collection of potential overpayments.</td>
<td>UPICs recover overpayments as part of resolution of a case or send the matter to an appropriate state entity for collection and can refer a finding of fraud to the appropriate law enforcement agency. MFCU investigations can result in both civil and criminal charges against providers.</td>
<td>A provider may appeal a UPIC determination through the typical Medicare or Medicaid appeals process.</td>
</tr>
<tr>
<td><strong>MFCUs</strong>&lt;br&gt;Focus: Medicaid fraud, waste, and abuse</td>
<td>MFCUs are not restricted to a specific investigational or audit process.</td>
<td>MFCUs recover overpayments as part of resolution of a case or send the matter to an appropriate state entity for collection and can refer a finding of fraud to the appropriate law enforcement agency. MFCU investigations can result in both civil and criminal charges against providers.</td>
<td>The appeal rights of providers investigated by MFCUs depend on the entity to which the case is referred for recoupment, investigation, or prosecution.</td>
</tr>
</tbody>
</table>

*continued on next page*
### TABLE 2. PROCESS, PENALTIES, AND APPEALS PROCESS, CONTINUED

<table>
<thead>
<tr>
<th>Name</th>
<th>Process</th>
<th>Penalties</th>
<th>Appeals process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CERT</strong>&lt;br&gt;Focus: Improper Medicare payment rates</td>
<td>CERT reviews a random sample of Medicare fee-for-service claims submitted to MACs and requests supporting records from the providers who submitted the claims for payment. The claims and associated health care records are evaluated for compliance with Medicare requirements. &lt;br&gt;The CERT RC is responsible for reviewing medical records and compiling data from the sampled claims. The CERT SC then calculates improper payment rates. Errors are assigned to claims in instances of noncompliance with medical records requests. &lt;br&gt;Once the review process is complete, CERT contractors analyze the error-rate data and produce a national Medicare fee-for-service error rate.</td>
<td>CERT contractors notify the appropriate MAC of improper payments identified through the audit process. MACs are then responsible for recovering overpayments or reimbursing underpayments. &lt;br&gt;If a provider fails to submit the necessary medical records to the CERT program within 75 days of the initial request, the claim counts as an improper payment and may be recouped from the provider.</td>
<td>A provider has the right to appeal a CERT determination through the five-level Medicare appeals process.</td>
</tr>
<tr>
<td><strong>PERM</strong>&lt;br&gt;Focus: Improper Medicaid payment rate</td>
<td>PERM is conducted over a three-year period, focusing on 17 states per year. The PERM SC draws random samples of fee-for-service claims from each state and forwards to the PERM RC, which is responsible for requesting and reviewing supporting medical records to validate compliance with Medicaid and CHIP payment and eligibility requirements. &lt;br&gt;Using the data compiled in the medical records review, the PERM SC then calculates state and national improper payment rates, and creates error analysis reports to be used by states for corrective action purposes.</td>
<td>Following each PERM measurement cycle, participating states are required to develop and submit a Medicaid and CHIP Corrective Action Plan (CAP) to CMS. The CAP, which is an outline of the steps states will take to reduce improper payments in each program, must be submitted by states within 90 days of error-rate notifications. &lt;br&gt;If a provider fails to submit a requested record to PERM, the claim counts as an improper payment and may be recouped from the provider.</td>
<td>States may pursue two levels of PERM error determination dispute: the difference resolution process, and the CMS appeals process. These processes afford states the opportunity to overturn PERM error determinations.</td>
</tr>
<tr>
<td><strong>SMRCs</strong>&lt;br&gt;Focus: Medicare compliance</td>
<td>SMRCs conduct their review of medical records based on an analysis of national claims data compared to data limited to a specific jurisdiction controlled by one of the MACs. The SMRC reviews all submitted documents for evidence of improper payments.</td>
<td>SMRCs are responsible for notifying CMS of any improper payments and noncompliance. CMS, in turn, will direct the appropriate MAC to initiate claim adjustments and/or overpayment recoupment actions through the standard Medicare overpayment recovery process. Penalties, if any, are determined by the appropriate MAC.</td>
<td>Providers may appeal the results of an SMRC audit once they receive overpayment demand letters from their respective MACs.</td>
</tr>
</tbody>
</table>

*continued on next page*
<table>
<thead>
<tr>
<th>Name</th>
<th>Process</th>
<th>Penalties</th>
<th>Appeals process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medicare RADV</strong>&lt;br&gt;Focus: MA risk adjustment</td>
<td>CMS selects 30 contracts from MA organizations for RADV audits based on diagnosis coding intensity for enrollees whose reported diagnoses increased in severity at the fastest rates. CMS ranks MA contracts by categorizing diagnoses into groups of clinically related conditions called hierarchical condition categories (HCCs), and uses the HCC and demographic information to calculate a risk score for each enrollee. Each contract is then divided into three risk score categories: high-, medium-, and low-risk. CMS then randomly selects contracts for audit: 20 high-risk, five medium-risk, and five from the low-risk scores. After CMS selects 30 MA contracts to audit, up to 201 enrollees are chosen from each contract based on the enrollees’ risk scores. 67 enrollee records are audited from each of the three risk score groups.</td>
<td>CMS uses the RADV results to calculate overpayment estimates and adjusts the monthly payments made to MA organizations for the next payment period.</td>
<td>MA organizations may file a Medical Records Dispute (MRD) for claims that result in payment recovery through the RADV administrative appeals process within 30 days of the preliminary audit findings.</td>
</tr>
<tr>
<td><strong>ACA HHS-RADV</strong>&lt;br&gt;Focus: ACA-compliant health plan risk adjustment</td>
<td>Under the ACA HHS-RADV, Initial Validation Audit (IVA) and Second Validation Audit (SVA) entities test a sample of health plans’ enrollees to determine if an error rate should be applied to the plan’s average risk score. The process includes six stages: 1. Sample selection 2. IVA 3. SVA 4. Error estimation 5. Appeals 6. Payment adjustments</td>
<td>If the IVA and SVA identify insurer-level overpayments, CMS uses the error rate discovered by the RADV to determine a payment adjustment to recover the funds.</td>
<td>CMS provides health plans the option of appealing the audit results or the application of the payment adjustment through the RADV administrative appeals process.</td>
</tr>
</tbody>
</table>

**Where can I find more information about these audits?**

- MICs: [www.cms.gov/Medicare-Medicaid-Coordination/Fraud-Prevention/MedicaidIntegrityProgram/](http://www.cms.gov/Medicare-Medicaid-Coordination/Fraud-Prevention/MedicaidIntegrityProgram/)
- MFCUs: [oig.hhs.gov/fraud/medicaid-fraud-control-units-mfcu/index.asp](http://oig.hhs.gov/fraud/medicaid-fraud-control-units-mfcu/index.asp)
- UPIC: [nebula.wsimg.com/696d873d012ff30f1df7138e96b87 leaned=957C8B8D8861BDADEB &disposition=0&alloworigin=1](http://nebula.wsimg.com/696d873d012ff30f1df7138e96b87 leaned=957C8B8D8861BDADEB &disposition=0&alloworigin=1)
Unlisted procedures: Strategies for successful reimbursement

by Kenneth Simon, MD, FACS; Samuel Smith, MD, FACS; Teri Romano, RN, MBA, CPC, CMDP; and Jan Nagle, MS, RPh

When seeking reimbursement for a surgical procedure, it is important to select the Current Procedural Terminology (CPT)* code or Healthcare Common Procedure Coding System (HCPCS) Level II code that accurately and precisely describes the services provided. If no specific CPT or HCPCS code exists, then the procedure must be reported using an appropriate “unlisted” CPT code. Some coding staff and surgeons are under the misconception that unlisted codes equate to unpaid codes. However, unlisted CPT codes, when reported with appropriate documentation, should be reimbursed. It is the responsibility of the surgeon and the coding or billing staff to report unlisted CPT codes appropriately and follow up with payors if a claim is denied. This column provides information about reporting an unlisted CPT code.

*All specific references to CPT codes and descriptions are ©2016 American Medical Association. All rights reserved. CPT and CodeManager are registered trademarks of the American Medical Association.

Unlisted CPT code reporting requirements
An unlisted code should be reported using the standard CMS-1500 form. Today, Medicare and most payors require that the CMS-1500 form be submitted electronically to facilitate expedient claim submission and, in a best-case scenario, expedient reimbursement.

Reporting an unlisted procedure typically requires more steps before and after the procedure than reporting a procedure that has a specific CPT or HCPCS code. To lessen the chance of payment denial for elective cases, it is best to obtain prior authorization in writing from the payor before performing an unlisted procedure. Most payors have a prior authorization form that allows the surgeon to describe the planned procedure and the medical necessity of the operation.

In those instances where an unlisted procedure is performed without prior authorization (for example, an urgent operation or unanticipated

CODING TIP
Medicare does not assign a value to CPT Category III codes. Hence, they should be reported the same way that unlisted codes are reported.
intraoperative procedure), a copy of the operative report should be submitted, along with supporting information outlining the decision-making process and the medical rationale for performing the operation. For Medicare patients, this documentation should be submitted to the appropriate Medicare Administrative Contractor (MAC). Individual payors may have processes in place for submitting claims for unlisted codes. It is important to be familiar with your top payors’ specific process to help expedite the claim.

When submitting an unlisted procedure, a concise description of the procedure must be included in Item 19 of the CMS-1500 paper form or the electronic media claim (EMC) form. This concise statement must be 80 characters or less. Even if the description can be summarized in this small space, it is best to send additional claim attachments. Common attachments include a cover letter, Certificate of Medical Necessity, discharge summary, and/or operative report. These attachments are sent with the original claim, either electronically or by fax, e-mail, or hard copy based on the payor’s rules. After the claim has been submitted, it is important to review the Explanation of Benefit for appropriate reimbursement.

Fee-setting considerations for unlisted CPT codes
Your charge for the unlisted procedure is included in Item 24.F of the claim form.

To support your charge, it is recommended that you attach a cover letter. You should adhere to the following steps in writing the cover letter:

• Choose a comparison code that is similar to the unlisted procedure performed. This code should represent surgery on the same body area. For example, you may choose the CPT code for open partial gastrectomy as your comparison code for a partial gastrectomy conducted using a laparoscopic approach. Each organ system and/or body area section of the CPT manual has an unlisted code that corresponds to an unlisted procedure in that organ system and/or body area.

• List two or three factors that make the unlisted procedure the same work, or more or less difficult than the comparison code. For example, your letter could indicate that the unlisted procedure required a different operative approach and approximately 30 minutes of additional operative time than the comparison CPT code.

• Indicate the difference in work between the unlisted procedure and the comparison code using a percentage. For example, you may estimate that the unlisted procedure required 50 percent more time for exposure, exploration, and closure than the comparison CPT code.

• Indicate the normal fee for the comparison CPT code and indicate the fee for the unlisted CPT code based on the percentage of more or less work required and documented in your letter. For example, you may indicate that your normal
fee for comparison CPT code is $1,000, and therefore you have set your fee for the unlisted procedure at $1,500 because it required 50 percent more time for exposure and exploration.

• For Medicare patients, if the unlisted procedure performed is one that other surgeons may perform in similar clinical circumstances, it would be helpful to share this information with the surgical representative on the Medicare Contractor Advisory Committee (CAC). This exchange provides the opportunity to inform and educate the Medicare Contractor Medical Director (CMD) of the new procedure so that future cases may be reviewed and processed more efficiently.

Eliciting the support of the surgery CAC representative provides the opportunity to establish open lines of communication with the CMD to discuss coding and billing issues as they arise, including changes and updates in payment, and other pertinent information between the contractor and medical community.

Keep in mind that the percentage indicated in step 3 is critically important, although the payor will adjust up or down from its fee schedule, not the physician’s charge.

### Coding examples

Table 1 on this page provides examples of CPT unlisted codes and comparison CPT codes that should be reported for procedures that do not have a specific CPT or HCPCS code.

---

**TABLE 1. EXAMPLES OF CPT UNLISTED CODES AND COMPARISON CPT CODES**

<table>
<thead>
<tr>
<th>Procedure performed</th>
<th>Unlisted CPT code reported on claim form</th>
<th>Comparison CPT code referenced in cover letter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laparoscopic subtotal gastrectomy with Roux-en-Y</td>
<td>43659, Unlisted laparoscopy procedure, stomach</td>
<td>43633, Gastrectomy, partial, distal; with Roux-en-Y reconstruction</td>
</tr>
<tr>
<td>Laparoscopic gastrojejunostomy</td>
<td>43659, Unlisted laparoscopy procedure, stomach</td>
<td>43820, Gastrojejunostomy; without vagotomy</td>
</tr>
<tr>
<td>Laparoscopic internal hernia repair</td>
<td>44238, Unlisted laparoscopy procedure, intestine (except rectum)</td>
<td>44050, Reduction volvulus, intussusception, internal hernia by laparotomy</td>
</tr>
<tr>
<td>Laparoscopic pylorotomy</td>
<td>43659, Unlisted laparoscopy procedure, stomach</td>
<td>43800, Pyloroplasty</td>
</tr>
<tr>
<td>Open appendicostomy</td>
<td>44799, Unlisted procedure, small intestine</td>
<td>44300, Placement, enterostomy or cecostomy, tube open (eg, for feeding or decompression) (separate procedure)</td>
</tr>
<tr>
<td>Phlebectomy, less than 10 stabs</td>
<td>37799, Unlisted procedure, vascular surgery</td>
<td>37765, Stab phlebectomy of varicose veins, 1 extremity, 10-20 stab incisions</td>
</tr>
<tr>
<td>Hemorrhoidectomy, external, single column/group</td>
<td>46999, Unlisted procedure, anus</td>
<td>46255, Hemorrhoidectomy, internal and external, single column/group</td>
</tr>
</tbody>
</table>


### Conclusion

When reporting an unlisted code to describe a procedure or service, it is necessary to submit supporting documentation along with the claim to provide an adequate description of the nature, extent, and need for the procedure and the time, effort, and equipment necessary to provide the service. For more detailed information about submitting an unlisted code to Medicare, see Chapter 26 of the Medicare Claims Processing Manual.†
Over the last decade, the accelerated pace of understanding and drug development for advanced genitourinary malignancies, together with positive clinical trials, has led to a significant evolution in oncologic practice. This development is perhaps best illustrated by the current treatment paradigm for patients with metastatic renal cell carcinoma (mRCC), where application of targeted agents inhibiting vascular endothelial growth factor and mammalian target of rapamycin pathways are most commonly used. In the last few years, the focus has shifted to immuno-oncology, which is one of the hottest fields, and the current and future role of immunotherapy in the treatment of urologic cancers appears promising.

This month’s column summarizes recent data for immune-based agents across the major organ sites.

Immunotherapy in urologic oncology
Harnessing the immune system has a long history in the treatment of urologic cancers.

Since the first report by Morales and colleagues in 1976, the intravesical instillation of Bacillus Calmette-Guérin (BCG) has become the mainstay of adjuvant treatment for non-muscle invasive bladder cancers after endoscopic resection. BCG remains the standard of care in reducing risks of cancer recurrence and progression, even when compared with other intravesical agents.

Until the previously mentioned targeted agents were introduced, the management of mRCC relied on immune activation with cytokines, such as interferon and interleukin-2 (IL-2). Even today, high-dose IL-2 plays a role in treatment, with a partial or complete response in up to 15 percent of selected patients. In April 2010, the U.S. Food and Drug Administration (FDA) approved sipuleucel-T, first in class as a therapeutic autologous vaccine, where a patient’s antigen-presenting cells (primarily dendritic) are extracted via leukapheresis, incubated with a prostate acid phosphatase and GM-CSF fusion protein, and then infused back into the patient, whereby the mature dendritic cells activate the patient’s own T cells, yielding a 4.1-month overall survival benefit when compared with placebo.

The latest generation of more specific immunotherapeutic agents includes immune checkpoint inhibitors, which target one of several sites of actions within the regulatory pathway (see Figure 1, page 75). These drugs affect programmed death 1 (PD-1), programmed death ligand 1 (PD-L1), and cytotoxic T-lymphocyte-associated antigen 4 (CTLA-4). Blocking interaction of CTLA-4 and B7 on the T cell and dendritic cell, respectively, and PD-1 and PD-L1 on the T cell and tumor, respectively, releases the brakes on the immune system and permits T-cell activation.

Prostate cancer
Prostvac is a prostate cancer vaccine, which in phase II trials led to an 8.5-month
improvement in median overall survival over placebo.\textsuperscript{5} It is based on two viral vectors engineered to express and, thus, target PSA as the tumor-specific antigen, along with three costimulatory transgenes. Interestingly, and similar to sipuleucel-T, PSA response to treatment was not correlated with outcomes and suggests that PSA may not be a useful biomarker in patients treated with immunotherapy.

A phase III trial of nearly 1,300 patients with mCRPC is under way, which compares Prostvac alone or in combination with GM-CSF against placebo with the endpoint of overall survival. This trial has completed accrual, and results should be reported in late 2017.\textsuperscript{6}

Other ongoing phase II trials combine Prostvac with docetaxel and other immunotherapies, such as ipilimumab.

Researchers expressed initial excitement for the strategy of inhibiting CTLA-4, with preclinical evidence suggesting efficacy in controlling tumor growth in a variety of cancers. The FDA has approved ipilimumab, a fully human IgG1 monoclonal antibody targeting CTLA-4, for the first-line and second-line treatment of advanced melanoma, but its role for mCRPC remains to be determined. Unfortunately, in two phase III trials, ipilimumab did not improve overall survival in men with mCRPC.

One study, CA184-095, randomized 400 men who were chemotherapy-naïve to ipilimumab or placebo (2:1 ratio). Although progression-free survival was longer in the ipilimumab arm, results showed the therapy had no effect on overall survival.\textsuperscript{7}

Another study, CA184-043, compared ipilimumab with placebo in approximately 800 men with mCRPC previously treated with radiotherapy and docetaxel chemotherapy.\textsuperscript{8} Again, no improvement in overall survival (hazard ratio 0.85, p = 0.053) was observed; however, there was a suggestion of benefit in those patients with more favorable disease.

Studies are under way to determine whether combining ipilimumab with other agents improves efficacy.

Renal cell carcinoma

Although high-dose IL-2 has demonstrated benefit in patients with mRCC and has been FDA approved since 1992, its routine use has been limited by significant toxicity and replaced by agents targeting angiogenesis. The completed phase III ADAPT (The Autologous Dendritic Cell Immunotherapy (AGS-003) Plus Standard Treatment of Advanced Renal Cell Carcinoma) trial accrued 462 patients with mRCC. This study compares standard therapy alone with standard therapy plus rocapuldencel-T, an autologous dendritic cell-based vaccine. Although the final results are pending, the independent data monitoring committee recently recommended that the study be discontinued due to futility based on the planned interim analysis.

In November 2015, nivolumab received FDA approval for the treatment of patients with mRCC who had progressed on antiangiogenic therapy. Nivolumab, a monoclonal antibody that neutralizes the PD-1 protein, was tested in a phase III study (CheckMate 025)
Since the first report by Morales and colleagues in 1976, the intravesical instillation of BCG has become the mainstay of adjuvant treatment for non-muscle invasive bladder cancers after endoscopic resection.

REFERENCES
10. Urothelial carcinoma of the bladder
Perhaps the greatest strides have been made in the treatment of advanced bladder cancer, where the mainstay had been cisplatinum-based combination chemotherapy. The absence of promising agents, combined with the challenges of completing clinical trials in this space, had led to little progress over three decades. However, the FDA has approved five immunotherapy drugs in the last year.

Atezolizumab targets and binds to PD-L1 and demonstrated a 15 percent objective response rate. The median duration of response was not reached with median follow-up of 11.7 months in the phase II IMvigor 210 trial, which included patients with advanced or metastatic bladder cancer with progression after previous platinum-based chemotherapy. A second platinum-ineeligible cohort within the study also showed encouraging results, with a 23 percent objective response rate and median overall survival of 15.9 months. These findings led to
The efficacy of novel immunotherapeutics, particularly checkpoint inhibitors, hold promise for a wide variety of tumor types.

accelerated FDA approval for both first-line and second-line treatment in bladder cancer; however, preliminary reports on the phase III IMvigor 211 trial data do not support a significant improvement in overall survival in the second-line setting, which was the primary endpoint. The ongoing phase III IMvigor 130 trial seeks to confirm the findings in the platinum-ineligible population.

Avelumab and durvalumab are both FDA approved in patients with disease progression after prior chemotherapy and demonstrated objective response rates of 13 percent and 17 percent, respectively.13,14 Durvalumab is being evaluated as first-line therapy alone and in combination with tremelimumab in the phase III Danube trial. Pembrolizumab is also approved in this space based on results from KEYNOTE-045, with improvement in overall survival from 7.4 to 103 months (hazard ratio 0.73, p = 0.002).13 The benefit was independent of measurement of PD-L1 expression.

The anti-PD-1 nivolumab was the second agent approved by the FDA as a second-line agent after a prior platinum-containing regimen. CheckMate 275 confirmed the findings from the phase 1/2 trial (CheckMate 032), with an objective response in 20 percent of patients and complete response rate of 2.6 percent, with mediation duration of response of 10.3 months.16

**Future directions**
The efficacy of novel immunotherapeutics, particularly checkpoint inhibitors, hold promise for a wide variety of tumor types. The next critical steps will be identifying the patients most likely to benefit from therapy and to develop and validate relevant biomarkers. In addition, these drugs will likely be used in combination with many others to optimize outcomes while minimizing side effects.

Open Alliance trials can be viewed at www.allianceforclinicaltrialsinoncology.org/main/public/standard.xhtml?path=%2FPublic%2FAlliance-Trials.

**REFERENCES, CONTINUED**

Next generation SSR helps surgeons comply with regulatory mandates and improve performance

by Ulrike G. Langenscheidt, MS

As a key member benefit for Fellows and Associate Fellows, the American College of Surgeons (ACS) Surgeon Specific Registry (SSR) allows surgeons to track their cases and outcomes and meet a number of regulatory requirements. The SSR is an online software application and database that is convenient and easy to use from a desktop computer or through a mobile responsive page. The College encourages members to take advantage of this important resource, which allows surgeons to track the quality of the patient care they provide.

Background
The SSR builds on the ACS Case Log system, which the ACS introduced more than a decade ago as a means for surgeons to keep a record of their cases for practice-based learning. The SSR has evolved into a comprehensive tool for surgeons seeking not only to keep a log of their cases, but also to meet the evolving regulatory demands of the profession.

In 2016, the ACS partnered with QuintilesIMS to move all ACS Quality Program registries, including the SSR, together under one umbrella platform with the goal of building the ACS registry of the future over the next three years. This spring, the ACS launched the new SSR platform on the QuintilesIMS-hosted registry as a first step in this direction.

The SSR’s new features and functions
Only a few key clinical data variables are required for case collection, so surgeons may enter as little or as much data as they like, depending on their clinical practice needs. Surgeons can enter data on any number of devices, including computers, tablets, and smartphones, regardless of the device’s operating system.

Members of the ACS can use the SSR free of charge. The SSR provides the individual surgeon with the ability to implement the system’s features to fulfill a variety of clinical practice needs, including the following:

• Log cases and track outcomes
• Analyze data with enhanced reporting options
• Create custom data fields
• Use responsive mobile web design

The SSR has evolved into a more comprehensive tool for surgeons seeking not only to keep a log of their cases, but also to meet the evolving regulatory demands of the profession.
Delegate account access

Meet regulatory requirements, including the following:

- American Board of Surgery Maintenance of Certification Part 4

- Centers for Medicare & Medicaid Services (CMS) Quality Payment Program (QPP)–Merit-based Incentive Payment System (MIPS)

Meeting regulatory requirements

The ACS continues to work with CMS to achieve and maintain the SSR’s standing as a qualified entity for individual, registry-based reporting of quality performance measures for the purpose of meeting Medicare program regulations.

To that end, the SSR is supporting the CMS MIPS program pathway of the QPP for the 2017 transition year. Specifically for 2017, the SSR is both a MIPS Qualified Registry (QR) and a MIPS Qualified Clinical Data Registry, and will be supporting the following components:

- Quality component, which replaces the former Physician Quality Reporting System

- Clinical Practice Improvement Activities, a new component

For the Quality component, the SSR is offering the following reporting options for surgeons:

- General Surgery Measures Specialty Set

- ACS Surgical Phases of Care Measures Set (expected to be available in September)

For more information on MIPS 2017, visit our website at facs.org/quality-programs/ssr/mips.

The ACS intends to continually improve the functionality of the SSR system, as well as address enhancement opportunities and integrate it with other ACS registries under the new platform. In the future, users also will be able to review benchmark reports.

The ACS offers training webinars to help members transition to the use of the new SSR and will continue to communicate programmatic updates and training on how to use the system on our website (facs.org/quality-programs/ssr/news) through the SSR Communities and via system user e-mail. For more information, contact the SSR program representatives at ssr@facs.org or at 312-202-5408.
Improper sterilization and high-level disinfection of medical equipment can have devastating effects on patients. Nevertheless, substandard sterilization and disinfection are relatively common findings in on-site surveys at health care institutions seeking accreditation from The Joint Commission. This problem strikes at the core of surgery, and a surgeon’s leadership on this issue can play a large role in enhancing an organization’s processes for sterilization and HLD of equipment.

In on-site surveys conducted in 2016, The Joint Commission reported at least one instance of noncompliance with Infection Prevention and Control (IC) Standard IC.02.02.01, Element of Performance (EP) 2. The rates of noncompliance in the following health care settings were as follows:*  

- Hospitals: 51 percent  
- Critical access hospitals: 58 percent  
- Ambulatory care: 43 percent  
- Office-based surgery: 53 percent

Responding to increased noncompliance
IC Standard IC.02.02.01, EP 2 states, “The practice implements infection prevention and control activities when doing the following: Performing intermediate and high-level disinfection and sterilization of medical equipment, devices, and supplies. It is important to note that sterilization is used for items such as implants and surgical instruments. High-level disinfection may also be used if sterilization is not possible, as is the case with flexible endoscopes.”

The Joint Commission has been focusing ongoing efforts on educating surveyors on the challenges of sterilization and HLD of equipment, which has resulted in a keen eye on surveying the areas where this equipment is stored and used. As a result, The Joint Commission surveyors are now better able to identify the problem and can provide on-site education to staff so they can better address HLD and sterilization issues.

To further help organizations with compliance and to raise awareness of this critical patient safety issue, in May, The Joint Commission published Quick Safety, Issue 33: “Improperly sterilized or HLD equipment—a growing problem.” This report asserts that the most vulnerable locations for lapses in sterilization or HLD of equipment are ambulatory care sites, including office-based surgery facilities, and decentralized locations in hospitals.†

Causes and effects
Many factors contribute to noncompliance. The Joint Commission’s Office of Quality and Patient Safety listed some of those reasons, such as the following:†

- Lack of knowledge or training in proper sterilization techniques, lack of HLD equipment, or lack of access to evidence-based guidelines
- No oversight by leadership
- Low priority assigned to sterilization or HLD of equipment
- Lack of a culture of safety that supports the reporting of safety risks

The consequences of failed processes include the following:

- Patients placed at risk for contamination
- Potential outbreaks of infections
- Potential loss of Joint Commission accreditation
- Potential loss of Centers for Medicare & Medicaid Services (CMS) deeming status

This problem [of substandard sterilization and disinfection] strikes at the core of surgery, and a surgeon’s leadership on this issue can play a large role in perfecting an organization’s processes for sterilization and HLD of equipment.

**ITL declarations**
From 2013 to 2016, The Joint Commission found immediate threat to life (ITL) declarations directly related to improperly sterilized or HLD equipment increased significantly. An ITL is defined as “a threat that represents immediate risk and has or may potentially have serious adverse effects on the health or safety of the patient, resident, or individual served. These threats are identified on site by the surveyor.”‡

ITL declarations can result in an expedited Preliminary Denial of Accreditation (PDA) decision based on the threat. After notice of the PDA decision, the organization has up to 72 hours to either eliminate the situation entirely, or, if more time is required to solve the problem (such as purchasing and installing a piece of equipment or a device), then the organization must implement emergency interventions to abate the risk to patients; for example, stop performing a certain procedure or implement additional safety measures, within 72 hours. If the situation is not fully resolved within 72 hours, the institution will have a maximum of 23 calendar days to do so. When the situation is fully resolved, the institution’s accreditation status may change from PDA to a time-limited PDA and accreditation with follow-up survey. This restriction will remain in place until an accreditation follow-up survey is conducted to assess the organization’s sustained implementation of corrective actions.

In 2016, 74 percent of all ITLs were related to improperly sterilized or HLD equipment. These lapses can lead to outbreaks of HIV, hepatitis B and C, and transmission of bacterial-infecting agents.†

**Recommendations**
The Joint Commission recommends several actions to improve HLD and sterilization processes. They include the following:

- Use and follow up-to-date, nationally recognized evidence-based guidelines
- Verify that the manufacturer’s instructions are easily available to staff and are followed for all equipment, devices, and supplies requiring sterilization or HLD
- Follow organizational policies and procedures for sterilization and HLD
- Ensure frontline staff competence, training, and support in sterilization and HLD processes, from point-of-use to storage

The Joint Commission also has the following recommendations for leadership:

- Support the length of time needed to conduct the reprocessing steps (in other words, do not rush frontline staff, which could lead to missed or omitted steps)
- Identify and review causes of instruments received with dried blood/bone/debris at point-of-use (for example, equipment sent back for reprocessing and not to be used on a patient)

The Quick Safety article also features a checklist for leadership to follow to address sterilization and HLD.

Surgical leaders play an important role in eliminating this problem and helping to protect patients, by hiring, supervising, training, and developing staff who are attentive to the details of sterilization and HLD of equipment. ♦

**Disclaimer**
The thoughts and opinions expressed in this column are solely those of Dr. Pellegrini and do not necessarily reflect those of The Joint Commission or the American College of Surgeons.
Hepatitis C, a disease of the liver caused by the hepatitis C virus (HCV), can take on both acute and chronic forms—ranging from a mild, self-limited illness where 15 to 45 percent of patients may spontaneously clear the virus, to a serious, lifelong, chronic condition.

An estimated 71 million people around the world have a chronic hepatitis C infection. Chronic infection may lead to cirrhosis in 15 to 30 percent of patients within 20 years and may lead to hepatocellular cancer. Almost 400,000 deaths occur annually worldwide as a result of hepatitis C. Antiviral medication can cure more than 95 percent of individuals with hepatitis C infection, which in turn significantly reduces the risk of death from cirrhosis or cancer. Unfortunately, at present, no vaccine is available to combat this global epidemic.*

How hepatitis C went viral
As a bloodborne pathogen, the most common routes of hepatitis C infection are through exposure to a small quantity of

Almost 400,000 deaths occur annually worldwide as a result of hepatitis C. Antiviral medication can cure more than 95 percent of individuals with hepatitis C infection, which, in turn, significantly reduces the risk of death from cirrhosis or cancer. Unfortunately, at present, no vaccine is available to combat this global epidemic.

blood. This transmission may occur as the result of needle-sharing in certain high-risk drug user populations, transfusion of unscreened products, exposure to a health care professional who is caring for a patient with hepatitis C, sexual transmission, and from mother to baby.

To examine the occurrence of injured patients with a diagnosis of hepatitis C in the National Trauma Data Bank® (NTDB®) research admission year 2015, medical records were searched using the International Classification of Diseases, Ninth and 10th Revision, Clinical Modification codes. Specifically searched were records that contained either diagnosis codes of 070.41/B17.11 (acute hepatitis C with coma), 070.51/B17.10 (acute hepatitis C without coma), 070.44/070.54/B18.2 (chronic hepatitis C), 070.70/B19.20 (unspecified without coma), or 070.71/B19.21 (unspecified with coma).

A total of 139 records were found, of which 122 records contained a discharge status, including 77 patients discharged to home, 13 to acute care/rehab, and 25 to skilled nursing facilities; seven died (see Figure 1, page 82.) Of these patients, 73 percent were men, on average 53.5 years of age, had an average hospital length of stay of 7.1 days, an intensive care unit length of stay of 5.1 days, an average injury severity score of 11.0, and were on the ventilator for an average of 6.3 days. Of the 87 patients tested for alcohol, more than one-third were positive.

Precautionary actions
In April, the World Health Organization (WHO) updated its HCV fact sheet, which includes several categories of recommendations regarding HCV infection, including screening high-risk populations, screening for alcohol in patients with documented HCV and offering behavioral reduction strategies, and assessing all adults and children with chronic HCV infection for possible antiviral treatment.

Unfortunately, the worldwide numbers for HCV infection have “gone viral.” For more information, the WHO HCV fact sheet is available at www.who.int/mediacentre/factsheets/fs164/en/.

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

Acknowledgment
Statistical support for this article was provided by Ryan Murphy, Data Analyst, NTDB.
Editor’s note: The following letter was submitted regarding a recent article published in the Bulletin. A response from the authors of the article follows.

Letters to the Editor

Surgeons do their best to prevent errors
I was dismayed to see the title on the cover of the March issue of the Bulletin.* “Preventing surgeon errors” is the worst admonishment you could issue to the busy surgeon working day in and day out trying to survive the onslaught of demands that define surgery today. The plaintiff attorneys will love you for the title, though.

As you are well aware, surgeons are humans and making mistakes will always be a part of being a surgeon and being a human. There is a bell-shaped curve for everything in life, and no matter how hard we try, some surgeons will always be at the top and some at the bottom. The title is reminiscent of the foolishness of “never events” and how the American College of Surgeons (ACS) never stood up to the use of this ludicrous phrase to say there is no such thing in medicine.

Although the authors present some excellent ideas to help decrease errors in surgery, these ideas will never prevent errors for the reasons stated above. Some attorneys and patients are taught that the practice of medicine should be perfect and that any time a complication occurs it is due to negligence and error.

We surgeons who operate day in and day out face this hostility and these expectations every day. Most of the article puts all the blame and responsibility on surgeons, stating what they should do, and none of the burden on the noncompliant or hostile patient, on the operating room that does not have the staff or the materials to properly care for the patient, and on the insurance companies that control everything. The entire article is about negative results and negative thoughts, when the vast majority of surgery leads to positive results.

We need a College that is ready to lead and not follow. We need a College that is ready to think outside of the box and use what we do as surgeons as a leverage to truly represent working surgeons and their patients. I don’t believe this can be accomplished by playing nice and being politically correct, as it seems so much of the College’s efforts revolve around today. The ACS led the fight to get rid of the sustainable growth rate’s yearly threats to reimbursement only for it to be replaced with the Quality Payment Program under the Medicare Access and CHIP

To whom it may concern,

Dear sir or madam,

(Children’s Health Insurance Program) Reauthorization Act and other ridiculous ideas. We need vigorous and strong resistance to what is being done to us, and it is sad to see the College not leading but following.

Guy Voeller, MD, FACS
Memphis, TN

Response from the authors

We are pleased to respond to Dr. Voeller’s heartfelt letter regarding our Bulletin article, “Evolving insights for preventing surgeons’ errors.” Dr. Voeller is a noteworthy force in herniology, advocacy, and health care policy whose voice carries considerable weight.

To leave no misunderstanding, the opinions and interpretation of data expressed in the article are those of the authors. Surgeon staff at the College reviewed the article and recommended acceptance. Beyond that, the College took no stance as to the article’s content.

As Dr. Voeller notes, most errors have a systematic component, to err is human, surgeon errors are inevitable, and errors are not synonymous with negligence or culpability. We are confident that the article implies nothing to the contrary. The authors share Dr. Voeller’s distaste for the word “error.” Nonetheless, it is what it is. In the past, we have referred to “technical misadventures” and “behavioral violations.” To update what we have learned since then, we chose error for this article.

Furthermore, any perceived shortcomings of our article should not be a platform for denigrating the ACS programs that support surgeons and their patients. The ACS has introduced educational programs to target the newfound causes of errors and liability, including courses in communication. New emphasis has been assigned to the ACS clinical databases, including the National Trauma Data Bank®, the National Cancer Database, and the ACS National Surgical Quality Improvement Program and the role they can play in increasing quality, decreasing liability, and providing data to measure outcomes and identify benchmark practices that lead to evidence-based care.

The College’s pursuit of liability reform is ongoing. Tort reform has been largely successful at the state level, and the College has offered alternatives to the tort system. Examples include alternative dispute resolution, health courts, enterprise liability, safe harbors, and communication and resolution programs, which have shown to lead to safer care, costs savings, and more equitable settlements.

As a result, the ACS is now seen as a patient-sensitive advocate in the health policy arena. We have achieved this position without pandering and without the stigma of political correctness.

The authors appreciate Dr. Voeller’s cogent input and the opportunity to participate in the discussion. We are optimistic that things are better for surgeons and their patients now than in the past, and that, in spite of the challenges, the future is bright. Even so, Dr. Voeller is correct: Surgeons must step up.

David H. Ballard, MD
St. Louis, MO
Navdeep S. Samra, MD
Shreveport, LA
F. Dean Griffen, MD, FACS
Shreveport, LA

AUG 2017 BULLETIN American College of Surgeons
The American College of Surgeons (ACS) presented the 2017 Jacobson Innovation Award to Timothy A. M. Chuter, MB, BS, DM, FACS, at a dinner in his honor June 9 in Chicago, IL. Dr. Chuter is professor of surgery, University of California, San Francisco (UCSF), where he practices vascular surgery with a focus on the endovascular reconstruction of aneurysms involving the aortic arch and thoracoabdominal aorta.

The Jacobson Innovation Award honors living surgeons who have developed innovative devices or techniques in any field of surgery and is made possible through a gift from Julius H. Jacobson II, MD, FACS, and his wife Joan. Dr. Jacobson is a general vascular surgeon known for his pioneering work in the development of microsurgery.

**Leading the way in endovascular aneurysm repair**

Dr. Chuter was recognized for his role in the development of endovascular aneurysm repair. He was the first individual to design and implant bifurcated
stent grafts to treat abdominal aortic aneurysms, based on the idea that if an aneurysm has branches—at the aortic arch or the bifurcation of the common iliac artery, for example—the endovascular prosthesis also should have branches. Because the most common site for aortic aneurysm involves the distal abdominal aorta, bifurcated endovascular repair has become the most accepted method of aneurysm repair worldwide. In the years between 1993 and 2000, the scope of endovascular repair rapidly expanded, with several firsts in the field, such as the first bifurcated stent grafts in 1993, the first endovascular repair of a ruptured aortic aneurysm in 1994, the first fenestrated stent grafts for aneurysms of the pararenal aorta in 1998, and the first branched stent grafts for the thoracoabdominal aorta in 2000. Dr. Chuter played a role in many of these developments, though none was the work of a single inventor. Dr. Chuter has said that he is proud to have contributed to several advances in endovascular aneurysm repair, not only by inventing new forms of repair, but also by mentoring surgical residents, fellows, and faculty.

In addition to his noted surgical skill, Dr. Chuter has been lauded for inventing and patenting the stent grafts that facilitate his work. Dr. Chuter’s devices and surgical techniques allow aneurysm repair in patients who otherwise might have no other chance of receiving effective treatment. He holds more than 40 patents, including 23 related to endovascular aortic stent-graft devices, stents, attachment systems, delivery systems, and component junctions.

Worldwide recognition
Dr. Chuter is the author or co-author of at least 145 peer-reviewed articles and 23 books or book chapters in the field. Other organizations have recognized his role in the development of endovascular aneurysm repair as well, including the Royal College of Surgeons, through their Kinmonth Medal in 1995; the Society for Vascular Surgery, through their Medal for Innovation in Vascular Surgery in 2008; and the Society for Endovascular Therapy in 2009.

Read more about Dr. Chuter and the Jacobson Innovation Award in the ACS press release at facs.org/media/press-releases/2017/jacobson061217. For a list of previous Jacobson Innovation Award winners, visit the ACS website at facs.org/about-acs/governance/acs-committees/honors-committee/jacobson-list.

Dr. Chuter has said that he is proud to have contributed to several advances in endovascular aneurysm repair, not only by inventing new forms of repair, but also by mentoring surgical residents, fellows, and faculty.
“Each of you is here because you serve in a leadership capacity at home. We want the benefit of all of your expertise,” said Patricia L. Turner, MD, FACS, Director, American College of Surgeons (ACS) Division of Member Services, in her opening comments at the sixth annual ACS Leadership & Advocacy Summit, May 6–9 in Washington, DC.

This year’s Leadership Summit drew 468 attendees—an 8 percent increase from 2016 and the highest number to date—representing all levels of ACS leadership, including Regents, Governors, Advisory Council members, Chapter Officers, Resident leaders, and other stakeholders.

This portion of the Leadership & Advocacy Summit—a paired meeting with a focus on both leadership enhancement and advocacy training—featured presentations covering a range of topics, including managing difficult people and conversations, leading from behind, volunteering “in your own backyard,” the state of ACS chapters and chapter success stories, overcoming burnout, leading health care systems, and understanding essential nontechnical skills in the operating room (OR).

Managing difficult people and conversations

“Overt bad behavior can be easier to handle as a leader than the more subtle negative behavior,” said Melina R. Kibbe, MD, FACS, Zack D. Owens Distinguished Professor and chair, department of surgery, University of North Carolina School of Medicine, Chapel Hill. Successfully managing difficult people, no matter how they exhibit negative behavior, is dependent upon a keen sense of self-awareness and self-regulation, Dr. Kibbe said. “Be open to your own emotional reaction—then modulate your emotions, because as a leader you can’t react emotionally.”

Dr. Kibbe described five different types of difficult people to manage, which include the following:

- **Passive-aggressive:** These individuals tend to “whisper” their dissent, are often sarcastic, and do not like being the center of attention. She suggests engaging passive-aggressive people openly and asking them to contribute in front of other team members.

- **Chronic whiner:** These individuals blame others for issues, which can disrupt teamwork. Dr. Kibbe advises leaders to underscore positive outcomes with concrete examples, while remaining realistic.

- **People pleaser:** Be careful when managing people who are always...
trying to please others. They tend to over-commit themselves and have a problem saying “no.”

• **Unresponsive and disengaged:** These individuals refuse to reveal their true motives and often use silence as an aggressive and controlling mechanism. Dr. Kibbe suggests asking disengaged team members open-ended questions and then waiting for their response.

• **Hostile or disruptive:** Address domineering or bullying staff members in a transparent and consistent manner, and try to determine the possible triggers for this behavior.

“Negative behavior in a health care environment is a serious patient care issue and jeopardizes patient safety because subordinates may be afraid to speak up,” Dr. Kibbe said. This behavior also affects patient engagement and can lead to an increase in patient complaints. She suggested surgeon leaders use the Vanderbilt Patient Advocacy Reporting System (PARS) or a similar tool to track and analyze patient complaints. “A very small number of physicians account for the majority of patient complaints,” Dr. Kibbe added, citing a *Journal of the American Medical Association* study of 645 physicians from 2002 that found that 9 percent of physicians account for half of all complaints.

Disruptive and inappropriate behavior leads to patient safety concerns, high employee turnover, and greater malpractice risk,” Dr. Kibbe added. “The key to managing difficult people is emotional intelligence [EI] and establishing a culture of professionalism.”

---

**Leading from behind**

Leading from the front, also known as the command-and-control style, works well in urgent situations that arise in the OR. “But when you walk out of the OR, you need another set of leadership skills, also known as leading from behind,” said Patrick Hudson, MD, FACS, BCC, a surgeon and fellow of the National Anger Management Association. According to Dr. Hudson, leading from behind is rooted in collaborative and inclusive behavior. It is by no means passive. In fact, it is as active as leading from the front.

Dr. Hudson described the following four leading-from-behind strategies that can help surgeons motivate team members, help them function independently when necessary, and reduce stress levels:

- **Avoid ego traps:** Learn to balance self-confidence and self-assuredness with EI and team member needs.

- **Empathy:** “Confident leaders do not need to constantly prove themselves,” Dr. Hudson said. “Stop talking and actively listen.”

- **Influence:** “You need to learn to dance. Step one is tell, step two is ask. Tell them something, and then ask them a question. This is a classic coaching tool.”

- **Self-management:** “This is probably the most important skill. We need to be able to show [the team] that we can make mistakes and that we are willing to learn.”

Dr. Hudson noted that the leading-from-behind approach is derived from many sources, perhaps most notably from Nelson Mandela, who in his autobiography, *Long Walk to Freedom*, equates being a great leader with shepherds who traditionally lead their flock from behind the herd.

---

**Volunteerism in your own backyard**

“We train for long hours for many years, and why? To make a living, for sure, but there are lots of ways to make a living,”
said Scott A. Leckman, MD, FACS, adjunct assistant professor of surgery, University of Utah School of Medicine, Salt Lake City. “We do this because we want to make a life-altering difference for others.”

In 2001, Dr. Leckman helped to lead the launch of the Health Access Project, a program that improves access to comprehensive health care for low-income and uninsured patients in Salt Lake County. Dr. Leckman described the challenges associated with recruiting the initial batch of surgeon participants.

“The first physician I talked to said, ‘No way, I already do too much free care,’ but he was talking about people who don’t pay their bills. I was talking about giving a gift to someone in need,” Dr. Leckman said. “I asked physicians to sign up for one patient per month. That wasn’t scary to anyone, and sign up they did. Patients are given a Health Access Project card, which looks like a standard health insurance card, and they wait in the same waiting rooms as other patients. When I operate on an Access patient, I am typically the only one in the room who is aware of this,” explained Dr. Leckman, who recruited the program’s first 300 physicians. Today, more than 600 physicians and nine hospitals in the county are providing free care to qualified individuals, totaling more than $22 million in donated health care.

In recognition of this effort, in 2014 Dr. Leckman received the ACS Surgical Volunteerism Domestic Award. He now serves on the Global Engagement Committee of Operation Giving Back (OGB), and chairs the Domestic Volunteerism Subcommittee.

“I don’t know what your destiny will be, but one thing I know—the only ones among you who will be really happy are those who will have sought and found how to serve,” said Dr. Leckman, ending his presentation with a quote from philosopher and physician Dr. Albert Schweitzer. “So, what can you do? Check the ACS OGB website for volunteer opportunities, but there are many more we don’t know about. Tell us what is going on in your community. If you don’t see anything in your area, be a leader and fill that need. If you ever hear your inner voice say, ‘Somebody should do something,’ remember, you are somebody.”

**The state of the ACS chapters**

After analyzing data from the 2016 Survey of ACS Domestic Chapters, which had a response rate of 82 percent, College leaders were able to determine strengths and opportunities for improvement in the following six categories:

- Member recruitment
- Chapter council/committee representation
- Financial health
- Communications
- Chapter meetings
- Advocacy

S. Rob Todd, MD, FACS, professor of surgery and chief, acute care surgery, Baylor College of Medicine, and chief, general surgery and trauma, Ben Taub Hospital, Houston, TX, presented details about the survey results, which will be disseminated to all chapters. Highlights are as follows:

- Of the respondents to the survey, 12 percent indicated a 10 percent increase in membership, while 18 percent noted a 10 percent decrease.

- The top revenue streams for the chapters include annual dues, meeting registration fees, exhibitor income, and income from investments and sponsorship income.

- Chapters report they most commonly communicate with their members quarterly,
while others do it weekly, and others on an ad-hoc basis.

• Nearly half (49 percent) of the ACS chapters fail to engage in any social media platform.

• Approximately 89 percent of the chapters organized an annual chapter meeting in 2016, and 39 percent participate in ACS state lobby days.

“How do we act on the data? The ACS is committed to supporting the local chapters with new initiatives that are being implemented during the coming year, including promoting the value of chapter membership, increased marketing of chapter events, and continued support of chapter advocacy efforts,” Dr. Todd said.

**Chapter success stories**

Officers of the Connecticut Chapter, the North and South Texas Chapters, and the Georgia Society of the ACS (GSACS) shared their success stories in an effort to inspire other chapter leaders to boost member engagement and to improve their effectiveness.

**Connecticut Chapter:**
**Resident engagement**
“Last year, four of our surgical residents attended the summit, and they really helped us determine what younger surgeons desire from the Connecticut Chapter,” said Kimberly A. Davis, MD, MBA, FACS, FCCM, President, Connecticut Chapter, and professor of surgery, Yale School of Medicine, New Haven. “Before the summit was over, plans were made to establish a Resident Council.” The Resident Council was formed in the summer of 2016 under an initiative led by the ex-officio resident member on the chapter board. The Resident Council is composed of one delegate from each residency program in Connecticut.

The Resident Council assumed responsibility for planning the resident panel at the chapter’s annual meeting, added a panel on legislative advocacy, hosted an American Board of Surgery In-Training Examination (also known as ABSITE) review session, and recruited resident participation for the 2017 Leadership & Advocacy Summit.

“Tremendous success can come from the most unlikely source,” Dr. Davis said. “A little bit of mentoring goes a long way.”

**North and South Texas Chapters:**
**Collaboration is key**
“It took us three years to set the stage for a closer relationship between the North and South Texas Chapters that would lead to sustained collaboration and joint ventures,” said Sharmila D. Dissanaike, MD, FACS, FCCM, Immediate Past-President, North Texas Chapter, and professor and Peter C. Canizaro Chair, department of surgery, Texas Tech University Health Sciences Center, Lubbock. Dr. Dissanaike said the primary goals of the collaboration were to offer a combined annual meeting and to unify advocacy efforts at the state level.

“This idea to have a combined meeting started at the 2014 Leadership & Advocacy Summit,” added Tien C. Ko, MD, FACS, Immediate Past-President, South Texas Chapter, and Jack H. Mayfield, MD, Distinguished Professor in Surgery, University of Texas Health Science Center, Houston. “We set some ground rules: there was to be 50-50 partnership in everything, including planning, fund raising, profit and loss sharing.” Other ground rules for the collaboration included dividing responsibilities between the two administrative staffs, centralizing fundraising efforts, combining program committees to develop sessions and invite speakers, and allowing medical students and surgery residents who were presenters at the annual meeting to participate free of charge.
This kind of collaboration between the two Texas chapters, the first in nearly a decade, was made possible after identifying leaders from each chapter and was facilitated through in-person planning meetings at the ACS Clinical Congress, the Leadership & Advocacy Summit, and Texas Surgical Society meetings.

“We realized that a combined meeting is a great way to synergize political lobbying efforts to energize individual chapters,” Dr. Ko said. He noted that a successful joint venture of this scale requires equal partnership and added that both the North and South Texas Chapters intend to have a joint meeting approximately every four years.

GSACS: Stop the Bleed
“Our first annual Trauma Awareness Day in Georgia is our success in a nutshell—and it took us a long time to get there,” said Dennis Ashley, MD, FACS, President-Elect, GSACS, and Milford B. Hatcher Professor and Chair of Surgery, Mercer University School of Medicine, Navicent Health, Macon, GA. The GSACS has participated in the ACS Lobby Day Grant program since its inception, according to Dr. Ashley, and when the College instituted a Lobby Day pilot program this year with a larger stipend of $15,000, the GSACS made it a goal to use the additional funds to institute a Stop the Bleed® program.

Before applying for the larger pilot project grant, the GSACS secured buy-in and support from the Georgia Trauma Foundation, the Georgia Committee on Trauma, and the Georgia Trauma Commission, ultimately forming the Georgia Trauma Awareness Day Coalition in October 2016. “‘Stop the Bleed’ was our battle cry,” Dr. Ashley said.

On February 7, the GSACS, other coalition members, trauma surgeons, and advocates from around the state met at the Georgia State Capitol to train legislators in Stop the Bleed techniques. The coalition also asked legislators to allocate $1 million from the state’s Super Speeder fund to place bleeding controls kits in all Georgia schools and to train teachers and staff about hemorrhage control tactics. (The Super Speeder fund is composed of monies collected from violators of Georgia’s Super Speeder Law, which fines drivers $200 for speeding more than 75 miles per hour (mph) on two-lane roads or more than 85 mph on any road within the state.) More than 300 legislators, staff, and visitors were trained in Stop the Bleed techniques during Georgia’s inaugural Trauma Awareness Day, with surgeons in their white coats leading the program. As a result of this effort, three large trauma stations were installed at the Georgia State Capitol, and the $1 million in additional funds were appropriated to the Georgia Trauma Commission.

Overcoming burnout
“Work-related burnout is a triad composed of emotional exhaustion, depersonalization or a dehumanized perception of others, and dissatisfaction with job-related accomplishments,” said Krista L. Kaups, MD, MSc, FACS, professor of clinical surgery, department of surgery, University of California–San Francisco, Fresno. “Burnout refers specifically to one’s relationship to work, unlike depression, and is seen in occupations with a high level of personal involvement and interactions with others,” she said, citing a 2008 ACS survey in which 40 percent of 7,905 respondents met the criteria for burnout. According to the survey, surgeons tend to experience two components of the burnout triad—emotional exhaustion and depersonalization—but
generally maintain a sense of personal accomplishment.

“Physician burnout has been shown to influence quality of care, patient safety, physician turnover, and patient satisfaction. What is the alternative to burnout? Having well-being as a goal,” Dr. Kaups said. “We now have a tool on the College’s website called the Physician Well-Being Index, which is available at facs.org/member-services/surgeon-wellbeing. This self-assessment tool is easy to complete and anonymous.” Available to all U.S. Fellows and Associate Fellows in active practice, as well as surgical residents and fellows, this validated screening mechanism helps users identify areas of risk in comparison with their peers across the U.S.

“We know that work-life balance, although often discussed and evaluated, is a myth. Work-life integration might be a better term,” Dr. Kaups said, adding that resilient people who excel at work-life integration share the following characteristics:

- A staunch acceptance of reality
- A deep belief—often buttressed by strongly held values—that life is meaningful
- An uncanny ability to improvise

**Leading health care systems**

“Hospitals with the most clinician involvement in management roles performed 50 percent higher on indicators of performance, such as effectiveness of overall management, performance management, and leadership, in contrast to hospitals with little clinical leadership,” said Bhagwan Satiani, MD, MBA, FACS, FACHE, professor of clinical surgery, division of vascular diseases and surgery; medical director, noninvasive vascular laboratory; and director, Faculty Leadership Institute at Wexner Medical Center, The Ohio State University College of Medicine, Columbus.

According to Dr. Satiani, leadership in health care is no different from management roles in other fields, although he underscored the importance of leadership training for preparing physician leaders to take on these roles in the future. Traditionally, physician leaders of hospital systems were appointed as a reward for their technical skills and loyalty to the organization, and sometimes because there weren’t any other competent individuals to fill these positions. In an effort to develop competent physician leaders, Dr. Satiani and colleagues created the Faculty Leadership Institute in 2013. The 12-month program is based on a curriculum composed of leadership competency training, strategic planning, financial management, team building, health care law, and change management.

The Faculty Leadership Institute’s program has resulted in enhanced continuity of leadership; the ability to identify faculty for committee work and leadership roles; higher retention of faculty, particularly junior faculty members; and, ultimately, improved patient care.

“I think the time for accidental leaders is done,” Dr. Satiani. “[Leadership roles] are not for everyone. But developing a pipeline for future leaders by investing in training and mentorship is important. If you’re not leading, you will be led.”

**Mastering nontechnical skills for surgeons**

“Nontechnical skills are critical for safety, longevity, and resilience in high reliability organizations and are related to surgical performance,” said Steven Yule, PhD, assistant professor of surgery, Harvard Medical School, and director of education and research, STRATUS Center for Medical Simulation, Brigham and Women’s Hospital, Boston, MA. “Surgeons are integrating
lessons from other high reliability industries to improve operative performance,” he said, citing the explosion on the Piper Alpha oil platform in the North Sea in 1987 and the Space Shuttle Columbia disaster in 2003 as examples of what can happen when faulty decision making and an ill-defined safety culture are present.

“Error is normal,” Dr. Yule said. “Good team skills and communication strategies can help capture them before they result in patient harm.” Patient outcomes can be improved through nontechnical skills and team training, he noted.

Nontechnical skills for surgeons include proficiency in leadership, decision making, assertiveness, and team management. The Non-Technical Skills for Surgeons (NOTSS) program, which instructs surgeons on how to enhance these skills in the OR, was developed in Scotland in 2006 at the University of Aberdeen with support from the Royal College of Surgeons of Edinburgh. Dr. Yule was a part of this development team, and today he is part of the Non-Technical Skills Lab at Brigham and Women’s Hospital and Harvard Medical School.

In 2014, the NOTSS became part of the American Board of Surgery’s SCORE (Surgical Council on Resident Education) national curriculum for surgical training.

**ACS update: Dr. Hoyt**

“What do we have to do to meet the demands of an uncertain time? We need to operate at the speed of health care system change,” said ACS Executive Director David B. Hoyt, MD, FACS, in his closing remarks at the Leadership Summit. He summarized the organizational and financial strengths of the College, including programs and advocacy initiatives that support surgeons and help them stay informed at the local and national level.

Dr. Hoyt also provided an update on Optimal Resources for Surgical Quality and Safety, which officially debuted at the ACS Quality and Safety Conference in New York, NY, last month. The manual is intended to help health care institutions improve quality processes and outcomes. “The quality manual deals with the infrastructure that is needed to have a successful quality program in a hospital, including regulatory requirements, application of registry and outcomes data, and education and training. It also covers what the individual surgeon has to do to improve quality improvement, including the role of mentoring and coaching,” said Dr. Hoyt.

Dr. Hoyt updated attendees on other key College initiatives, including the resources available to navigate the Quality Payment Program; and the QuintilesIMS project, which will seamlessly link ACS clinical databases under a single platform, beginning with the recently released next-generation ACS Surgeon Specific Registry (SSR) featuring new SSR reports that he said are “more actionable, [have] faster generation, more interactive, and with better data visualization.”

“At this year’s summit, we’ve learned how to implement change leadership and how to measure and use emotional intelligence,” said Dr. Hoyt. “The beautiful thing about these competencies is that they are learnable skills.”

The next ACS Leadership & Advocacy Summit will take place May 19–22, 2018, in Washington, DC. ♦
More than 300 surgeons and residents participated in the Advocacy Summit at the American College of Surgeons (ACS) Leadership & Advocacy Summit 2017, May 6−9, in Washington, DC. Participants in the Advocacy Summit came to Washington to gain an inside-the-beltway view of the political and legislative climate, develop their advocacy skills, and meet with lawmakers and congressional staff to educate them about key ACS legislative priorities that affect surgeons and surgical patients. The summit drew surgeons at all phases of their surgical careers, with a record 72 resident participants attending with the help of scholarships.

The issues
Advocacy Summit participants had a total of more than 200 meetings on Capitol Hill. During these meetings, they discussed top issues for surgeons and their patients, including ensuring an adequate surgical workforce in underserved areas; advancing childhood cancer research and surveillance and providing resources for pediatric cancer survivors; allocating funding for the Children’s Health Insurance Program, which provides health care coverage to uninsured children from low-income families; improving liability protections for trauma care providers; and providing greater flexibility for providers during implementation of the Merit-based Incentive Payment System (MIPS).

Health care reform was front and center at the summit. Just days before surgeons arrived in the capital, the U.S. House of Representatives had passed the American Health Care Act by a vote of 217–213. Summit attendees were educated about the College’s concerns with the legislation and advised that the Senate bill likely would be dramatically different. The College continues to work to ensure that ACS health care reform principles—patient safety and quality, patient access to surgical care, reduction of health care costs, and medical liability reform—are included in a final bill.* The briefs presented at the summit on all key issues discussed, including health care reform, are available on the ACS Professional Association (ACSPA) website at surgeonsvoice.org.

The summit included a panel discussion, Perspectives on 2017 Health Care Reform, which highlighted the stark contrast in viewpoints on Obamacare and the American Health Care Act. The final consensus of the panel was that the House bill would be drastically altered before a final law was realized.

A panel of senior staff from the ACS Division of Advocacy and Health Policy provided an update on policy and legislative activities related to Medicare physician payment, with an emphasis on MIPS, Advanced Alternative Payment Models, and global surgical code reporting. During meetings with lawmakers, surgeon participants called upon members of Congress to enact legislation that would provide the Secretary of the U.S. Department of Health and Human Services (HHS) with flexibility in implementing MIPS.

View from national journalists
The summit kicked off with a keynote address by Chuck Todd, NBC News political director, moderator and managing editor of Meet the Press, and host of MTP.

Daily on MSNBC. Interspersing his comments with humor and irony, Mr. Todd said, “I feel like you doctors are a fish out of water in DC because you guys are too fact-based. Politics these days—facts and beliefs, they don’t exactly mesh very well.”

Mr. Todd predicts that the final health care reform legislation will be “some form of ugly status quo—Obamacare nibbled around the edges.” He said that in the first 100 days of the Trump Administration, “Washington has been a lot of noise but not a lot of action.” He added that Washington is going to be stuck for a while because President Trump began his administration with Obamacare repeal. “Beginning with health care, it’s polarizing, and Democrats now can’t work with Trump. It’s going to be a conundrum for Trump for some time.”

A political luncheon hosted by the ACSPA political action committee (ACSPA-SurgeonsPAC) featured Mara Liasson, national political correspondent for National Public Radio and a Fox News contributor. Ms. Liasson’s comments centered on President Trump as well, asking, “Is his
bark worse than his bite? We don’t know.” She said, “One of my jobs as a journalist is to try to separate out the truly consequential from the merely outrageous. There are many things that he says that are odd or eccentric that really don’t matter, but there are other things that are really important.”

Surgeon advocacy works
Demonstrating the power of surgeons’ advocacy efforts, summit participants played an essential role in advancing the introduction of the Ensuring Access to General Surgery Act. The legislation, introduced June 14, would direct HHS to conduct a study of general surgery shortage areas. Furthermore, it would give the HHS Secretary the authority to issue a formal general surgery shortage area designation based on the study’s results.

Thomas K. Varghese, Jr., MD, MS, FACS (#TomVargheseJr @ACSLAS17), a thoracic surgeon from Salt Lake City, UT, and Medical Director of the ACS Strong for Surgery program, captured the mandate for surgeons to be involved in advocacy in a linked statement that he tweeted from the summit: “For far too long surgeons have confined themselves to their own environment, and ceded the conversations to others. It’s our comfort zone—we take care of patients, and we do it well. However, there are many issues at play now that directly impact our ability to care for patients,” the statement read. “We need to get engaged at all levels of leadership and advocacy (hospital, state, national). We need to learn the necessary skills to be effective. We can’t afford to sit idly by any longer. And we can never forget to keep our patients at the center of all our conversations.”

Key ways to make a difference
ACS members can actively influence key surgical issues throughout the year, not only during the Advocacy Summit. Here’s how:

- Stay current on ACS legislative priorities by reading ACS NewsScope weekly, and checking the ACS Advocacy web page at facs.org/advocacy and surgeonsvoice.org
- Become familiar with key state legislative issues affecting surgeons and surgical patients at facs.org/advocacy/state/trends
- Build relationships with your lawmakers and their local staff by arranging in-district meetings, attending town halls, or inviting them to visit your surgical practice; details for setting up an in-district meeting are available at facs.org/advocacy/participate/surgeonsvoice/grassroots/guide
- Respond to ACS calls to action by contacting your lawmakers through SurgeonsVoice at surgeonsvoice.org
- Mark your calendar to participate in the 2018 Leadership & Advocacy Summit in Washington, DC, May 19–22, as well as your local ACS chapter’s state lobby day
- Learn about the ACSPA-SurgeonsPAC at surgeonspac.org

AUG 2017 BULLETIN American College of Surgeons
Don’t miss out on the sessions you want to attend—even if they’re scheduled at the same time. Webcast sessions are available on any device *anytime, anywhere*. Maximize your learning opportunities and earn CME Credit and Self-Assessment Credit when it’s convenient for you.

Preregister for Clinical Congress to take advantage of reduced pricing.

### Choose one of the three webcast packages below:

#### 2017 Complete Package
Access all selected webcast sessions from Clinical Congress 2017 and MP3 audio recordings of all Named Lectures and most Panel Sessions. More than 175 CME Credits and 175 Self-Assessment Credits are available for practicing surgeons.

<table>
<thead>
<tr>
<th></th>
<th>For Practicing Surgeons*</th>
<th>For Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member</td>
<td>$445</td>
<td>Member</td>
</tr>
<tr>
<td>Non-Member</td>
<td>$495</td>
<td>Non-Member</td>
</tr>
<tr>
<td></td>
<td>$150</td>
<td>$200</td>
</tr>
</tbody>
</table>

#### 2017 Webcast Package
Access all selected webcast sessions from Clinical Congress 2017.

<table>
<thead>
<tr>
<th></th>
<th>For Practicing Surgeons*</th>
<th>For Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member</td>
<td>$345</td>
<td>Member</td>
</tr>
<tr>
<td>Non-Member</td>
<td>$395</td>
<td>Non-Member</td>
</tr>
<tr>
<td></td>
<td>$100</td>
<td>$150</td>
</tr>
</tbody>
</table>

#### Pick 25 of 2017
Choose 25 of the selected webcast sessions from Clinical Congress 2017.

<table>
<thead>
<tr>
<th></th>
<th>For Practicing Surgeons*</th>
<th>For Residents</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member</td>
<td>$195</td>
<td>Member</td>
<td>Non-Member/Non-Physician</td>
</tr>
<tr>
<td>Non-Member</td>
<td>$245</td>
<td>Non-Member</td>
<td>$245</td>
</tr>
<tr>
<td></td>
<td>$50</td>
<td>$100</td>
<td></td>
</tr>
</tbody>
</table>

*Practicing Surgeons are eligible for CME Credit and Self-Assessment Credit.

FOR MORE INFORMATION: Visit [facs.org/clincon2017/register](http://facs.org/clincon2017/register) or contact Olivier Petinaux by phone at 866-475-4696 or by e-mail at elearning@facs.org.
The American Medical Association (AMA) annual House of Delegates (HOD) meeting took place June 10–14, in Chicago, IL. The agenda included 62 reports from the AMA board and councils and 186 resolutions from state medical associations, specialty societies, and AMA sections.

The uncertain mood of the HOD was shaped by congressional activity on the Affordable Care Act and a competitive election for AMA president-elect. At the start of the meeting's final day, the HOD paused to remember the lives lost and changed one year earlier at the Pulse nightclub in Orlando, FL. The HOD also noted the value of American College of Surgeons (ACS) Stop the Bleed® training in response to the shooting June 14 at the Republican congressional baseball team practice in Alexandria, VA.

In the AMA House of Delegates, which is composed of 545 members, the College was represented by its six-member delegation (see sidebar, page 100, for more information).

The meeting has eight reference committees that focus on the following issues: bylaws and medical ethics, health care system, legislation, medical education, public health, medical science and technology, governance, and medical practice. John H. Armstrong, MD, FACS, co-author of this article, chaired Reference Committee A, which reviewed items pertaining to the health care system. This article provides an overview of several issues of relevance to ACS members.

### Medical education

The priority issue for the ACS at this meeting was protecting the profession's autonomy in defining the standards of lifelong learning through Maintenance of Certification (MOC). Five items related to MOC and Continuing Medical Education (CME) resulted in considerable debate. Internists and medical specialists were particularly frustrated by their experiences with their certifying boards. While acknowledging opportunities to improve MOC, the College delegation took the lead in collaborating with other specialty and state societies to argue against referring MOC to the state legislatures and against creating a new solely CME-based certification system.

- **Resolution 302, Comprehensive Review of CME Process**, directed the AMA, in collaboration with the Accreditation Council for Continuing Medical Education, to conduct a comprehensive review of the CME process on a national level, with the goal of decreasing costs and simplifying the process of providing CME.

- **Resolution 316, Action Steps Regarding Maintenance of Certification**, sponsored by the largest state delegations in the HOD (Arizona, California, Florida, Georgia, New York, Pennsylvania, and Texas), sought to extend AMA model state legislation against MOC by barring hospitals, health care insurers, and state licensing boards from linking nonparticipation in the American Board of Medical Specialties (ABMS) MOC process to exclusion from credentialing. Further, it sought to create AMA policy that would replace MOC with high-quality CME under the purview of a physician's specialty society solely as the demonstration of lifelong learning in hospital, insurance, and licensing credentialing.
The HOD conversation shifted from restricting how hospitals, licensing boards, and insurers can use MOC, to redefining MOC.

To address this challenge to professional autonomy while emphasizing the need for responsiveness to concerns across boards, the ACS Delegation applied a strategy that involved prepared talking points; caucus presentations by ACS Executive Director David B. Hoyt, MD, FACS, and Dr. Armstrong; reference committee testimony from Dr. Hoyt and Vice-Chair of the ACS Board of Regents Leigh A. Neumayer, MD, FACS, and ACS Regent James Denneny, MD, FACS, executive director, American Academy of Otolaryngology-Head and Neck Surgery; as well as hallway conversations and HOD floor discussion. As a result, the AMA affirmed that lifelong learning is a fundamental obligation of the profession and recognizes that, for a physician, it is best achieved through ongoing participation in a program of high-quality CME appropriate to the physician’s medical practice as determined by the relevant specialty society. The concept of the AMA lobbying hospital associations, health care insurers, and state licensing boards to not use the ABMS-sponsored MOC process with lifelong interval high stakes testing for credentialing, in addition to the idea of the AMA partnering with state medical associations and specialty societies to undertake a study to establish a separate program of certification by 2020, were referred for further consideration. The ACS will continue to emphasize that a core element of professionalism is self-regulation of lifelong learning through standard-setting.

• Resolution 318, Oppose Direct-to-Consumer Advertising of the ABMS MOC Product, asked the AMA to oppose direct-to-consumer marketing of the ABMS MOC product in print media, social media, apps, and websites that specifically target patients and their families, including but not limited to the promotion of false or misleading claims linking MOC participation with improved patient health outcomes and experiences where limited evidence exists. This item was referred for further study.

• Resolution 319, Public Access to Initial Board Certification Status of Time-Limited ABMS Diplomates, was adopted. The AMA now advocates that the initial certification status of time-limited diplomates remain on ABMS and ABMS member board websites or physician certification databases, even if the diplomate opts out of MOC participation.

Health system
• Council on Medical Service Report 6, Expansion of U.S. Veterans’ Health Care Choices, was adopted with an amendment offered by the ACS delegation. The AMA will encourage the Veterans Health Administration (VHA) to engage with VHA physicians to explore and develop solutions to improve the health care choices of veterans. The AMA also will continue to support efforts to improve the Veterans Choice Program (VCP) and make it permanent, advocate for new funding to support expansion of the VCP, and encourage the acceleration of interoperability of electronic personal and health records and the exchange of medical records between VHA and non-VHA physicians.

• Substitute Resolution 115, Out-of-Network Care, combined four resolutions on the subject of greatest interest in the Reference Committee A hearing—surprise (unanticipated) billing for out-of-
The ACS delegation successfully put forth the College’s priorities at the June AMA HOD meeting. The delegation is now working with the Division of Advocacy and Health Policy, the Health Policy and Advocacy Group, and other committees to develop next steps in shaping AMA policy consistent with College principles.

**Public health**

- **Resolution 419, Improving Physicians’ Ability to Discuss Firearm Safety**, was adopted with minor amendments. As a result, the AMA is working with appropriate stakeholders to develop state-specific guidance for physicians on how to counsel patients to reduce their risk for firearm-related injury or death by suicide, including guidance on when and how to ask sensitive questions about firearm ownership, access, and use; and clarification on the circumstances under which physicians are permitted or may be required to disclose the content of such conversations to family members, law enforcement, or other third parties.

**AMA elections**

The June meeting is when AMA officers, trustees, and councilors are elected. Barbara McAneny, MD, an oncologist from New Mexico, was elected AMA president-elect. Three ACS-endorsed candidates were successful in their bids to serve on the Council on Medical Education. Liana Puscas, MD, MHS, FACS, associate professor of surgery, Duke University School of Medicine, Durham, NC, and Luke Selby, MD, a general surgery resident, University of Colorado School of Medicine, Denver, were reelected; Krystal Tomei, MD, assistant professor of neurosurgery, Case Western Reserve University School of Medicine, Cleveland, OH, was elected.

**Medical practice**

- **Substitute Resolution 706, Concurrent and Overlapping Surgery**, was adopted. The AMA will work with interested national medical specialty societies on issues related to concurrent and overlapping surgery.

**Surgical Caucus**

The Surgical Caucus hosted a well-attended educational session, Cultivating and Protecting Your Digital Presence: Do’s and Don’ts of Social Media. Speakers included Deanna Attai, MD, FACS, a breast surgeon and assistant clinical professor of surgery, David Geffen School of Medicine, University of California, Los Angeles, and Ravi Goel, MD, an ophthalmologist in private practice in Cherry Hill, NJ, and delegate from the American Academy of Ophthalmology.

Both presentations emphasized that surgeons need to manage their online reputation in practice reviews and other web content. Drs. Attai and Goel provided constructive ideas for personal and professional branding through social media, as well as practical ways for surgeons to build and protect their social media reputation. Both presentations are available on the Surgical Caucus web page at facs.org/advocacy/ama-house-of-delegates/surgical-caucus.

The ACS delegation successfully put forth the College’s priorities at the June AMA HOD meeting. The delegation is now working with the ACS Division of Advocacy and Health Policy, the Health Policy and Advocacy Group, and other committees to develop next steps in shaping AMA policy consistent with College principles.

The next AMA meeting is the Interim Meeting in Honolulu, HI, November 11–14. The College’s delegation welcomes input from Fellows regarding issues of importance to surgeons. Comments and questions should be directed to jsutton@facs.org.
Stand out.
Update your FACS profile today!

Your personalized profile can include information about you and your practice, medical school, residency, fellowships, areas of special interest, board certifications, society memberships, and a photo.

- Maintain a professional presence online
- Help patients verify your FACS status and learn more about you
- Easily connect with colleagues
- Be visible when patients are searching for surgeons by specialty, procedure, location, or for a second opinion
- Link to your website and social media

Visibility has perks.
Start taking advantage of them today.

Update your FACS profile. It’s easy. Log in to facs.org using your member login. Click on “My Profile” in the top navigation and select “My Profile Overview.” Need help? Contact ms@facs.org.

facs.org/member-services/benefits/update
Residents, prepare to take your ACS membership to the next level

As a surgical resident, you are interested in pursuing educational and professional excellence, both as a surgeon and as a member of the surgical community. Associate Fellowship in the American College of Surgeons (ACS) provides you with access to the tools, resources, and opportunities needed to help you along the way. This membership category is open only to surgeons who are devoted to practicing surgery according to the College’s professional and ethical standards, as stated in the Fellowship Pledge and the Statements on Principles—both available on the College’s website at facs.org.

Time to apply for Associate Fellowship

If you are moving from training into practice this year, apply for Associate Fellowship. The application requests basic information about your education and training, licensure, board certification, and hospital and academic affiliations—some of which already exists in your Resident Member record. The ACS will waive the Associate Fellow application fee for current Resident Members as well as requirements for documentation of training completion.

Once you become an Associate Fellow, your membership at that level will be limited to a period of six years in order to foster your progression to the Fellowship level. Therefore, Associate Fellows are encouraged to consider applying for full Fellowship once they are eligible.

Application requirements

For U.S. and Canada Fellowship, the basic requirements are as follows:

• Certification by an appropriate American Board of Medical Specialties Surgical Specialty Board, an American Osteopathic Surgical Specialty Board, or the Royal College of Surgeons in Canada

• One year of surgical practice after the completion of all formal training (including fellowships)

• Current appointment at a primary hospital

For International Fellowship applicants, the requirements include the following:

• Certification by an appropriate American surgical specialty board or Canadian or international college of physicians and surgeons, or national surgical board from the applicant’s country of practice.

• Three years of surgical practice after the completion of all formal training (including fellowships)

• Current appointment at a primary hospital

Submit an online application for Associate Fellowship at facs.org/member-services/join/associate. You will need your ACS login information to access the application. If you do not have your login information, contact the Member Services staff at 800-293-4029 or via e-mail at enroll@facs.org for assistance. When your application has been processed, an e-mail notification will be sent to provide updated information about your membership status.

We look forward to having you transition from being a Resident Member to an Associate Fellow of the ACS. ♦
Michigan Chapter holds annual meeting, participates in Advocacy Summit

The 64th Annual Meeting of the Michigan Chapter of the American College of Surgeons (MCACS) and the 66th Annual Surgical Resident’s Competition took place at Boyne Mountain Resort in Boyne Falls, MI, May 17–19. Craig Reickert, MD, FACS, President of the MCACS, and M. Ashraf Mansour, MB, BCh, FACS, Program Chair and President-Elect of the MCACS, led the event. The Michigan Committee on Trauma (COT) also hosted the 67th Annual Keyport Trauma Symposium under the leadership of COT State Chair Wayne Vanderkolk, MD, FACS.

This year, the MCACS annual meeting was expanded to include the inaugural presentation of Resident Jeopardy led by Donn Schroder, MD, FACS, with six expert teams competing. The University of Michigan, Ann Arbor, team, including residents Vahagn Nikolian, MD, and Patrick Georgoff, MD, won the competition. “QuickShot” research presentations were added to the program, allowing more residents to participate in the annual MCACS meeting. The new program format was successful, and several surgical residents gave award-winning research presentations. The overall first-place winner of the QuickShot competition was Anna Boniakowski, MD, University of Michigan, for her presentation titled Interaction Between a Macrophage Chemokine Receptor, CCR2, and its Ligand Plays a Crucial Role in Macrophage Recruitment and Regulated Inflammation in Normal Wound Healing.

Jerry Jurkovich, MD, FACS, presented the 20th Annual Mo Henig Trauma Lecture on Lessons Learned from 2,500 Trauma Deaths.
In addition, several MCACS members participated in the ACS Leadership and Advocacy Summit 2017, May 6–9 in Washington, DC, and met with U.S. Sens. Debbie Stabenow (D-MI) and Gary Peters (D-MI) to educate them about ACS legislative priorities that affect surgical patients.

North Dakota and South Dakota Chapters hold 18th joint annual meeting

The North Dakota and South Dakota Chapters of the American College of Surgeons (ACS) hosted their 18th combined chapter meeting April 27–29 in West Fargo, ND. Thursday evening’s welcoming event featured a reception and tour of the new $494 million Sanford Medical Center Fargo, which opened in July.

The scientific sessions comprised 23 presentations, including two by medical students (one from North Dakota and one from South Dakota) and seven by residents (four from North Dakota and three from South Dakota). Representing the College was First Vice-President Hilary Sanfey, MB, BCh, MHPE, FACS, FRCS, Springfield, IL, and Shane Hollett, Executive Director, ACS Foundation, Chicago, IL.

Janice Zunich, MD, FACMG, clinical associate professor of medical and molecular genetics, Indiana University School of Medicine, Northwest-Gary, gave a presentation on genetic testing, and John Weigelt, MD, DVM, FACS, professor of surgery and chief, division of trauma and critical care, Medical College of Wisconsin, Milwaukee, delivered two presentations on his personal experiences with presidential travel medical support and disaster management.

Jed Assam, fourth-year medical student at Sanford School of Medicine, Sioux Falls, SD, received the 2017 Chester B. McVay, MD, award given to an outstanding clinical or research paper submitted by a student.

The highlight of the meeting was Surgical Jeopardy, hosted by Robert P. Sticca, MD, FACS, chairman, program director, and professor, department of surgery, University of North Dakota School of Medicine and Health Sciences (UND SMHS), Grand Forks. The competition was highly spirited, with occasional audience participation, and Katherine Senter, MD, postgraduate year (PGY)-5 and Trent Waage, MD, PGY-4 from UND SMHS prevailed.

The South Dakota Chapter will host the next combined chapter meeting April 13–14, 2018, in Deadwood, SD.

Massachusetts Chapter embraces wellness with a running club

The physical and emotional well-being of surgeons has been a subject of much discussion since a survey of ACS Fellows revealed that 40 percent of the respondents experience one or more symptoms of burnout. Further studies showed that surgeons who participate in physical fitness activities are less likely to experience burnout.

ACS Panel Sessions at the annual Clinical Congress have focused on identifying and ameliorating risk factors for burnout. In keeping with this initiative, Heena P. Santry, MD, MS, FACS, Program Chair of the Massachusetts Chapter’s 2016...
annual meeting, developed the theme of Surgeon Wellness and Resiliency. The chapter established a running club called Cut to the Chase (named by Marc S. Rubin, MD, FACS, a colon and rectal surgeon at North Shore Medical Center, Danvers). Cut to the Chase participated in its inaugural race at the 13th Run to Remember Boston, which honors local fallen first responders. On May 28, more than 20 chapter members, friends, and family participated in either a five-mile or half-marathon run and ended with a postrace celebration. The MCACS Cut to the Chase team plans to participate in the next Run to Remember, May 27, 2018, and Chapter President, Anne C. Larkin, MD, FACS, encourages new members to join. Visit www.mcacs.org/fun-run.cgi for more information.

Illinois Chapter Holds Annual Scientific Meeting
The 67th Annual Scientific Meeting of the Illinois Chapter of the ACS took place May 18–20 in Champaign. Daniel Chase, MD, FACS, a general surgeon from Hoopeston, and Michelle Olson, MD, FACS, Chapter Secretary, co-directed the program. Guest speaker Yuri Novitsky, MD, FACS, director, Comprehensive Hernia Center, University Hospitals Cleveland Medical Center, OH, presented a lecture titled A Patient-Focused Approach to Technique and Mesh Selection in Hernia Repair, and Robert Steigmann, a judge for the 4th District Appellate Court of Illinois, addressed The Real Story about Medical Malpractice Litigation and the Special Protections the Law Provides Doctors and Other Healthcare Providers. Patrick V. Bailey, MD, FACS, Medical Director, Advocacy, ACS Division of Advocacy and Health Policy, presented What Is MIPS?...And Why It Is Important to Know. This year’s program included a Surgical Jeopardy competition. Three teams from the University of Illinois at Chicago Metropolitan Group Hospital (UICMGH); Southern Illinois University School of Medicine, Springfield; and Carle Foundation Hospital, Urbana, participated in this event. The team from UICMGH, composed of Rym El Khoury, MD, PGY-1, and Deepa Bhat, MD, PGY-2, won the competition. Awards for the Founders Competition, a contest to determine the best submitted scientific paper and that is open to residents of all surgical specialties, were presented at a dinner May 19. The first-place winner of $500 and a plaque was Molly W. Meyers, MD, Northwestern University, Chicago, for Systemically Administered Collagen-Targeted Gold Nanoparticles Bind to Arterial Injury following Vascular Interventions. The second-place winner of $300 was Timothy Daugherty, MD, MS, Southern Illinois School of Medicine, for Implementation of a Standardized, Evidence-Based Protocol for Routine Central Line Replacement. The third-place winner of $200 was Robert J. Yu, MD, Carle Foundation Hospital, for Evaluation of the Safety of Methohexital in Conscious Moderate Sedation during Colonoscopies. A total of 16 residents participated in this year’s competition. The chapter elected its 2017–2018 officers and council
members during the annual business meeting. Henry R. Moore III, MD, FACS, a general surgeon at Carle Hospital, and Dr. Olson were elected Councilors; Richard C. Anderson, MD, FACS, a general surgeon in Peoria, agreed to serve a second term as Governor; and Dawn Wietfeldt, MD, FACS, a colorectal surgeon in Springfield, was elected as Secretary/Treasurer.

A joint meeting with the Illinois Chapter, the Illinois Surgical Society, and the Metropolitan Chicago Chapter is tentatively planned for spring 2018.

ACS Italy Chapter annual meeting focuses on surgical education

TTT (Training, Teaching, and Tools) for Surgery was the theme of the annual meeting of the Italy Chapter of the ACS, May 4–5 in Catania. The Italy Chapter organized the meeting in collaboration with the Italian Society for Surgical Research (SIRC) and the Sicilian Society of Surgery (SSC). The University of Catania General Surgery and Digestive Surgery residency programs also participated in the event.

The annual meeting attracted approximately 150 participants, including surgical residents from many regions throughout Italy. ACS President-Elect Barbara L. Bass, MD, FACS, gave a lecture on The Future of Surgical Training and Teaching, which highlighted the improvements being made in training and the work being done at the Methodist Institute for Technology, Innovation and Education, Houston, TX, where Dr. Bass is executive director. The meeting also featured other Continuing Medical Education (CME)-accredited programming.

The ACS Governor of the Germany Chapter, Norbert Senninger, MD, FACS, and the former ACS Governor of the Spain Chapter, Miguel Cainzos, MD, FACS, together with many Italian ACS Fellows, contributed to most of the lectures. The methodological issues concerning the training and teaching of surgery were analyzed, focusing on simulation, robotic surgery, and minimally invasive surgery, as well as the importance of training opportunities in trauma, diagnostic ultrasound, microsurgery, and experimental surgery. Thereafter, the program focused on the details of different surgical procedures within the fields of general, oncologic, and visceral surgery.

The Secretary and Treasurer of the Italy Chapter, Giuseppe Nigri, MD, FACS, presented the activities of the chapter, including the Association of Italian Surgeons in North America and the International Exchange Program, which was developed by a partnership between the ACS Massachusetts and Italy Chapters. He also discussed the opportunities for medical students, residents, and young Fellows at the ACS. On the second day of programming, junior surgeons and residents were involved in sessions to present the best videos previously selected by a committee, followed by the Surgical Jeopardy competition, which was warmly received by the audience. The meeting concluded with the awards ceremony for the three best videos and the winning team...
of the Surgical Jeopardy competition. To close the event, Prof. Alberto Montori, MD, FACS(Hon), expressed words of appreciation to the organizing committee and board.

Virginia Chapter supports residents for humanitarian efforts
The ACS Virginia Chapter’s Humanitarian Surgical Resident Travel Scholarship Program, now in its ninth year, offsets travel expenses for surgical residents in Virginia who are interested in participating in programs to deliver surgical care as part of humanitarian missions to underdeveloped countries.

This year, the chapter awarded scholarships to the following residents:

• Ben Rubinstein, MD, PGY-4, and J. Michael C. Kenerson, MDm, PGY-3, from Eastern Virginia Medical School (EVMS), Norfolk, will travel to Hospital Loma de Luz, a Christian outreach hospital on the north coast of Honduras in Balfate. They will staff otolaryngology clinics and perform head and neck procedures. This year marks the EVMS department of otolaryngology’s 10th annual mission to Honduras.

• Evan Somers, MD, PGY-4, from EVMS traveled to Kijabe, Kenya, through the World Medical Mission and participated in a mission at the African Inland Church (AIC) Cure Hospital, performing cleft lip/palate operations and microtia repairs.

• Andrew Bluher, MD, PGY-3, from EVMS travelled to the Philippines and assisted in the evaluation and management of patients with head and neck masses and cancers, and thyroid disease.

• Valerie Plant, MD, PGY-3, from Virginia Commonwealth University (VCU) Health, Richmond, will travel to Jamaica with Children’s Medical Services International to help teach a pediatric trauma course, which includes didactic modules, patient scenarios for hands-on practice, a pediatric airway intubation skills station, and an introduction to ultrasound and focused assessment with sonography in trauma (FAST) course.

West Virginia Chapter hosts 67th Annual Meeting
The West Virginia Chapter of the ACS held its 67th Annual Spring Meeting, May 11–13 at The Greenbrier in White Sulphur Springs, WV. Speakers included J. David Richardson, MD, FACS, Immediate Past-President of the ACS, professor and vice-chair of academic affairs, department of surgery, University of Louisville, KY; Frederick L. Greene, MD, FACS, medical director, cancer data registry, Levine Cancer Institute, Charlotte, NC; and Rebecca C. Britt, MD, FACS, critical care specialist and associate professor of surgery, EVMS.

In addition, 19 other speakers discussed a range of topics, including breast cancer treatment, plastic and reconstructive surgery, genetics, oncology, vascular surgery, and surgical volunteerism.

Three resident competitions focused on trauma, oncology, and surgery, with 10 residents from participating WV training programs. A total of 31 medical students representing Marshall University, West Virginia
University (WVU) Charleston, Martinsburg and Morgantown campuses, and 15 students from the Osteopathic School at Lewisburg were in attendance. All students took part in an informal question-and-answer student forum. Students had the opportunity to attend endovascular, laparoscopy, and suturing workshops. The faculty included Bryan K. Richmond, MD, FACS, Governor, West Virginia Chapter, professor and chief of general surgery, WVU, Charleston; Alan A. Thomay, MD, FACS, assistant professor of surgery, medical student (MS) III clerkship director, WVU, Morgantown; and Jesse A. Clanton, MD, assistant professor of surgery/MS III clerkship director, WVU, Charleston.

Several meeting attendees assisted with the workshops. Dr. Dabous presented current guidelines, compared old and new treatment modalities and types of surgeries, showed pictures of cases at King Hussein Cancer Center, and presented a comparison of the center’s data with international figures. He also discussed prospective studies, which shed more light on treatment options. Although some physician attendees supported the new treatment options, others defended the older treatment methods, which made for a lively debate.

New York chapters visit Capitol Hill
During the ACS Leadership & Advocacy Summit, 15 surgeons from the Brooklyn-Long Island Chapter, the Eastern Long Island Chapter, and the New York Chapter went to Capitol Hill to meet with lawmakers and express their views on pending legislation. John McNelis, MD, FACS, President of the Brooklyn-Long Island Chapter, met with congressional staff to describe the Stop the Bleed® campaign and its importance. Among the group of physicians from New York State who participated in these advocacy efforts were seven residents who received scholarships from the ACS to support their attendance.

All members who visited the Hill were well received, and congressional staff were attentive and receptive to the physicians’ comments and concerns.

Jordan Chapter offers monthly scientific activity
Renowned consultant at King Hussein Cancer Center and surgical oncologist, Ali Dabous, MB, BCh, spoke on the current status and future perspectives in treating colorectal liver metastasis at the Jordan Chapter of the ACS’ monthly scientific activity May 3 in Amman. More than 100 physicians from different regions of Jordan attended the meeting.

Turkey Chapter hosts meeting at Baskent University
The Turkey Chapter of the ACS convened at Baskent University in Ankara, May 11–12. More than 100 participants attended the surgical infection-themed meeting, which included both scientific and social programming.

The program featured lectures by invited speakers and 10-minute oral presentations selected from submitted paper abstracts. ACS Past-President Patricia J. Numann, MD, FACS, presented a lecture titled Assuring Excellence in Surgical...
Care and provided an update on ACS activities. Participants also were invited to submit papers for a poster presentation at the meeting and were given the opportunity to display their posters in a prominent meeting location, participate in a brief moderated session to discuss their findings, and answer questions from the audience.

The College welcomes two new international chapters
The ACS has welcomed two new chapters—the Bangladesh Chapter and the Kuwait Chapter—to its international chapter network. The ACS Board of Regents officially granted charters to the Bangladesh and Kuwait Chapters at its June 9 meeting in Chicago, IL. The College looks forward to working with and supporting both chapters as they get up and running to provide opportunities for ACS members to actively engage at the local level. With the formation of the two new chapters, the ACS now has 111 chapters around the world—67 domestic and 44 international chapters.

Dr. McCarthy meets with Sri Lankan surgeons interested in forming chapter
Mary C. McCarthy, MD, FACS, ACS Second Vice-President, participated in a surgical meeting in Jaffna, Sri Lanka, in June. Dr. McCarthy, along with other international surgeons, met with local surgeons and medical students and assisted in advanced minimally invasive cases. Several surgeons in Sri Lanka are working on educating and building interest about the ACS in anticipation of someday forming an ACS chapter in Sri Lanka.

Coming next month in *JACS* and online now

**Oncologic safety of nipple-sparing mastectomy in women with breast cancer**

Barbara L. Smith, MD, PhD, FACS; Rong Tang, MD; Upahvan Rai; et al found that rates of locoregional and distant recurrence are acceptably low after nipple-sparing mastectomy in patients with breast cancer. No patient in their series had a recurrence involving the retained nipple areola complex.

This article and all other *JACS* content is available at www.journalacs.org.
PROFESSIONAL PROTECTION PORTFOLIO

“The ACS Insurance Program provided both me and my spouse a really good value for life insurance at very competitive rates. I wish I had utilized this program earlier in my career.” —Benjamin Poulose M.D., M.P.H., F.A.C.S.

Three Insurance Coverages That Can Benefit Every Surgeon.

1. Life: 10-, 15- or 20-Year Level Term and/or Traditional Term
2. Disability: Long Term Disability Income and/or Professional Overhead Expense Insurance
3. Accidental Death & Dismemberment (AD&D) and/or Hospital Indemnity Insurance

Request a Quote Now:

Call Toll-Free: 1-800-433-1672
(M–F 8:00 a.m.–5:00 p.m. CT)

Apply Online 24/7:
www.acs-insurance.com

25% PACKAGE DISCOUNT On Top Of Other Qualifying Premium Discounts When You Have All Three
Calendar of events

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

AUGUST

Mexico, Federal District Chapter
August 4–5
Acapulco, Guerrero, Mexico
Contact: Rosa Aurora Ruiseco, colegioamericanodecirujanos@yahoo.com.mx, www.facs.org.mx

Tennessee Chapter
August 4–6
Nashville, TN
Contact: Wanda G. McKnight, wanda@tnacs.org, www.tnacs.org

2017 ACS CPT Coding Workshop
August 10–11
Nashville, TN
Contact: Jan Nagle, jlmdata@aol.com

Georgia Society of the ACS
August 18–20
St. Simons Island, GA
Contact: Kathy Browning, gasacs@gmail.com, www.georgiaacs.org

Kentucky Chapter
September 8
Lexington, KY
Contact: Linda Silvestri, lsilv@uky.edu, kentuckychapter.facs.org

New Mexico Chapter
September 8–9
Albuquerque, NM
Contact: Melissa Davis, mdavis@nmms.org

Arizona Chapter
September 9–10
Scottsdale, AZ
Contact: Joni Bowers, jonib@azmed.org, www.azacs.org

Egypt Chapter
September 14–15
Cairo, Egypt
Contact: Dr. Mohey Elbanna, moheyelbanna@yahoo.com

September

Jordan Chapter
September 7–9
Amman, Jordan
Contact: Dr. Abdalla Bashir, abybashir@gmail.com, acsjordan.com

October

Nevada Chapter
October 7
Las Vegas, NV
Contact: Camille Spenner, camillespenner@gmail.com, nevadaacs.org

Argentina Chapter
October 9–12
Buenos Aires, Argentina
Contact: Dr. Alberto Ferreres, capitulo@aac.org.ar

Delaware Chapter
October 11
Newark, DE
Contact: Kristi Walters, defacs@ymail.com

Minnesota Surgical Society
October 13–14
Stillwater, MN
Contact: Janna Pecquet, janna@mnssurgicalsociety.org, www.mnssurgicalsociety.org

Kuwait Chapter
September 30–October 1
Kuwait City, Kuwait
Contact: info@kuwaitssurgicalassociation.org

FUTURE CLINICAL CONGRESSES

2017
October 22–26
San Diego, CA

2018
October 21–25
Boston, MA

2019
October 27–31
San Francisco, CA