LESSONS LEARNED IN THE PURSUIT OF

QUALITY SURGICAL HEALTH CARE
ACS INSPIRING QUALITY TOUR

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QUALITY SURGICAL HEALTH CARE
With gratitude to Nancy Longley, our dear friend and trusted advisor from Weber Shandwick, and her team. Your vision, enthusiasm, and passion have made our Inspiring Quality initiative one of our proudest achievements.
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This year, the American College of Surgeons (ACS) celebrates its Centennial anniversary. In looking back at our history and at the organization the College is today, it is clear that our continuing legacy remains our commitment and dedication to our patients.

This legacy is reflected in the quality improvement and educational programs we have developed over the past 100 years, all of which are dedicated to fulfilling our enduring commitment to providing our patients with the safest, best possible, and most cost-effective surgical care.

These programs are in the public interest and dedicated to the public trust. To raise awareness about them, ACS launched its Inspiring Quality initiative in 2011 by presenting ACS Surgical Health Care Quality Forums across the country. Our goal is to encourage a national conversation about how to respond to the two great pressures our health care system faces today: improving quality and reducing costs.

ACS programs have improved quality in trauma and cancer care, bariatric surgery, and in overall surgical care. The underpinning of its quality improvement programs is based on four key principles: set the standards, build the right infrastructure, use the right data, and verify with outside experts. All of these principles are important, but the last one is particularly important because it reassures the public that what they are promised is what they are getting. That is, when patients go to a Level I trauma center, they know that it meets the standards and requirements for a top-quality trauma center because it has been reviewed by experts in the trauma field. These four principles form a continuous loop of quality improvement in which hospitals and physicians, armed with tools, measurement, and education, learn to improve and keep improving care while reducing costs.

How does the College’s tradition with regard to these principles apply to today’s health care system? For perhaps the first time, payers and policymakers are aligned on their overall goals for the system: the “Triple Aim” of improving the experience of care, improving the health of populations, and reducing per capita costs. In addition, the Institute of Medicine (IOM) is calling for a “learning health care system,” in which the medical evidence is continuously tested and evaluated against outcomes from patient databases so that evidence-based practice is regularly revised to fit the context of actual patient populations and the actual settings in which they receive care.

Our programs meet these goals. First, they have been shown to measurably improve the quality of care, prevent complications, save lives, and reduce costs. Specifically, they reduce costs because better quality means fewer complications, readmissions, and days in the hospital. Second, by following the four principles, ACS programs are exactly the type of learning health care systems the IOM has in mind, and they help hospitals to become learning health care systems as well.

While we view the ACS Surgical Health Care Quality Forums as an opportunity to share what we have learned about quality, we also welcome them as a way to learn more about how health care leaders from across the country are working to improve the quality of care provided at their institutions. To share these lessons more broadly and to keep the conversation going, we have compiled a list of lessons learned and have summarized the key points made during the various forums.

David B. Hoyt, MD, FACS
In July 2011, the American College of Surgeons (ACS) launched its Inspiring Quality campaign in Chicago with the first of 11 ACS Surgical Health Care Quality Forums to drive national discussion on effective quality improvement methods that improve patient safety and reduce costs. It was a time of change with the implementation of the Patient Protection and Affordable Care Act (PPACA), the federal government grappling with budget deficits, and health care systems and providers facing heavy economic pressures.

In the two years since the campaign began, 95 surgeons and other health care leaders have spoken at the forums to a combined audience of more than 1,300 people (including those who joined via livestream or conference call). Their presentations showed widespread recognition that health care is changing and continuous quality improvement is the way forward. One after another, forum panelists and presenters, including hospital administrators, policymakers, regulators, and surgeon and non-surgeon providers, showed their alignment with the College in its mission of improving the care of the surgical patient.

A stated purpose of the forums was to inform policymakers and the public about the College’s deep knowledge of data-driven quality improvement. ACS Fellows shared research findings and case studies illustrating the link between better quality and lower cost of care. However, Inspiring Quality also was a listening tour. The College and its dedication to improving quality cannot be effective in a vacuum. It has been an opportunity to hear from surgeons and stakeholders about what quality means to them in today’s dynamic environment. Going forward, the College’s efforts will be informed by the reality of where we need to go.

This book was written to share what we learned with you. It is a compilation of stories at the front lines of continuous quality improvement. Innovation is taking place all around us, in collaboratives and national partnerships, and within hospitals and physicians’ offices. Many hospitals are using powerful tools like the ACS National Surgical Quality Improvement Program® (ACS NSQIP®), ACS NSQIP Pediatric (ACS NSQIP Peds®), and the ACS National Trauma Data Bank® (NTDB) to improve quality and reduce costs. We hope the following pages give you a taste of what is truly an exciting time in health care.

In the following pages you will find:

• Background on the American College of Surgeons and our 100-year history of commitment to quality surgical care
• “Lessons Learned” over the course of the Inspiring Quality campaign
• A summary of each forum, with the main points made by each speaker
• Select case studies

Surgeons have valuable knowledge to impart about the relationship between higher quality and lower cost. At these forums, policymakers, regulators, and hospital executives told us they are ready to receive it.
BACKGROUND ON ACS’ LEADERSHIP IN QUALITY

For a century, the American College of Surgeons (ACS), the largest scientific and educational organization for surgeons in all specialties, has developed and delivered leading programs to improve care for the surgical patient. From trauma and cancer care to surgical quality, ACS initiatives have been shown to measurably improve the quality of care, prevent complications, reduce costs, and save lives.

THE FOUR PRINCIPLES

The College has discovered four key principles required to measurably improve quality of care and increase value:

1. **Set the Standards**: Identify and set the highest of clinical standards based on previous outcomes and other scientific evidence that can be individualized by the patient’s condition.

2. **Build the Right Infrastructure**: Have in place appropriate and adequate structures, such as staffing levels, number and type of specialists, and the appropriate equipment. More recently, checklists and information technology have become an integral component of this infrastructure as well.

3. **Collect Robust Data**: Use data from medical charts—not just from claims files—that track patients after they leave the hospital and are risk-adjusted to account for the condition of the patient, provide a clearer picture of care, and capture as many as twice the number of complications normally documented. Data should be collected in nationally benchmarked databases to allow hospitals to compare their care with that provided by other facilities.

4. **Verify through a Third Party**: Allow an external authority to periodically verify that the right processes and infrastructure are in place, outcomes are being measured and benchmarked, and hospitals and providers are proactively responding to those findings.
ACS QUALITY INITIATIVES

Complex, multidisciplinary care—such as surgical care—requires a commitment to continuous quality improvement, and surgeons have a long history of developing standards and holding themselves accountable to those standards. The quality programs ACS has developed are built on these principles and have been shown to be effective in improving patient care and increasing the value of care. A brief description of these programs is included in the following pages.

The American College of Surgeons National Surgical Quality Improvement Program® (ACS NSQIP®) is the first nationally validated, risk-adjusted, outcomes-based program to measure and improve the quality of surgical care across surgical specialties in the private sector. Named “Best in the Nation” by the Institute of Medicine (IOM), ACS NSQIP provides a prospective, peer-controlled, validated database of preoperative to 30-day postoperative surgical outcomes based on clinical data, not claims data from medical billing. Since the program was launched in the private sector in 2001, ACS NSQIP-participating hospitals have seen significant improvements in quality and cost savings through use of the program’s tools, reports, and analysis. A 2009 Annals of Surgery study shows that each hospital participating in ACS NSQIP on average prevents 250–500 complications, saves 12–36 lives, and reduces costs by millions of dollars per year. There are nearly 500 hospitals that participate in ACS NSQIP.

To extend ACS NSQIP to more hospitals and surgical specialties, ACS collaborated with the American Pediatric Surgical Association to develop ACS NSQIP Pediatric (ACS NSQIP Peds®) for specialties in children’s surgery. ACS NSQIP Peds enables participating hospitals to collect highly reliable clinical data points, modified from the adult program, to meet the needs of the pediatric population and compare their surgical outcomes with the outcomes of other participants in the program. There are about 50 hospitals participating in ACS NSQIP Peds.

The American College of Surgeons Bariatric Surgery Center Network Accreditation (ACS BSCN) Program was established in 2005 to advance safe, high-quality care for bariatric surgical patients through the accreditation of bariatric surgery centers. To be accredited, these centers must maintain certain physical resources, human resources, and standards of practice; report their patient outcomes to the ACS Bariatric Surgery Database; and undergo independent peer evaluation. In March 2012, ACS and the American Society of Metabolic and Bariatric Surgery (ASMB) announced plans to combine their respective national bariatric surgery accreditation programs into a single unified program to achieve one national accreditation standard for bariatric surgery centers. This transition is now in progress. Therefore, bariatric surgery centers that are accredited under ACS BSCN program standards are now part of the recently formed Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP) administered by ACS.

The National Accreditation Program for Breast Centers (NAPBC®), established in 2005, is an ACS-administered consortium of national, professional organizations dedicated to improving the quality of care and monitoring outcomes of patients with breast diseases. Today, there are more than 473 accredited centers in 48 states. To earn accreditation, a breast center must meet or exceed NAPBC quality standards, be evaluated every three years, and maintain a high level of excellence.
The Commission on Cancer (CoC), a consortium of professional organizations established in 1922, is dedicated to improving survival and quality of life for cancer patients through standard-setting, prevention, research, education, and monitoring of comprehensive quality care wherever they live. Approximately seven of every 10 cancer patients are cared for at the more than 1,500 cancer programs in the United States and Puerto Rico that are accredited by the CoC. Participating cancer programs must meet CoC quality standards and undergo evaluation every three years. CoC-accredited programs report their data to a nationwide oncology outcomes database known as the National Cancer Data Base (NCDB). Some 70 percent of all newly diagnosed cases of cancer in the United States are captured at the institutional level and reported to the NCDB. The NCDB, established in 1989, now contains approximately 29 million records from hospital cancer registries across the United States, and is recognized as the largest clinical registry in the world.

The American College of Surgeons Program for the Accredited Education Institutes (ACS AEI®) was launched in 2008 to develop a global network of ACS-approved regional education institutes to educate and train current practicing surgeons, surgical residents, medical students, and members of the surgical team. This ACS AEI consortium (67 Level I and nine Level II institutes) improves surgical quality through innovative education and training, and developing standards and metrics. The goals of ACS AEI are to promote patient safety; use simulation to advance professional development; develop new education and training programs, technologies, and methods; and promote research and collaboration among the institutes. They also evaluate the impact of educational interventions on physician behaviors and patient outcomes and incorporate aspects of educational and surgical research into surgical education.

The Committee on Trauma (COT) was established in 1922 to achieve improvements in all phases of the care of injured patients and in prevention of injuries through establishing trauma care standards and developing standards for trauma center verification. Verified trauma centers, of which there are more than 300 in the United States, save lives. Patients treated at verified trauma centers have mortality rates 25 percent lower than those treated at undesignated hospitals, according to a major peer-reviewed study. The COT manages the National Trauma Data Bank® (NTDB), the largest aggregation of U.S. trauma registry data ever assembled. The COT releases NTDB annual adult and pediatric reports each fall. These reports contain descriptive information about trauma patients, including demographics, injury information, and outcomes.

The COT’s Trauma Quality Improvement Program (TQIP®) provides risk-adjusted benchmarking of designated or verified trauma centers to track outcomes and improve patient care. Besides risk-adjusted benchmarking, its components include standardized data collection, education and training, online customizable reports, identification and sharing of best practices, targeted process measures, and ongoing performance monitoring. When performance gaps are identified, centers can review cases and learn from others in the program. As of 2012, there were 140 trauma centers participating in TQIP.

ACS SURGICAL HEALTH CARE QUALITY FORUMS

1. CHICAGO
   7/18/2011

2. BALTIMORE
   8/30/2011

3. SAN DIEGO
   3/2/2012

4. WASHINGTON STATE
   4/11/2012

5. BOSTON
   6/4/2012

6. TENNESSEE
   8/3/2012

7. HOUSTON
   9/10/2012

8. PHILADELPHIA
   10/12/2012

9. NEW YORK
   11/16/2012

10. GEORGIA
    12/12/2012

11. FLORIDA
    1/23/2013
An extraordinary national conversation about surgical quality, lasting almost two years, took place during the ACS Surgical Health Care Quality Forums. Surgeon leaders from hospitals of all types discussed their challenges and successes, observations and opinions, research findings, and innovations in pursuit of quality. They shared the podium with stakeholders from a wide variety of relevant vantage points: hospital CEOs, members of the U.S. Senate and House of Representatives, state health officials, payers, academics and health policy researchers, physicians on the surgical care team, nurses—even executives from the aviation industry who drew timely parallels between surgery and commercial aviation.

Each forum had a unique flavor that reflected local initiatives and priorities—but as we listened to our multidisciplinary allies, several themes resonated again and again. We’ve distilled them here as overarching lessons learned. If you’d like to dig deeper, we encourage you to read the forum summaries on the following pages and take the opportunity to watch the forums online at http://inspiringquality.facs.org.
LESIONS LEARNED

1. Quality improvement is the future of medicine.
2. Quality is measurable.
3. High-quality data is essential for quality improvement.
4. Quality thrives in a supportive culture.
5. Collaboration spurs innovation and higher quality.
6. Surgeons must lead on quality: in the operating room, on Capitol Hill, and in the classroom.
Lessons Learned

Quality improvement is the future of medicine.

Health care in the United States is fragmented and unaffordable for many of our citizens. Policymakers, regulators, payers, and hospital administrators are actively seeking solutions to reduce costs and improve access to care. Multiple studies on the ACS National Surgical Quality Improvement Program® (ACS NSQIP®) have confirmed the cost savings that result from reducing the rate of surgical complications and improving quality of care. Health systems are also focused on another important aspect of quality—reducing variation in how care is provided—which will require greater adherence to evidence-based best practices and less leeway in how operations are performed. Results show such standards of care can save lives. New payment delivery models are also encouraging surgeons to be a part of holistic efforts to prevent patient readmissions.

In the past we didn’t include physicians and surgeons in discussions on how to fix the American health care system because we thought they were part of the problem—a big mistake. We need them as part of the solution because they are American health care.

—Stuart Altman, PhD, MA, BBA

Quality is measurable.

Quality improvement benefits even high-performing hospitals. A number of speakers said they were able to move the rate of certain complications in their hospitals toward zero by standardizing and enforcing high-reliability best practices. While cautioning that some complications are inevitable due to patient risk factors, hospitals are realizing that the bar can be set higher than current conventional wisdom suggests. Someday, greater transparency about surgical outcomes by hospitals could help patients make better decisions about where they receive care.

High-quality data is essential for quality improvement.

Hospitals increasingly rely on tools such as ACS NSQIP, other registries, and internal dashboards to set quality targets, measure individual surgical service performance, and tackle areas of concern. Speakers emphasized the importance of providing surgeons and surgical teams with risk-adjusted, verified, clinical data for tracking the results of quality initiatives and benchmarking against a national standard. At each forum, speakers gave real-life examples of the results of initiatives at their own hospitals. Repeatedly, the message was that surgeons will make changes in how they work if they are given performance data they trust. Anesthesiologists, nurses, and other members of the care team are also motivated by data that show their quality improvement efforts are making a difference.

Quality thrives in a supportive culture.

How do you move from an “eminence-based” past in which authority was followed without question to an “evidence-based” present in which every member of the care team is empowered to help make quality better? Hospitals and surgeons shared their experiences with instilling teamwork and a quality mindset in the entire surgical department, including physicians, nurses, and nonclinical staff. Custodial staff, for instance, play an important role in preventing infection and their buy-in and ideas should be solicited. Just as importantly, hospital administration must be committed to creating an environment and setting expectations about quality so that culture change can take effect.
5 COLLABORATION SPURS INNOVATION AND HIGHER QUALITY.

Around the country, surgeons, hospitals, and stakeholders are developing and testing new ways to improve surgical quality. National partnerships between ACS and The Joint Commission, Comprehensive Unit-Based Safety Program (CUSP), and the Centers for Disease Control and Prevention (CDC) have achieved significant results. But national efforts are only one source of innovation. The forums called attention to the efforts of state collaboratives in Florida, Georgia, Tennessee, and Washington State. Payers have banded with hospitals and hospital associations in these states to share their data with each other in the pursuit of quality. These initiatives work because they capture and disseminate the innovation that happens on the hospital floor, hospital by hospital, department by department, operation by operation. Quality is a team effort.

6 SURGEONS MUST LEAD ON QUALITY: IN THE OPERATING ROOM, ON CAPITOL HILL, AND IN THE CLASSROOM.

Continuous surgical quality improvement demands surgeon leadership at the hospital level, but also with state and federal policymakers and regulators who are embroiled in budget discussions and concerned about affordable access to care for their constituents. Federal agencies want feedback on how regulation affects practice in the operating room. Members of Congress who took part in the forums invited the surgical community to make its voice heard on Capitol Hill. Policymakers are interested in hearing from surgeons about how higher quality affects the bottom line and any information about the financial impact of quality initiatives; they are also anxious to hear about how collaboration could help pave the way for similar efforts in other areas of medicine. Communicating the cost savings of quality improvement programs to patients is another area in which they are interested. Surgeons should also lead in education and training. The ACS consortium of 67 Level I and nine Level II Accredited Education Institutes® (ACS AEIs) is helping to ensure that today’s surgeons stay current with best practices and techniques in a rapidly evolving environment. AEIs also give medical students and surgical residents opportunities to be exposed to ACS NSQIP data and practice quality improvement and patient safety in the clinical environment. Today’s providers are preparing the next generation of surgeons to advance the College’s mission of improving the quality of care for the surgical patient.
Inspiring Quality Tour begins by bringing together health leaders to create a national culture of surgical quality improvement

AMERICAN COLLEGE OF SURGEONS HEADQUARTERS

The American College of Surgeons (ACS) kicked off its Inspiring Quality initiative on July 18, 2011, with the first community surgical health care quality forum following the official launch of the project on Capitol Hill in May 2011. Speakers and panelists at the session at ACS headquarters highlighted how they approach quality measurement and process improvement—from national programs at The Joint Commission and the College, to candid case studies from five distinguished Chicago-area institutions.
Culture change is necessary to achieve sustained performance improvement.

A “culture of quality” is key to sustain surgical quality improvement. Even academic medical centers, which traditionally are seen as being on the leading edge of health care innovation and performing high-risk, complex procedures, realize they must continue to improve. For example, Nathaniel Soper, MD, FACS, of Northwestern Memorial Hospital, indicated that Northwestern Medicine has been involved in many quality improvement projects over the years, including the ACS National Surgical Quality Improvement Program® (ACS NSQIP®), but realized that a culture change among all clinical staff was necessary in order to see even better results.

Jeffrey Matthews, MD, FACS, of the University of Chicago Medical Center, shared that based on 2006 data from its Surgical Care Improvement Project (SCIP), the university learned it needed to improve in key “routine” areas, particularly preventing infection and venous thrombosis. This finding motivated the university to build an infrastructure, or “culture” of quality improvement, and within 18 months it achieved 100 percent compliance and sustained improvement against these key measures.

Quality is our cornerstone mission. We were an early adopter of ACS NSQIP and we knew that to improve outcomes a culture change was necessary. We’ve now seen an 80 percent reduction in serious events, and malpractice claims have decreased by 30 percent.

PARTICIPANTS

HOSTS: L.D. Britt, MD, MPH, FACS, FCCM, FRCSEng (Hon), FRCSEd (Hon), FWACS (Hon): Past-President, American College of Surgeons  •  David B. Hoyt, MD, FACS: Executive Director, American College of Surgeons  KEYNOTE SPEAKER:  U.S. Sen. Mark Kirk (R-IL)  PANELISTS:  Enrico Benedetti, MD, FACS: chair of surgery, University of Illinois Medical Center at Chicago  •  Mark R. Chassin, MD, FACP, MPP, MPH: president, The Joint Commission  •  Clifford Y. Ko, MD, MS, MSHS, FACS: Director, ACS Division of Research and Optimal Patient Care  •  Jeffrey Matthews, MD, FACS: chief of surgery, University of Chicago Medical Center  •  Alejandra Perez-Tamayo, MD, FACS: chief of surgery, Mercy Hospital and Medical Center  •  Marleta Reynolds, MD, FACS: surgeon-in-chief, Children’s Memorial Hospital  •  Nathaniel Soper, MD, FACS: surgeon-in-chief, Northwestern Memorial Hospital
**SPEAKER HIGHLIGHTS (in order of appearance)**

**DAVID B. HOYT, MD, FACS, AND L.D. BRITT, MD, MPH, FACS, FCCM, FRCS-ENG (HON), FRCSED (HON), FWACS (HON)**

Drs. Hoyt and Britt set the tone for the forum by outlining the College’s four key principles of quality improvement—set the standards, build the right infrastructure, use the right data, and don’t just trust, verify (see Background on page x). They also emphasized the urgent need to minimize disparities in quality health care across the country.

**U.S. SEN. MARK KIRK (R-IL)**

Sen. Kirk provided an update on state and federal health care budget discussions in Congress. He said that moving forward it will be crucial to address access to care, particularly in rural areas, while tempering funding cuts for key health care programs such as graduate medical education, which would significantly affect the future of health care delivery. When asked if he and his colleagues in Washington were hearing the messages about how quality health care can lower costs, he said, “unfortunately, no.”

**MARK R. CHASSIN, MD, FACP, MPP, MPH**

The Joint Commission/ACS partnership has entered a new era, with the College’s increased focus on quality and The Joint Commission’s emergence as a “quality improvement organization.” Dr. Chassin discussed how The Joint Commission Center for Transforming Healthcare’s process improvement tools and the ACS NSQIP program formed a partnership to pinpoint variations in care and complication rates. “With large-scale national collaborations like this, it’s not just individual hospitals and organizations that participate in the program reaping the benefits—it’s the entire health care delivery system.”

**ALEJANDRA PEREZ-TAMAYO, MD, FACS**

Dr. Perez-Tamayo said small community and rural hospitals can truly benefit from investing in quality programs like ACS NSQIP. These institutions face multiple challenges such as staffing shortages, maintaining a spectrum of services and quality, and inherent financial barriers. She shared how her institution has achieved several performance and process improvement milestones utilizing ACS NSQIP, including open dialogue among clinical teams, standardized documentation and reporting processes, and improved rates of pulmonary embolism, deep vein thrombosis (DVT), and infection.

**ENRICO BENEDETTI, MD, FACS**

As a transplant surgeon, Dr. Benedetti offered a unique perspective on how the national central monitoring system for transplantation can be an effective quality improvement model and can be applied to other fields. He noted that ACS is taking the lead in this effort with regard to bariatric surgery with the ACS Bariatric Surgery Center Network (now part of the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program, or MBSAQIP). He added that there may be an opportunity to look into this type of infrastructure to achieve greater quality for other specialty procedures, such as carotid endarterectomy, a surgical procedure to remove plaque build-up inside the arteries and prevent stroke.

The most important first step for hospitals to realize true quality improvement is for the entire leadership of the hospital—from nurses and surgeons, to executive management, and in some cases, members of the board—to come together and make a commitment to higher levels of patient safety.

—Mark R. Chassin, MD, FACP, MPP, MPH
JEFFREY MATTHEWS, MD, FACS

Dr. Matthews said that as an academic medical institution, the University of Chicago tends to treat more unusual or high-risk cases than many of the measurement programs are able to capture because those programs focus on routine, high-volume, or otherwise easily benchmarked procedures. As a result, the university has adopted ACS NSQIP principles to establish a surgical quality review committee and identify opportunities for quality and/or process improvement; the findings are then measured against the best published data in those areas.

MARLETA REYNOLDS, MD, FACS

Dr. Reynolds said pediatric quality measurement is unique and currently in its infancy on a national level, but that the ACS NSQIP Pediatric (ACS NSQIP Peds®) program—which is being conducted in partnership with the American Pediatric Surgical Association—is making tremendous strides to help fill this void. She said using risk-adjusted outcomes data and multispecialty variables is critically important, given the nature of pediatric surgical cases.

NATHANIEL SOPER, MD, FACS

Dr. Soper reported that although Northwestern Memorial was an early adopter of ACS NSQIP, a change in culture was necessary to effectively implement process changes that yielded results. In addition to simulation and communication training, Northwestern implemented an anonymous reporting system for “near misses” and other problems related to surgical care. Dr. Soper said that over the last several years, the number of incidents reported has doubled, while the number of serious events occurring has decreased by 80 percent. In addition, Northwestern has seen a 30 percent decrease in malpractice claims related to surgical care in the last five years.

CLIFFORD Y. KO, MD, MS, MSHS, FACS

Dr. Ko reiterated that the quality landscape is changing and that surgeons and hospitals have to measure in the best way possible to ensure that patient outcomes are actually improving. Currently, hospitals are rigorously being measured on Surgical Care Improvement Project (SCIP) measures that highlight process improvement. However, Dr. Ko said he believes this effort should be taken a step further with programs like ACS NSQIP, which follow up with patients after operations and look at tangible, risk-adjusted patient outcomes including survival rates, infection rates, thrombosis rates, and so on.
August 30, 2011

JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE

U.S. Sen. Ben Cardin (D-MD) set the stage for the American College of Surgeons (ACS) Surgical Health Care Quality Forum Baltimore with a presentation on how the Affordable Care Act (ACA) addresses health care quality, costs, disparities, and other access barriers. He said surgeons and the work they are doing with regard to quality can play an important role in improving America’s health care system. Six panelists brought the quality concept to life with examples of how ACS programs power the quality improvement efforts they champion in their own organizations.

The $250 billion dollars in cost savings caught my attention—that and lives saved. That’s a lot of money. That could go a long way in dealing with costs in health care, and that’s just in surgery.
Stakeholders are focused on quality.

Now more than ever, hospitals and health systems, policymakers, patients, and health care providers are aligned with the American College of Surgeons’ mission of improving the quality of care for the surgical patient. For example, Ronald Peterson of the Johns Hopkins Hospital and Health System spoke about a new institute at the hospital dedicated to achieving the best patient outcomes at the lowest cost. Proven quality frameworks, like the ACS National Surgical Quality Improvement Program® (ACS NSQIP®), can illuminate the path forward.

Innovative quality programs are happening everywhere—and ACS tools play an important role.

Quality programs discussed by panelists are supported by ACS data from ACS NSQIP, ACS NSQIP Pediatric (ACS NSQIP Peds), the National Trauma Data Bank (NTDB®), and by CUSP (Comprehensive Unit-Based Safety Program), an ACS partnership with Johns Hopkins.

Policymakers welcome surgeon input.

Sen. Cardin said the overriding concern in Congress is to get a handle on the cost of health care. He believes that policymakers need to know how ACS NSQIP could save billions of dollars while decreasing the cost of care.

Dr. Makary: “With NSQIP, we’re in an amazing position to take the lead with patient quality transparency.”

#ACSImpiringQuality #ptsafety
—@AmCollSurgeons

PARTICIPANTS

HOSTS: Julie A. Freischlag, MD, FACS: The William Stewart Halsted Professor and Chair, Johns Hopkins University School of Medicine’s Department of Surgery; Member, Board of Regents, American College of Surgeons, at the time of the forum; current Chair of the ACS Board of Regents • Ronald R. Peterson: president, The Johns Hopkins Hospital and Health System

KEYNOTE SPEAKER: U.S. Sen. Ben Cardin (D-MD)

PANELISTS: Fizan Abdullah, MD, PhD, FACS: associate professor of pediatric surgery, Johns Hopkins University School of Medicine • Deborah J. Baker, DNP, CRNP: director of nursing, The Johns Hopkins Hospital’s Department of Surgery • Sean M. Berenholtz, MD, MHS, FCCM: associate professor of anesthesiology/critical care medicine and surgery, Johns Hopkins University School of Medicine • Thomas Genuit, MD, MBA, FACS: chief, division of trauma, Sinai Hospital of Baltimore • Elliott R. Haut, MD, FACS: associate professor of surgery, Johns Hopkins University School of Medicine • Martin A. Makary, MD, MPH, FACS: associate professor of surgery, Johns Hopkins University School of Medicine • Patricia L. Turner, MD, FACS: Director, ACS Division of Member Services; adjunct professor of surgery, University of Maryland School of Medicine

#ACSInspiringQuality
SPEAKER HIGHLIGHTS (in order of appearance)

JULIE FREISCHLAG, MD, FACS
Dr. Freischlag opened the program with a statistic on the potential financial impact of ACS NSQIP on the U.S. health system. She said if all 4,500 hospitals in the nation adopted ACS NSQIP, the potential savings would be between $13 and $26 billion annually, with total estimated savings over a decade approaching $260 billion.¹

RONALD R. PETERSON
As president of the Johns Hopkins Hospital and Health System, Mr. Peterson noted that Johns Hopkins recently founded the Armstrong Institute for Patient Safety and Quality to further the rigorous application of science for improving patient safety.² Better quality goes hand in hand with eliminating disparities, he said. He added that Johns Hopkins shares Senator Cardin’s desire to eradicate deep, long-standing disparities in care.

U.S. SEN. BEN CARDIN (D-MD)
Sen. Cardin described the United States as the world leader in quality of hospital care and health technology innovation. However, he said it also has the highest costs and thus, the current health system is unsustainable. Senator Cardin added that a major challenge is to deliver quality health care more efficiently in order to bring down the cost of care and that a second challenge is to expand access to quality care. Racial, ethnic, and socioeconomic disparities raise questions about whether the current system works for America. On indicators like infant mortality, he noted, the United States ranks with some third-world nations. The Affordable Care Act reflects a value that access to health care should be universal.

FIZAN ABDULLAH, MD, PHD, FACS
Dr. Abdullah described the expectation he saw in the eyes of the parents of a sick baby that he—both as an individual surgeon and as part of a hospital system—would help their child. ACS NSQIP Peds was rolled out one year before the forum at Johns Hopkins and 30 children’s hospitals, giving care teams risk-adjusted, verified data for pediatric patients. He said he hoped that with ACS NSQIP Peds, “we’ll be able to better meet the expectations for success of every single parent of every single patient, every single time.”

SEAN M. BERENHOLTZ, MD, MHS, FCCM
Dr. Berenholtz spoke about the Keystone Intensive Care Unit (ICU) program, a partnership between Johns Hopkins and the Michigan Health & Hospital Association to reduce central line-associated blood stream infections (CLABSI) and ventilator-associated pneumonia (see the Case Studies section for more detail). The Keystone ICU results suggest that the vast majority of health care-associated infections are preventable. Calling on the visionary leadership of ACS and ACS NSQIP, he said, “We strongly support a national program that embraces the principles of the Keystone ICU program to focus more explicitly on surgical care.”

THOMAS GENUIT, MD, MBA, FACS
Dr. Genuit profiled the Maryland Institute for Emergency Medical Services Systems (MIEMSS). In Maryland, trauma centers are verified by MIEMSS, expanding on the standards developed by the ACS. All Maryland trauma centers participate in the Maryland Trauma Registry, and most also participate in the NTDB. The NTDB allows Maryland to benchmark its care with centers outside the state. Both tools track data on the standard of care delivery, allowing hospitals to better allocate resources and track process performance. For example, he said, surgeons at Sinai Hospital of Baltimore used the data to revise the process of ICU admissions for trauma patients, reducing the time between arrival at the hospital and admission to ICU from more than three hours to less than one and one-half hours.
ELLIOTT R. HAUT, MD, FACS

Venous thromboembolism (VTE) causes more than 100,000 deaths annually, Dr. Haut explained, providing context about a quality effort he led to ensure surgical patients receive appropriate prophylaxis against VTE. While Medicare considers VTE a preventable complication and withholds payment if one occurs, research shows that some patients will still develop it. Johns Hopkins is actively working with medical directors at the Centers for Medicare & Medicaid Services (CMS) and ACS to better define the term “preventable harm” and improve care for all patients.

PATRICIA L. TURNER, MD, FACS

Dr. Turner gave an overview of the features of ACS NSQIP that make it so useful to surgeons and hospitals: risk-adjustment, rigorous data collection, actionable benchmarking tools, and the framework to share best practices with other institutions. “We don’t all need to make the same mistakes over and over again,” she said. The multidisciplinary approach ACS NSQIP fosters helped the University of Maryland significantly reduce its CLABSI rate.

DEBORAH J. BAKER, DNP, CRNP

Ms. Baker said data is important because it provides the reason for doing what you do, helps facilitate communication, and builds teamwork. CUSP brings clinical, nonclinical, and administrative staff together to focus on quality with the question, “What do you think is going to hurt your patient today?” Recently a CUSP team at Johns Hopkins developed a quality effort to reduce surgical site infections (SSI) after colorectal surgery. As a result, the SSI rate decreased from 29 to as low as 15 percent.

MARTIN A. MAKARY, MD, MPH, FACS

Dr. Makary talked about how patients will often choose a hospital based on parking or a billboard, and said that his passion is to move the competition among hospitals to the level of performance metrics. He said ACS plans to roll out CUSP broadly, with the experience of Johns Hopkins serving as a toolkit.

SAN DIEGO

The operating room moves from eminence-based to evidence-based medicine

March 2, 2012

SCRIPPS MEMORIAL HOSPITAL (SCRIPPS HEALTH)

The American College of Surgeons (ACS) Surgical Health Care Quality Forum San Diego stop drew on the city’s rich history of innovation in trauma medicine. Several panelists spoke to the increasingly evident need to apply the systems approach pioneered by trauma surgeons more broadly in other areas of health care. A diverse mix of perspectives was represented in the lively discussion, including surgeons and other physicians who work in the surgical environment, hospital executives, and health policy researchers.
Systems of care are the future of medicine in the United States.

Each hospital represented on the San Diego forum panel is working to standardize health care delivery in an effort to improve quality and eliminate waste. Scripps Health turned its management structures sideways to standardize metrics and delivery of care across services. Kaiser Permanente developed a comprehensive program to build greater teamwork into its culture. The Naval Medical Center is using the ACS National Surgical Quality Improvement Program® (ACS NSQIP®) to help drive culture change in a dynamic institutional environment.

A collaborative culture leads to better quality.

Health care teams in which all members are empowered to work toward quality are achieving complication rates lower than what was once believed possible. Mark Talamini, MD, FACS, of the University of California, San Diego, and Ralph Dilley, MD, FACS, of Scripps Green, gave examples of how their hospitals, which already had good outcomes, drove surgical patients’ complication rates even lower through relentless focus on continuous quality improvement.

I have never been more bullish about the future of health care. I’ve never seen this level of collaboration in 30 years of health care administration with doctors and administrators, all of us working together.

**KEY THEMES**

**PARTICIPANTS**

**HOST:** A. Brent Eastman, MD, FACS: President, American College of Surgeons; chief medical officer and corporate senior vice-president, Scripps Health (at the time of the forum) **KEYNOTE SPEAKER:** David B. Hoyt, MD, FACS: Executive Director, American College of Surgeons **PANELISTS:** David Chang, PhD, MPH, MBA: director of outcomes research, department of surgery, University of California, San Diego School of Medicine • Ralph Dilley, MD, FACS: vice-chairman, department of surgery, Scripps Clinic Medical Group; surgeon-in-chief, Scripps Green Hospital • Capt. Mark Kobelja, MD, MC USN: deputy commander, Naval Medical Center, San Diego • James E. LaBelle, MD, MBA: corporate vice-president of quality, medical management, and physician co-management, Scripps Health • Mark Schumacher, MD, FACS: physician director of hospital surgical services, Kaiser Permanente, San Diego • Mark A. Talamini, MD, FACS: professor and chairman, department of surgery, University of California, San Diego • Chris Van Gorder, FACHE: president and chief executive officer, Scripps Health; immediate past chairman, American College of Healthcare Executives
There's no question that this type of outcomes-based program is vitally important to control costs and improve quality.
—Ralph Dilley, MD, FACS
If I can speak to you with risk-adjusted data around mortality rates or particular complications, then we can have broader conversations around the entire system of care than [if we talk about] a particular measure, for instance one that looks at, "did I provide DVT prophylaxis for the patient?"

—James E. LaBelle, MD, MBA

MARK SCHUMACHER, MD, FACS

Dr. Schumacher said that a year-and-a-half ago, his hospital gave its surgical staff a safety attitudes questionnaire that is known to correlate well with clinical outcomes. Survey results showed several opportunities to develop a team approach to patient safety and quality. The hospital has since taken multiple approaches to institute culture change, including holding group and one-on-one meetings and trainings, using consultants to teach more effective communication, developing an onboarding curriculum on teamwork for new hires, and moving from taking punitive action for errors to learning from adverse outcomes. He said Kaiser Permanente also invested in empowering those on the front lines to identify and solve problems.

DAVID CHANG, PHD, MPH, MBA

From a health policy perspective, Dr. Chang said ACS NSQIP is an innovative effort bringing needed organization to health care delivery. With the exception of trauma, he said, the lack of systems in health care causes medical errors and fragmentation. It is important to inform the public and policymakers that quality can be measured objectively. He expressed concern that policymakers may focus on money and cost of care to the point that they lose sight of the possibility that an upfront investment in quality can reduce future costs. On a related note, he said the government is seeking proposals on how to report quality in a way that the public understands.

JAMES E. LABELLE, MD, MBA

The process of fostering teamwork and collaboration requires a change in culture, said Dr. LaBelle. He spoke about the system changes being reengineered over the last 18 months at Scripps Health in services; including the emergency departments (EDs), which were underperforming in both turnaround times and access to physicians. Analysis showed several areas for improvement. For example, physicians used triage to modulate the volume of patients coming into the ED for the convenience of physicians, not necessarily based on the needs of patients. Therefore, the triage function was eliminated. To stop patients from having to repeat historical data to various care providers, physicians and nurses now see incoming patients as a team. He stressed that ACS NSQIP facilitates the deep conversations required for collaboration between surgeons and patients.
THE RAINIER CLUB, SEATTLE

The American College of Surgeons (ACS) Surgical Health Care Quality Forum Washington State brought together leaders from the fields of aviation and health care to champion effective quality improvement programs and best practices across industries. The forum ignited a discussion around driving innovation through the adoption of aviation-like standardization and checklists, and surgical quality research and data. The forum also launched the Strong for Surgery initiative—a partnership between Washington State’s Comparative Effectiveness Research Translation Network (CERTAIN) and the Washington surgical community, the ACS Division of Education, the Agency for Healthcare Research and Quality (AHRQ), the Life Sciences Discovery Fund, and Nestlé HealthCare Nutrition—that brings preoperative checklists and nutritional interventions to doctors’ offices and engages patients as their own health care advocates to help further improve patient outcomes.
Proactively approach surgical quality by evaluating overall patient health status before a surgical procedure.

An airline pilot would never start the aviation safety checklist process after the plane has taken off, and the same concept applies to performing operations. Surgical decisions—Should the patient have the operation in the first place? Is his or her diabetes controlled?—should be made before the patient enters the operating room to ensure the patient’s health status indicates readiness to undergo an operation. This process can thereby improve patient safety and outcomes. The concept of the Strong for Surgery initiative is shifting the spotlight from the operating room to the surgeon’s office, where the decision to operate first takes place.

Controlling variability improves quality.

Just shining the spotlight on variability helps improve quality. For example, colorectal surgeons across the state agree that checking for leaks during an operation is very important. When the Washington State Surgical Outcomes Assessment Program (SCOAP) began—a voluntary, clinician-led collaborative that includes statewide insurers, policymakers, professional organizations, physicians, nurses, hospitals, and the ACS Washington State Chapter—surgeons checked for leaking only half of the time. Now 95 percent of the time, they are checking for leaks in the operating room, dropping the risk by half. Variability dropped, but not by accident; quality improvement leaders in the state worked hard on it and the numbers went from 17 percent to 9.5 percent. Variability is still there, but colorectal surgeons in the state have made huge progress in improving quality.
CARLOS A. PELLEGRINI, MD, FACS, FRCSI (HON)

Dr. Pellegrini stressed how appropriate it was to unite surgical and aviation experts to discuss the successful quality programs that were implemented in the state of Washington and learn from two distinct professions that both strive for safety, quality, and excellence. Dr. Pellegrini discussed the development of SCOAP, a grassroots data-sharing, benchmarking, and quality improvement collaboration of more than 50 hospitals working to improve quality by reducing variation in outcomes.

U.S. REP. JIM MCDERMOTT (D-WA)

Rep. McDermott discussed the challenges of health care quality and cost, Washington State’s leadership in quality improvement, and why it is important for the surgical community to be involved in health care discussions on Capitol Hill. He stated that the Affordable Care Act only provides some of the answers. As a result, the work Washington health care leaders do on a state level and what ACS does on a national level could not be more timely or relevant to the challenges faced across the nation. Rep. McDermott used the example of SCOAP being successful in deploying the use of a checklist, saying that physicians need to be more systematic about the whole issue of quality in order to significantly reduce surgical complications and costs.

DAVID B. HOYT, MD, FACS

In presenting the ACS Inspiring Quality initiative to the audience, ACS Executive Director Dr. Hoyt said that surgeons have a responsibility to demonstrate to patients that educational efforts are preparing them to provide the best quality of surgical care. The ACS Division of Education recently launched the Accredited Education Institutes® (ACS AEs) program where learners can acquire and maintain their skills in new and existing procedures and verify knowledge and skills to confirm achievement of predetermined standards. The program currently includes 65 institutes where surgeons are being trained, and new and existing procedures are being reaffirmed. This program is a model for the future and is really about the public and patients trusting that surgeons are qualified to perform any given surgical procedure. Dr. Hoyt said the surgeon of the future is going to increasingly be part of teams and systems of care that are held to a standard of evidence-based practice. Even public reporting and Maintenance of Certification are going to have to be tailored to the surgical practice.

BRADLEY D. TILDEN

Mr. Tilden told the audience there are five main parallels between aviation and surgery: customers put their lives in our hands; teamwork is essential; there is a system of double checks (verbalize, verify, and monitor); checklists are a necessity as quality comes from standardization; and there is a need for a “safe” culture to openly discuss mistakes in order to improve.

This is an opportunity to recognize the surgeons at the University of Washington and around the state who are applying the principles of quality and cost and proving these two things are not at odds with each other.
KEITH W. LEVERKUHN

Mr. Leverkuhn echoed Mr. Tilden’s remarks that when it comes to quality and ensuring safe outcomes, there are probably more similarities than differences between aviation and surgery. He also noted that standardization and innovation in conflict couldn’t be further from the truth—they are absolutely interdependent. The challenges pilots and surgeons both face in their professions are how to take advantage of the tools to be cost-effective and ensure that they don’t stray away from the imperatives of standardization and innovation.

DAVID R. FLUM, MD, MPH, FACS

Dr. Flum highlighted the work Washington State has done around surgical quality, noting that SCOAP has made considerable progress that should make its participants proud. He added, however, that to build a quality improvement initiative that can be sustained over time, surgeons and other clinicians need more legs than just the good graces of hospitals willing to spend a little extra money. To address this need, Dr. Flum and others have built a network called CERTAIN (www.becertain.org), whose mission is to get research funding that supports widespread quality improvement throughout the state. The organization’s name is based on the concept that surgeons working together makes for a good start, but bringing the public, payers, and all stakeholders into the mix, and building off research findings, creates a lasting effect. CERTAIN creates a “learning health care system” by linking data from multiple sources, including medical records, payers, and patient surveys, to help SCOAP hospitals assess the longer-term impact of care and complications on patients and the health care system.

It sounds like a crazy idea, but we’ll get every hospital in the state of Washington to volunteer to be part of something where we show each other our worst outcomes and we try to learn from each other. That’s inspiring. And that’s what the College is about: Inspiring Quality—it’s something we can all be really proud of.

—David R. Flum, MD, MPH, FACS

PARTICIPANTS

HOSTS: Carlos A. Pellegrini, MD, FACS, FRCSI (Hon): Henry N. Harkins Professor and Chair, department of surgery, University of Washington, and Past Chair, Board of Regents, American College of Surgeons KEYNOTE SPEAKER: U.S. Rep.Jim McDermott (D-WA) OPENING PRESENTERS: David R. Flum, MD, MPH, FACS: associate chair for research and surgery, and professor, surgery, health services, and pharmacy, University of Washington • David B. Hoyt, MD, FACS: Executive Director, American College of Surgeons • Keith W. Leverkuhn: vice president of engineering, general manager, propulsion systems, Boeing Commercial Airplanes • Bradley D. Tilden: CEO-elect, Alaska Air Group • Thomas K. Varghese, Jr., MD, MS, FACS: director, Harborview Thoracic Surgery Program, University of Washington PANELISTS: Richard Billingham, MD, FACS: colon and rectal surgeon, Swedish Medical Center • Ellen T. Farrokhi, MD, FACS: medical director, SCOAP; vascular surgeon, Providence Regional Medical Center Everett • Morris G. Johnson, MD, FACS: general surgeon, Skagit Regional Clinics; President, ACS Washington State Chapter • Lt. Col. Scott R. Steele, MD, FACS, FASCRS: colon and rectal surgeon, Madigan Healthcare System; assistant professor of surgery, Uniformed Services University of the Health Sciences and University of Washington • Richard C. Thirlby, MD, FACS: general surgeon, Virginia Mason Medical Center
THOMAS K. VARGHESE, JR., MD, MS, FACS

Dr. Varghese stated that nutritional impairment is the leading cause of complications and death in surgical patients, explaining that it’s possible to influence a surgical outcome dramatically by addressing the nutritional status of the surgical patient before an operation. He reported that eight randomized clinical trials demonstrated that most patients appear to benefit from preoperative nutritional supplements leading to a 41–50 percent risk reduction. Therefore, conducting nutritional interventions with patients before their operations helps uncover and address risks for patients who are nutritionally impaired, enabling the patients to gain strength before their operations and avoid complications.

ELLEN T. FARROKHI, MD, FACS

Dr. Farrokhi said that she thinks SCOAP and CERTAIN are wonderful partners. The programs benefit each other and advance the College’s commitment to quality and making surgical procedures safer. Further, the programs are patient-focused, and she’s confident Washington State will continue leading in quality improvement and serve as a model for other states and the nation.

RICHARD C. THIRLBY, MD, FACS

Dr. Thirlby said the philosophy of patient safety at Virginia Mason is that “mistakes are different than defects.” We all make mistakes but the defects are what people focus on. Death is not a good outcome for tracking complications. Medical professionals tend to focus on bad outcomes, when it would be more useful to focus relentlessly on mistakes—even those that don’t necessarily result in errors or harm to the patient. He used the example of a patient safety alert system at Virginia Mason where 26,000 patient safety alerts (PSA) had been filed in the last 10 years—or seven a day. Ninety-eight percent of those incidents were small mistakes and two percent were “Red PSAs,” which signals real harm to the patient. The breakdown of the 98 percent is where the opportunity for improvement lies, since 37 percent were systems errors, 26 percent were related to errors in diagnosis or errors in treatment, and 20 percent were medication errors.
LT. COL. SCOTT R. STEELE, MD, FACS, FASCRS

Dr. Steele said at Madigan Healthcare System, residents are involved in quality improvement at the clinical level. As part of their research program, residents look at the American College of Surgeons National Surgical Quality Improvement Program® (ACS NSQIP®) data for certain procedures and figure out how to apply what they learn back to patient care. Madigan also involves residents in a mandatory process called “Team Steps.” At the beginning of each day, a multidisciplinary team meets (the scrub tech, surgeon, surgical resident, anesthesiologist, nurses, and so forth), to improve patient care and outcomes through better communication. The team discusses each patient case, the site of surgery, why the patient needs an operation, what medications will be given, and what equipment is needed. The goal is to expose residents to quality improvement efforts up front so they will understand how quality improvement steps lead to better patient outcomes.

MORRIS G. JOHNSON, MD, FACS

Dr. Johnson shared an anecdote about Skagit Regional Centers realizing major quality improvement in one key area, and it started with a simple conversation between him and the chair of anesthesia. After looking at their SCOAP data, they realized they needed to do a better job of glucose management and postoperative protocols for diabetic patients. They pointed out to the hospital’s administration how much savings they would realize by improving efficiency in this area, and within exactly 120 days they improved staffing levels and increased the number of insulin pumps and glucose monitors on the floors and in the operating room. It all started with one person asking a question, but the clinical teams and hospital administration joined together and achieved remarkable accomplishment in a short period of time.

RICHARD BILLINGHAM, MD, FACS

Dr. Billingham said surgeons are now collecting data both on process and outcomes, but the culture change is going to have to come at the hospital, or caregiver level, where standards of care are determined, and make sure that each of the hospitals are maintaining these current standards. It’s expensive for hospitals to do this, he noted. Dr. Billingham gave the example of when he first went into medical practice and said the prevailing wisdom was, “You have to spend money to make money.” Now the mantra is, “You’ve got to spend money to save money.” He said he is hopeful that his colleagues at the hospital administration level understand the money they are spending on quality control is going to reap huge benefits both in patient care and in terms of the bottom line.
BOSTON

Delivering the right care at the right time is low-hanging fruit for improving quality and reducing cost

BOSTON MARRIOTT COLEY PLACE

Surgical care accounts for half of the annual health care expenditures nation-wide,¹ yet improving surgical quality is often overlooked as an overall tool for reducing costs and improving health care outcomes. That notion was a focus of the American College of Surgeons (ACS) Surgical Health Care Quality Forum Boston, where participants discussed the value proposition that quality surgical care not only delivers better patient outcomes, but also better financial outcomes, through the real untapped power of surgeons delivering the right care, at the right time. What’s more, surgical outcomes data through programs such as the ACS National Surgical Quality Improvement Program® (ACS NSQIP®) are enabling surgeons to harness that untapped power.

June 4, 2012
KEY THEMES

Widespread collaboration offers great opportunities for success.

How do surgeons and other clinicians work more effectively with other health care leaders to find better ways to collaborate and implement a shared vision of “better” surgical care? By sharing best practices that use evidence-based examples to show how implementing quality improvement programs can become part of the larger solution. Because health care systems are changing, a huge difference has come about in the last few decades and surgeons now have opportunities to share solutions that can be brought forward for consideration to other areas of the U.S. Further, processes such as using centralized resources for data collection and reporting, and regular team meetings are keeping the focus on quality improvement by creating accountability among members of patient care teams. Increasingly, hospitals are financially penalized for preventable complications, but institution-level quality data derived from programs such as ACS NSQIP have been proven to make the difference. By helping hospitals identify areas where they may be underperforming, hospital and physician leadership can create action plans to reengineer workflows, foster and improve internal education, and develop clinical performance improvement initiatives.

Dr. Ernest Codman’s “End-Result” is as relevant today as it was a century ago.

The end-results idea, and the whole process Boston surgeon Dr. Codman laid out 100 years ago, has served as the foundation for ACS’ four guiding principles in the continuous quality improvement cycle: set the standards, build the right infrastructure, use robust data, and verify with external review. Dr. Codman is credited with stating, “So I am called eccentric for saying in public: that hospitals, if they wish to be sure of improvement; must find out what their results are, must analyze their results to find out their strong and weak points; must compare their results with those of other hospitals; and must welcome publicity not only for their successes but for their errors. Such opinions will not be eccentric a few years hence.” Because of Dr. Codman’s influence, a central tenet of ACS has long been that surgical quality improvement programs must be based on proven tools, systems, and methodologies that measurably improve patient care.

Quality can lead to the Holy Grail: appropriateness.

Currently, to gauge the appropriateness of surgery, many hurdles must be cleared including insurance preapprovals, paperwork, and extra clinic visits. This “make it hard to do the wrong thing” approach is not only frustrating for surgeons who just want to do the right thing, but is also expensive for payers and tiresome for patients.

Opportunities exist to use some of the ACS quality improvement processes to better understand appropriateness and answer questions that surround the issue, including: How can science help determine when a procedure is appropriate and when it is not? How can science and data enable surgeons to have more meaningful discussions with patients so that they have actionable information to make informed choices? It’s widely known that when patients are more informed and more engaged, they typically have more reasonable expectations and are better able to participate in the decision making process. Thus, surgical care needs to be redesigned in a way that reflects a “make it easy to do the right thing” approach, developing ways to deliver better information, streamline and coordinate care, and structure surgical decision making so that providing the most efficient, most appropriate surgical care is actually the easiest thing for a surgeon to do.
SPEAKER HIGHLIGHTS (in order of appearance)

MICHAEL J. ZINNER, MD, FACS

Dr. Zinner said that when physicians, surgeons, and hospitals are better engaged in the important dialogue around improving surgical quality and patient outcomes, they are better positioned to help drive programs that deliver better value and ultimately have a better understanding of appropriate care.

ANDREW L. WARSHAW, MD, FACS

Dr. Warshaw stated there is no need to recreate the wheel on quality improvement. ACS’ four guiding principles of continuous quality improvement are the path to get there by setting the standards; building the right infrastructure; using robust data; and verifying processes and infrastructure.

STUART ALTMAN, PHD, MA, BBA

Dr. Altman said hospitals, surgeons, and the various groups of physicians are not on the same page all of the time. And what’s worse, he noted, is they’re not talking to each other when it comes to prehospital, hospital, and posthospital care. That situation needs to change. Improving quality and reducing preventable complications are part of the solution to the vexing problem of controlling costs in an equitable, humane, and efficient way. In the past, physicians and surgeons were not included in discussions on how to fix the American health care system because they were mistakenly considered part of the problem. They need to be part of the solution because surgeons and other physicians “are American health care” and on the right track with their focus on quality improvement as one viable means to address the cost issue.

MATTHEW HUTTER, MD, MPH, FACS

Dr. Hutter said high-quality data through programs such as ACS NSQIP—data that surgeons trust—is the key to improving care at hospitals. High-quality data can focus on the things surgeons might not even think are important, but are. Administrative data aren’t sufficient for drilling down to identify the cause of complications in order to prevent them from happening again. Clinically rich data—from a patient’s medical chart—benchmarked with other hospitals’ across the nation, are what physicians, surgeons, and hospitals need to drive change.

For example, Dr. Hutter highlighted a collaborative effort among five Partners HealthCare hospitals that used ACS NSQIP data to improve “as-expected” outcomes in key areas and dramatically reduced colorectal complications—by nearly 50 percent at Massachusetts General Hospital alone—over one year.

SAMUEL FINLAYSON, MD, MPH, FACS

When economic realities dictate that spending be capped and the population demands physicians do a better job of maintaining health, Dr. Finlayson said the only solution is to increase the value of care provided. When patients have complications, they use capacity and resources. In third-world countries it’s easy to see that there is a ceiling on costs—they can’t afford to go much higher. Yet in the U.S., the system acts as if there is no ceiling, but there is. When there are limited resources, the only way to expand is to get more benefit out of your dollar, which is what improving quality is all about.
Dr. Gawande said the hospitals that are better at quality improvement are not always the most expensive. What that observation leads to is trying to recognize what those institutions are doing differently and what innovations allow them to be better. More often than not, it is simple things like a checklist. What ACS did to standardize trauma care nationally, ensuring that trauma care received in one area of the U.S. is the same as another area, is now being attempted to bring quality care to other populations.

An example Dr. Gawande provided is the Safe Surgery 2015 initiative he is pioneering with the South Carolina Hospital Association. This initiative ensures a modified version of the World Health Organization (WHO) Surgical Safety Checklist will be used in every operating room in South Carolina by the end of 2015. Since June 2011, the initiative has succeeded in bringing checklists to 60 percent of the population and is on track to get to 90 percent in order to determine whether infections and deaths have dropped on a population level. That's an aspect of what's to come: being able to change entire results at a statewide level and being able to incorporate measures and ensure quality is improving and costs are on the decline.


**PARTICIPANTS**

**HOSTS:** Andrew L. Warshaw, MD, FACS: W. Gerald Austen Distinguished Professor of Surgery, Harvard Medical School; surgeon-in-chief, emeritus, Massachusetts General Hospital; Chair, ACS Health Policy and Advocacy Group, ACS Treasurer • Michael J. Zinner, MD, FACS: Moseley Professor of Surgery, Harvard Medical School; clinical director, Dana Farber/Brigham and Women's Cancer Center; surgeon-in-chief, Brigham and Women's Hospital; Member, Board of Regents, American College of Surgeons **KEYNOTE SPEAKER:** Stuart Altman, PhD, MA, BBA: economist and health policy expert; The Sol C. Chaikin Professor of National Health Policy at The Heller School for Social Policy and Management, Brandeis University **PANELISTS:** Samuel Finlayson, MD, MPH, FACS: Kessler Director, Center for Surgery and Public Health, Brigham and Women's Hospital • Atul Gawande, MD, MPH, FACS: associate professor of surgery, Harvard Medical School; associate professor, department of health policy and management, Harvard School of Public Health; research director, BWH Center for Surgery and Public Health; lead advisor, World Health Organization’s Safe Surgery Saves Lives program • Matthew Hutter, MD, MPH, FACS: Director of the Codman Center for Clinical Effectiveness in Surgery, associate visiting surgeon, Massachusetts General Hospital; assistant professor of surgery, Harvard Medical School • Peter Slavin, MD: president, Massachusetts General Hospital

**PETER SLAVIN, MD**

Economic pressures facing this country are forcing health care leaders to act with a great sense of urgency and purpose, said Dr. Slavin. Within this climate, he pointed to three key institutional fundamentals that can be established in hospitals across the country for continuous quality improvement to thrive: leadership, infrastructure, and incentives. Institutions can drive quality by implementing programs and protocol, but it's up to the collaboration among all team members, from hospital administrators to clinicians, and their willingness to strive for culture change and progress that will make quality improvement “real.” You can have very motivated physicians but unless they have access to quality improvement tools, the goodwill isn't going to go very far. It's up to institutional leaders to make sure they have the tools in place to succeed.
TENNESSEE

The power of collaboration can improve surgical outcomes across a state

THE CHATTANOOGAN HOTEL

The American College of Surgeons (ACS) Surgical Health Care Quality Forum Tennessee was unique because it was held in conjunction with the ACS Tennessee Chapter’s annual meeting. As a result, it brought together a diverse group of key health care and surgical leaders and highlighted the successes of the statewide Tennessee Surgical Quality Collaborative (TSQC), a partnership launched in 2008 among Tennessee surgeons, hospitals, and health plans.
Collaboratives are effective.

Models like TSQC that use programs such as the ACS National Surgical Quality Improvement Program® (ACS NSQIP®) in partnership with the Tennessee Hospital Association (THA) and BlueCross BlueShield of Tennessee (BCBS), have the necessary infrastructure and vehicles to affect widespread and sustainable improvement. TSQC has shown significant advancements in patient outcomes and millions in cost savings, leading to its expansion to 21 hospitals across the state (at the time of the forum).

All health care is local.

The state of Tennessee has a population that is “sicker” than the national average. Data show Tennessee patients have a higher prevalence of chronic disease and trauma, which impacts outcomes. While hospitals and clinicians are adept in treating these patients, it’s critical that their performance measurement activities account for these population disparities. If data are risk-adjusted, as they are through ACS NSQIP, the data will give hospitals a more accurate picture of how they are performing and help them better identify critical areas for improvement.

Autonomy within individual institutions drives success.

Before hospitals can work effectively together with other organizations in larger collaboratives like TSQC, it’s imperative that administrators, clinical teams, and quality leaders within an institution are autonomous with one another and align their own quality improvement goals and priorities. For example, Will Gibson, MD, FACS, a general surgeon with Premier Surgical Associates and Parkwest Hospital, highlighted the need for clinical teams and administrators to more constructively share knowledge, tools, and resources. David Archer, CEO, Saint Francis Healthcare, emphasized that all sectors of an institution need to be engaged in a quality program so they don’t lose momentum beyond the surgical team.

PARTICIPANTS

HOST: Joseph B. Cofer, MD, FACS: professor and residency program director, department of surgery, University of Tennessee College of Medicine – Chattanooga; Vice-President, ACS Tennessee Chapter KEYNOTE SPEAKER: Tennessee State Sen. Bo Watson, PT (R-Hixson): Tennessee Senate Speaker Pro-Tempore; director, rehabilitation and sports medicine, Parkridge Medical Center PANELISTS: David Archer, MBA, MPH: CEO, Saint Francis Healthcare • Chris Clarke, RN, BSN: senior vice-president, Tennessee Hospital Association • Will Gibson, MD, FACS: surgeon, Premier Surgical Associates • Vicky Gregg: CEO, BlueCross BlueShield of Tennessee • Oscar Guillamondegui, MD, MPH, FACS: associate professor of surgery, Vanderbilt University Medical Center; President-Elect ACS Tennessee Chapter • Clifford Y. Ko, MD, MS, MSHS, FACS: Director, ACS Division of Research and Optimal Patient Care
JOSEPH B. COFER, MD, FACS

Dr. Cofer’s opening presentation highlighted the significance of TSQC—the first collaborative using ACS NSQIP to form a true three-way quality improvement relationship with hospitals, health plans, and surgeons, serving as a model for other states across the nation. Early TSQC results for the 10 participating hospitals showed 25 percent fewer surgical patients experiencing kidney failure, an 18 percent decrease in infections, and 15 percent fewer patients experiencing the need to be on a ventilator for a prolonged period of time. Likewise, 60 percent fewer graft failures and 34 percent fewer wound disruptions meant a significant reduction in patients who had to undergo follow-up surgical procedures. The collaborative also showed an estimated savings of $2.2 million per 10,000 general and vascular surgery cases, or approximately $8 million overall. The success of ACS NSQIP and the TSQC in the state has led to an increased number of Tennessee hospitals participating—a total of 21 since 2012—and it received a $3.9 million grant from the BlueCross BlueShield of Tennessee Health Foundation to fund the program through 2014.

STATE SEN. BO WATSON, PT (R-HIXSON)

Sen. Watson reinforced the fact that “we are living in a quality era.” Clinicians and hospitals are being bombarded with information and data, but how do clinicians and policymakers know what data are useful and how can it be turned into actionable knowledge? The state of Tennessee has used outcomes measures for years and bases its entire budget for state agencies on how they are performing against set standards (for example, the Departments of Health, Correction, and so on). While standardization has become the mantra, health care is different—it is part art. No two patients are the same, no two state populations are the same—it’s very difficult to design a system with the scalability to encompass everything. While clinicians, hospitals, and governments can develop excellent process and models, Senator Watson pointed out that they should all be mindful of what one famous economist once said: “All models are wrong, some models are helpful.” He believes that surgeons and ACS NSQIP can help establish a health care system with the level of quality patients expect.

Senator Watson closed with a call to action, saying it’s critically important that surgeons and clinicians be part of health care discussions in Congress. He urged surgeons and hospitals to embrace quality programs like ACS NSQIP and engage themselves in national discussions to ensure that we not only maintain quality, but are also continuously working to improve in the right way.

CLIFFORD Y. KO, MD, MS, MSHS, FACS

Dr. Ko elaborated on some key observations based on the College’s experience and perspective on quality improvement in the context of health reform on a national level. Namely, quality and safety have always been a national priority, but amidst a rapidly changing health care system it is top of mind for everyone now more than ever. For example, the Centers for Medicare & Medicaid Services (CMS) are mandating hospitals to participate in general surgery registries based on clinical outcomes data. Programs like ACS NSQIP and the Society of Thoracic Surgeons (STS) National Database fulfill this requirement.

Quality measures are only effective if what we are measuring is valid and reliable, and we depend on folks like you [surgeons] to help us determine that.
CHRIS CLARKE, RN, BSN

Ms. Clarke gave some background on the TSQC from her perspective as a leader within the THA, which considers quality and patient safety as pillars of its work and mission. In 2007, THA created the Tennessee Center for Patient Safety, which provides education, resources, and other tools to assist hospitals in accelerating their performance on quality and patient safety initiatives. As a key partner of TSQC, THA utilizes its infrastructure as a neutral party to bring together hospital leadership and surgeons, and creates a “safe” place for discussion around data and opportunities for improvement—after all, “data are just data until someone acts on them.”

VICKY GREGG

Ms. Gregg debunked the myth that organizations like BCBS simply pay claims; she said that couldn’t be further from the truth for her health plan today. BCBS’s mission is much broader: improving the health of the populations it serves, improving quality of life, and ensuring access to affordable, quality health care. She said TSQC was a natural fit for BCBS, particularly to help advance its goal of preventing patient infections. Ms. Gregg acknowledged that quality improvement was in its infancy 30 years ago when she was in nursing, but even then, one of the early lessons for her was the power of data and information to change how clinicians practice and take care of patients. People who were involved trusted the data—otherwise they wouldn’t change. She emphasized that that is the power of a program like ACS NSQIP.

WILL GIBSON, MD, FACS

Dr. Gibson, a community hospital surgeon and original participant in ACS NSQIP and the TSQC since 2008, offered two observations when it comes to executing effective quality improvement. One of the key driving forces behind change is transparency of individual surgeon data—even though it can be inflammatory and alarming by nature. Today, clinicians are being measured on “outside” data about their outcomes that they may or may not trust. ACS NSQIP, at its foundation, is managed and owned by surgeons. Surgeons are inherently competitive and instinctively want to do better for their patients; if they have data they trust, they will act on them to achieve better outcomes. He added that as hospitals face more scrutiny and pressure from outside sources to improve outcomes and cut costs, clinicians and administrators have certain knowledge, tools, skills, and resources that can benefit each other, so working together will be a key success factor moving forward. He believes that ACS NSQIP is an important tool in achieving that success.

OSCAR GUILLAMONDEGUI, MD, MPH, FACS

As an academician, Dr. Guillamondegui observed that TSQC has opened up incredible opportunities for collaboration and knowledge-sharing between community and academic hospitals. He added that the best thing about using ACS NSQIP is that the data are not biased and affords “global” change. It brings to light not only how surgeons are doing, but represents the performance of the entire clinical team. He said this systemic approach to quality improvement is what health care leaders should be striving for, not just in surgery, but for medicine as a whole.

DAVID ARCHER, MBA, MPH

Mr. Archer offered some candid challenges and lessons his organization, Saint Francis Healthcare, has faced implementing ACS NSQIP over the last several years. He said perhaps one of the most significant hurdles has been inconsistency in leadership. He acknowledged that programs like ACS NSQIP need to be surgeon-driven—deciding what to focus on, how to improve, and then measuring and achieving. Mr. Archer also acknowledged that to be successful, ACS NSQIP requires buy-in and integration in all areas of an organization, including administration, clinical teams, and quality leadership. If ACS NSQIP data and outcomes information are confined to surgeons, the program will lose momentum and priority among larger hospital quality systems and improvement initiatives.

Innovation, education, and data are drivers of quality improvement

THE HEALTH MUSEUM, TEXAS MEDICAL CENTER

Each speaker at the American College of Surgeons (ACS) Surgical Health Care Quality Forum Houston touched on the concept of thinking differently to improve the quality of surgical care and patient safety—whether through innovation, ongoing education and training, or by following data wherever they lead the research effort. An audience of 80 health care leaders heard first-person accounts of different approaches to quality improvement. ACS innovations were on display, with presentations on new or updated ACS programs, including the Surgeon-Specific Registry, the ACS National Surgical Quality Improvement Program® (ACS NSQIP®), Pancreatectomy Demonstration Project, and ACS NSQIP Pediatric (ACS NSQIP Peds®).
I commend the American College of Surgeons as well as the Texas Medical Center for their leadership and proactively taking steps to improve quality for patients throughout Texas. It is crucial that we are partners together and that policymakers have more give-and-take with physicians in order to understand how best to improve.

**Cross-discipline dialogue and information sharing create enhanced understanding.**

Kenneth L. Mattox, MD, FACS, Baylor College of Medicine, echoed a call by U.S. Rep. Sheila Jackson Lee (D-TX) earlier in the session for surgeons to let Congress know how the Affordable Care Act (ACA) affects their practices. He said regulatory agencies need to know about evolving best practices and the effect of regulations on surgical patients. For example, hospitals use an antibiotic required in the operating room by the Centers for Medicare & Medicaid Services (CMS) to get paid, and a second antibiotic to treat the bacteria that actually causes the infection. Richard E. Wainerdi, PE, PhD, Texas Medical Center, described his system’s recent efforts to spur collaboration among students in different health care disciplines. Several speakers emphasized they have multidisciplinary quality teams in their hospitals.

**Innovation in education is happening.**

Forum co-host Barbara Lee Bass, MD, FACS, Methodist Institute for Technology, Innovation and Education (MITIE™), gave a presentation on the innovative opportunities for surgical education at MITIE, while Dr. Wainerdi described the Texas Medical Center’s new approaches in education—encouraging students in different disciplines to talk to one another and changing the way anatomy is taught. Instead of studying cadavers, students will study at autopsy tables to better see how parts of the body are anatomically connected.

**Reliable data are the cornerstone of successful culture change, and surgeons must drive it.**

Thomas A. Aloia, MD, FACS, MD Anderson Cancer Center, said quality assessment data that both providers and administrators trust helped create culture change at his institution. Taylor S. Riall, MD, PhD, FACS, University of Texas Medical Branch, used comparative effectiveness research with ACS NSQIP data to help her hospital dramatically reduce readmissions for gallbladder disease. Without understanding the provider culture, an institution will not create lasting behavioral change. Likewise, engaged providers without institutional support are unlikely to succeed.

**U.S. Rep. Sheila Jackson Lee (D-TX)**

I commend the American College of Surgeons as well as the Texas Medical Center for their leadership and proactively taking steps to improve quality for patients throughout Texas. It is crucial that we are partners together and that policymakers have more give-and-take with physicians in order to understand how best to improve.
SPEAKER HIGHLIGHTS (in order of appearance)

H. RANDOLPH BAILEY, MD, FACS
Dr. Bailey said that as the world’s largest hub of medical innovation and education, the Texas Medical Center is an ideal venue for a national discussion on the role of surgeons in ensuring the highest quality care.

BARBARA LEE BASS, MD, FACS
Dr. Bass said it is essential to high-quality surgical care that surgeons stay current with best practices, techniques, and technology over the course of their careers, which can last for 40 years or more. She talked about how MITIE (www.mitietexas.com), is a state-of-the-art educational resource and training facility for health care professionals who wish to maintain excellent clinical skills, and is part of a national ACS network of Accredited Education Institutes®.

M. MICHAEL SHABOT, MD, FACS, FCCM, FACMI
Dr. Shabot described Memorial Hermann Hospital’s quest in 2006 to become a high-reliability organization that prevents avoidable harm—with a track record comparable to commercial aviation. He said that Memorial Hermann participates in all ACS data registries and that its incidence of hospital-acquired conditions and other patient safety indicators are now consistently near zero. In his experience, surgeons respond most immediately to their own data, especially against a reference to national data. For surgeons who work in hospitals that don’t use ACS NSQIP, the College offers the Surgeon-Specific Registry, a data repository into which individual surgeons can enter their cases for private comparative performance reports. This registry already contains 3.5 million case records.

THOMAS A. ALOIA, MD, FACS
Dr. Aloia led the effort to implement ACS NSQIP at MD Anderson two years ago. Initially, he said the faculty was reluctant to trust the outcomes data, given the hospital’s unique case mix and patient population. “The initial pushback was great,” he said. “But through education about the ACS NSQIP methodology and repetitive, transparent internal reporting of our data, both providers and the administration are coming to rely on the data to the point that it is now being used to prioritize our quality improvement efforts.”

KENNETH L. MATTOX, MD, FACS
Dr. Mattox said “physicians, surgeons, and nurses need to be the major overriding voice in their institution when quality improvement protocol is being established.” He said surgeons should guard against any efforts by administrators or regulators to use quality data for punitive or disciplinary measures. As soon as this type of punitive action surfaced in the airline industry, people stopped reporting the data, he explained.

RICHARD E. WAINERDI, PE, PHD
Dr. Wainerdi said continuous quality improvement in surgical tools will be increasingly important as surgeons incorporate technology, such as robotics. The engineering profession has done a lot of relevant work on keeping equipment operating reliably, for example, in space travel and atomic energy.
TAYLOR S. RIALL, MD, PHD, FACS

Dr. Riall described an effort that she initiated at her hospital to use comparative effectiveness research as a tool for quality improvement (see the Case Studies section for detail). Recently she joined an ACS demonstration project that used ACS NSQIP data to study variability in the treatment of pancreatic surgery. Both clinical and statistical understanding is needed to guide research questions and translate findings into better quality surgical outcomes.

KEVIN P. LALLY, MD, MS, FACS

Dr. Lally discussed the College’s partnership with the American Pediatric Surgical Association to develop rigorous pediatric outcomes measures for ACS NSQIP Peds. Data from 36,000 hospital discharges were evaluated. Risk adjustment for ACS NSQIP Peds will take into account the differences that were noted between pediatric and adult surgical patients.

PARTICIPANTS

HOSTS: H. Randolph Bailey, MD, FACS: chief of the division of colon and rectal surgery, deputy chief of the department of surgery, The Methodist Hospital; professor of surgery, Weill Cornell Medical College, The University of Texas Health Science Center; Member, Board of Regents, American College of Surgeons  •  Barbara Lee Bass, MD, FACS: John F. and Carolyn Bookout Distinguished Endowed Chair of Surgery, The Methodist Hospital; director, Methodist Institute for Technology, Innovation and Education (MITIE™); professor of surgery, Weill Cornell Medical College; Former Member, Board of Regents, American College of Surgeons  KEYNOTE SPEAKER: U.S. Rep. Sheila Jackson Lee (D-TX) PANELISTS: Thomas A. Aloia, MD, FACS: assistant professor of surgical oncology, program director, AHPBA Hepato-Pancreatico-Biliary Surgery Fellowship, University of Texas MD Anderson Cancer Center  •  Kevin P. Lally, MD, MS, FACS: A.G. McNeese Chair in Pediatric Surgery, Richard Andrassy Distinguished Professor, professor and chairman, department of pediatric surgery, University of Texas Health Science Center at Houston; surgeon-in-chief, Children’s Memorial Hermann Hospital  •  Kenneth L. Mattox, MD, FACS: Distinguished Service Professor, Michael E. DeBakey Department of Surgery, Baylor College of Medicine; chief of staff/chief of surgery, Ben Taub General Hospital  •  Taylor S. Riall, MD, PhD, FACS: John Sealy Distinguished Chair in Clinical Research, director, Center for Comparative Effectiveness and Cancer Outcomes, associate professor, department of surgery, University of Texas Medical Branch  •  M. Michael Shabot, MD, FACS, FCCM, FACMI: system chief medical officer, Memorial Hermann Healthcare System  •  Richard E. Wainerdi, PE, PhD: president and chief executive officer, Texas Medical Center
Physician-driven quality improvement makes the greatest impact

THE COLLEGE OF PHYSICIANS OF PHILADELPHIA

The American College of Surgeons (ACS) Surgical Health Care Quality Forum Philadelphia was held at the College of Physicians of Philadelphia—otherwise known as the “birthplace of American medicine.” This storied institution was established by Benjamin Rush in 1787 to improve dialogue between the medical profession and the public as a way to improve the overall health of the population, making it a fitting venue for the forum’s predominant discussion of “physician-led quality improvement.”
Quality and efficiency are at their finest when efforts are led by physicians.

Beginning with renowned surgeon Ernest A. Codman, MD, FACS, surgeons have been interested in improving quality long before other professions were similarly focused. The importance of surgeon leadership in this area remains relevant today because it’s at the core of the profession and because administrative guidelines cannot single-handedly improve surgical care. Quality improvement begins at the bedside.

The “right” data and benchmarking are paramount to quality improvement.

The continuous feedback of risk-adjusted data, along with national benchmarking are essential to surgeons for improving their outcomes as well as for setting the quality improvement agenda at the hospital administrative level. Data measurement in surgery is especially appropriate because there is a starting point and endpoint, which enables surgeons and hospitals as a whole to accurately “keep score” and compare their outcomes with a national standard.

You [surgeons] bring a credibility and knowledge that legislators don’t have, and I would encourage you to advocate for these changes we need to have and the programs you want to save because they work.
SPEAKER HIGHLIGHTS (in order of appearance)

HOWARD M. SNYDER III, MD, FACS

Dr. Snyder urged physicians to be involved in health care reform and guide the quality improvement process, noting administrative guidelines alone cannot account for the improvements in quality and efficiency that need to happen.

MARSHALL Z. SCHWARTZ, MD, FACS

Dr. Schwartz introduced the role of ACS in improving health care quality, noting surgeons have been focused on improving quality since the College’s inception. He emphasized the importance of four ACS guiding principles of continuous quality improvement—setting the standards, implementing the right infrastructure, collecting and using rigorous data, and verifying process.

U.S. REP. JIM GERLACH (R-PA)

Congressman Gerlach emphasized that reducing improper spending in our health care system—particularly fraudulent spending—is key to saving taxpayer dollars, saving government health programs, and sufficiently reimbursing health care practitioners. He went on to encourage surgeons and health care providers to use their credibility and experience with legislators to advocate for needed changes in the health care system and champion the existing programs they want saved because these measures work.

JOHN S. KUKORA, MD, FACS, FACE

Dr. Kukora touched on his years of experience with the ACS National Surgical Quality Improvement Program® (ACS NSQIP®), noting it has been a useful tool in “setting the agenda for change.” Dr. Kukora said he had been asked by his hospital’s peer-review committee to lower his department’s surgical wound infection rates, but upon investigating his six-month ACS NSQIP report, he saw his hospital already had one of the lowest wound infection rates in the country. Instead, the ACS NSQIP report flagged a critical care staffing issue, which gave him the evidence needed to support improvement in that area over another. He also addressed his hospital’s current beta test using ACS NSQIP to benchmark surgical residents’ performances, driven by the Accreditation Council for Graduate Medical Education’s (ACGME) expectations that trainees use their own outcomes to drive learning plans and improve.

LARRY R. KAISER, MD, FACS

Dr. Kaiser focused on quality improvement from his perspective as a cardiothoracic surgeon. He emphasized the depth and breadth of the Society of Thoracic Surgeons (STS) National Database, which has been in use for more than 20 years with data entered for more than one million patients. He also highlighted the success of a cardiac surgeon collaborative called The Northern New England Cardiovascular Disease Study Group, which was established in 1987. Upon reviewing its hospitals’ mortality rates in 1991, the group instituted a three-part intervention that involved continuous data feedback, quality improvement training for leaders and members of the consortium, and multidisciplinary site visits. The result was a 24 percent regional reduction in adjusted mortality with each center showing significant improvement.

Many of us in organized medicine realize we’re 20 years late in getting started to reform U.S. health care because physicians have to be involved. It’s questionable whether you can achieve quality and efficiency on administrative guidelines alone; it takes physician guidance.

—Howard M. Snyder III, MD, FACS
As a system CEO and surgeon, Dr. Steele discussed the two predicates behind everything Geisinger Health System has done related to surgery. The first is accepting that at least 30–40 percent of current costs are unrelated to improved patient care. To address this association, health care professionals must extract the health care costs that don’t benefit patients and redeploy that value to those that are buying care—the physicians providing the care and insurance companies. He admits redesigning care is not easy and that’s why administrators and surgeon leaders must rely on clinical registry participation that yields continuous feedback. The second predicate is that high costs and poor outcomes overlap. Therefore if you reengineer care, you are improving outcomes and attacking costs at the same time. Dr. Steele said surgery is an optimal area to reengineer care because there is a starting point and an endpoint—that we’re progressing with national, transparent metrics that can be fed back, and that’s very important.

—Glenn D. Steele, Jr., MD, PhD, FACS

Dr. Pauly shared why his experience as a health services researcher and economist has influenced his skepticism of true continuous quality improvement. While Dr. Pauly was impressed by ACS NSQIP’s progress, he urged ACS to consider comparing those using the program against a control group of hospitals that don’t. Additionally, he noted that an interesting research study would involve looking at characteristics of hospitals that volunteer to be part of quality improvement efforts such as ACS NSQIP compared with hospitals that do not seek the opportunity, because it may provide additional insight into other factors that impact the likelihood of success (for example, hospital culture).

If we reengineer care, we’re improving outcomes and attacking cost at the same time. Surgery is particularly appropriate to start with because there’s a starting point and an endpoint—we’re progressing with national, transparent metrics that can be fed back, and that’s very important.

—Glenn D. Steele, Jr., MD, PhD, FACS


PARTICIPANTS

HOSTS: Marshall Z. Schwartz, MD, FACS: professor of surgery and pediatrics, Drexel University College of Medicine; surgeon-in-chief, chief, pediatric surgery, St. Christopher’s Hospital for Children; Member, ACS Board of Regents • Howard M. Snyder III, MD, FACS: attending urologist, Children’s Hospital of Philadelphia; professor of urology in surgery, University of Pennsylvania School of Medicine; Member, ACS Board of Regents KEYNOTE SPEAKER: U.S. Rep. Jim Gerlach (R-PA) PANELISTS: Larry R. Kaiser, MD, FACS: senior executive vice-president for health sciences, dean, Temple University School of Medicine; president and chief executive officer, Temple University Health System • John S. Kukora, MD, FACS, FACE: chairman, department of surgery, program director, general surgery residency program, Abington Memorial Hospital • Mark V. Pauly, PhD: Bendheim Professor, professor of health care management, professor of business economics and public policy, The Wharton School, University of Pennsylvania • Glenn D. Steele, Jr., MD, PhD, FACS: president and chief executive officer, Geisinger Health System
Multiple stakeholders examine the challenges and benefits of data-driven health care initiatives

The American College of Surgeons (ACS) Surgical Health Care Quality Forum New York offered a look at the future of data-driven health care from multiple perspectives, including medical education, hospital administration, state regulation, and the surgical profession. Four chairs of surgery at local hospitals provided additional insight into the challenges and successes they face with improving surgical quality in their own institutions. Forum host Fabrizio Michelassi, MD, FACS, summarized the overarching theme of the forum, saying, “Now more than ever we need to focus attention on quality of care, and for the first time we have tools to really measure our care and results.”
Teach quality improvement to students and residents.

Laurie Glimcher, MD, of Weill Cornell Medical College, advocated for teaching medical students about quality in the classroom and through experiential activities. Pierre Saldinger, MD, FACS, of New York Hospital Queens, spoke on the importance of including residents in hospital quality committees and giving them hands-on projects to build familiarity with quality concepts, such as using the ACS National Surgical Quality Improvement Program® (ACS NSQIP®) from the onset of their careers.

Show surgeons and surgical teams data about their individual performance.

Several speakers touched on the importance of sharing outcomes data with individual surgeons to call attention to below-average performance and help identify the reasons behind it. Steven Stain, MD, FACS, of Albany Medical College, gave a unique example about his hospital’s effective sharing of data with private practitioners who contributed to a higher than expected complication rate.

It can be tricky to sustain results achieved by quality improvement efforts over time.

Jeffrey Peters, MD, FACS, of the University of Rochester Medical Center, described an uptick in complications after five years of steady downward progress. Clifford Y. Ko, MD, MS, MSHS, FACS, with ACS, said that culture is key to maintaining behaviors that lead to improved outcomes. Dr. Saldinger said that in addition to culture, hospital leadership must stay committed to quality improvement and keeping the infrastructure alive.
**SPEAKER HIGHLIGHTS** *(in order of appearance)*

**FABRIZIO MICHELASSI, MD, FACS**

Dr. Michelassi opened the forum by saying the focus of the day’s discussion would be on the data resources surgeons have available to focus on quality of care and quality of life for their patients. He added that the theme of “data” resonates in New York State, which pioneered public reporting 20 years ago with the New York State Cardiac Surgery Reporting System.¹

**DAVID B. HOYT, MD, FACS**

ACS Executive Director

Dr. Hoyt explained that ACS decided that its legacy should be based on its founding principle that the College was organized to improve the quality of care for surgical patients. This belief is embodied in its present-day commitment to render high-quality surgical care to patients. He added that external verification through peer review is unique to medicine.

**LAURIE H. GLIMCHER, MD**

Dr. Glimcher gave an overview of existing teaching methodologies and research on quality improvement and patient safety. At Weill Cornell, medical students study these topics during each year of medical school. She said education is tailored to the level of the student, with more advanced students working on clinical projects that have real-world impact. These projects empower students with the idea that they can effect meaningful change, she explained, and expose the next generation to robust information systems like ACS NSQIP.

**FOSTER C. GESTEN, MD, FACP**

From his perspective as a state official, Dr. Gesten spoke on the importance of reliable data and outcomes measures. Although a lot of variation exists in the methodologies used by registries, comparing patients in New York with patients in other states consistently shows the need for better quality care. For example, a recent study showed that medical malpractice costs New York hospitals an average of $4,080 per bed each year, the third highest cost in the country.² He emphasized the need to recognize that there are multiple stakeholders for quality measurement, including payers and patients. One day, he said he hopes electronic health records will make quality measurement and reporting easier and more affordable.

**STEVEN J. CORWIN, MD**

Dr. Corwin spoke on the transformation of the American health care delivery system. He said that unlike fee-for-service, today’s models of care place greater risk on the provider. He foresees greater emphasis on quality and patient satisfaction indicators in the future; and utilization reduction through care coordination that will require providers to go beyond the four walls of the hospital to prevent readmissions. Dr. Corwin told the audience to prepare for fewer variations in care and standardized care initiatives. “If we’ve gone from a period of individual excellence and individual innovation, we’re moving toward a more industrialized approach,” he said. Hospitals must align more tightly and collaborate with their physicians if they are to thrive in an environment in which they are paid less and are held accountable for outcomes.

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¹ For more information on the New York State Cardiac Surgery Reporting System, visit [this link](https://www.nysacsrs.com).  
² For the study mentioned, see [this article](https://www.nytimes.com/).
CLIFFORD Y. KO, MD, MS, MSHS, FACS

Dr. Ko discussed a recent study that ACS conducted with the Centers for Medicare & Medicaid Services (CMS), comparing ACS NSQIP data on more than 100,000 patients against claims data. One of the surprising findings was that claims data showed a high percentage of false positives for complications (for example, 81 percent of urinary tract infections recorded were false). Similarly, correlation when ranking hospitals based on clinical versus claims data was poor, underscoring how important it is to know the source of one’s data when making decisions. ACS NSQIP offers hospitals many tools to apply their data, including caterpillar graphs that plot whether the hospital’s outcomes are excellent, in need of improvement, or as expected; risk calculators; and guidelines on common topics.

ALFONS POMP, MD, FACS, FRCSC

Dr. Pomp said NewYork-Presbyterian uses two databases: electronic medical records are the data source for an internal hospital database, and ACS NSQIP is used to validate its in-house data collection. The most recent ACS NSQIP report showed higher-than-average rates for some complications. He recounted the process the hospital used to reduce the rates of surgical site infections and urinary tract infections (see Case Studies section for detail).

PARTICIPANTS

HOST: Fabrizio Michelassi, MD, FACS: Lewis Atterbury Stimson Professor and chair, department of surgery, surgeon-in-chief, NewYork-Presbyterian/Weill Cornell Medical Center PRESENTERS: Steven J. Corwin, MD: chief executive officer, NewYork-Presbyterian Hospital • Foster C. Gesten, MD, FACP: medical director, Office of Quality & Patient Safety, New York State Department of Health • Laurie H. Glimcher, MD: Stephen and Suzanne Weiss Dean, Weill Cornell Medical College; provost of medical affairs, Cornell University • David B. Hoyt, MD, FACS: Executive Director, American College of Surgeons • Clifford Y. Ko, MD, MS, MSHS, FACS: Director, ACS Division of Research and Optimal Patient Care • Alfons Pomp, MD, FACS, FRCSC: Leon C. Hirsch Professor, vice-chairman, department of surgery, chief, section of laparoscopic and bariatric surgery, NewYork-Presbyterian/Weill Cornell Medical Center PANELISTS: H. Leon Pachter, MD, FACS: George D. Stewart Professor and chair, department of surgery, New York University (NYU) School of Medicine • Jeffrey H. Peters, MD, FACS: professor of surgery, chair, department of surgery, University of Rochester Medical Center • Pierre F. Saldinger, MD, FACS: chairman, department of surgery, surgeon-in-chief, New York Hospital Queens • Steven C. Stain, MD, FACS: Henry and Sally Schaffer Chair, department of surgery, Albany Medical Center; professor and chair, department of surgery, Albany Medical College
H. LEON PACTER, MD, FACS

Dr. Pachter discussed the management dashboard used at NYU Langone Medical Center. This tool collects verified data on variables such as mortality, 30-day readmissions, and length of stay, allowing the hospital to parse outcomes by patient, division, and individual surgeon. It offers a basis for accountability and transparency, and tracks trends. Dr. Pachter explained that, “Once surgeons know someone is looking at them and asking what’s going on here, and you have to give a cogent explanation, believe me, they change their attitudes.” As hospital performance on dashboard metrics improves, higher targets are set. Dr. Pachter gave examples from his experience on the importance of looking for explanations in data variation: physicians may game the system to improve performance, for example, by cherry picking the patients they treat; there may be coding problems; or a unique patient situation may warrant an extended hospital stay.

JEFFREY H. PETERS, MD, FACS

Dr. Peters said the University of Rochester Medical Center has used ACS NSQIP since 2006. He showed longitudinal data on mortality rates for the flagship hospital and a smaller hospital in the system. The flagship hospital provided each individual surgeon with feedback on their outcomes and within a year, mortality rates began to drop and fell consistently over five years. Meanwhile, in the second hospital, no information about individual surgeon performance trickled down to the surgeons and rates did not fall. Dr. Peters said feedback was an important factor in improving performance. However, he also said that after five years, mortality rates began to rise again at the flagship hospital across all surgical specialties. Did this increase arise from complacency or another reason? He challenged the ACS NSQIP community to study this phenomenon to help hospitals address it effectively.

We are talking about changing the culture where we go from individual performance to a team sport. The operating room should not be a place for displays of individuality because medicine is no longer an art. We have to come to terms with that. It’s a science.
PIERRE F. SALDINGER, MD, FACS

Reflecting on his seven-year “love affair” with ACS NSQIP, Dr. Saldinger advised surgeons to be proactive in their use of this powerful tool. He said confronting underperforming surgeons constructively with high-quality data motivates behavior change, and more broadly, the data enable multidisciplinary surgical teams to achieve continuous quality improvement. He recommended that hospitals not wait for their risk-adjusted biannual report to act; rather, they should review quarterly reports, even though they’re not risk-adjusted, to identify and analyze any potential problem areas case by case. He said residents must be included in performance improvement initiatives. Finally, Dr. Saldinger mentioned the Connecticut Surgical Quality Collaborative as an example for hospitals to learn from their competitors and establish trust in pursuit of better patient care. He noted that nurses and anesthesiologists are important members of the surgical performance improvement team and should be included in communication of the data. When ACS NSQIP findings are applied broadly, a hospital gains greater benefit.

STEVEN C. STAIN, MD, FACS

Dr. Stain described how ACS NSQIP flagged a high rate of myocardial infarctions after vascular surgery at Albany Medical Center. The hospital analyzed the problem and developed an action plan (see Case Studies section for detail). Changing existing practices was complicated by the fact that vascular surgeons and cardiologists in this instance were academically affiliated and not hospital employees, but they paid attention to the data, and three years later the hospital is no longer an outlier. Dr. Stain said that although each year there is a budget battle for hospital resources, he has been able to prove the value of ACS NSQIP to hospital administration, and has persuaded administration to add additional specialties.

GEORGIA

Prevention and partnerships are key ingredients for transforming the health care system

AMERICAN CANCER SOCIETY

The American College of Surgeons (ACS) Surgical Health Care Quality Forum Georgia was held at the American Cancer Society headquarters in Atlanta—a suitable location given both organizations were founded 100 years ago to advance patient care. A series of presenters and panelists across the spectrum provided robust perspective on the state of health care in the U.S., and how hospitals, surgeons, and other stakeholders can work together to achieve better outcomes and ultimately transform the health care delivery system.
We don’t need to reinvent the wheel when it comes to achieving effective quality improvement.

Some of the Georgia presenters pointed to proven quality improvement models and programs that can be more effective if implemented on a larger scale. From a public health perspective, Kenneth E. Thorpe, PhD, from Emory University, discussed the example of how lifestyle modification programs for overweight adults are shown to drastically decrease the risk of developing diabetes. On the hospital side, Bryant W. Wilson, MD, FACS, of Piedmont Healthcare, discussed how his institution is addressing quality improvement at the unit level, using all of the following: the Lean Six Sigma methodology to improve efficiency and reduce waste; the tracer methodology designed to maintain compliance with The Joint Commission; and a Comprehensive Unit-Based Safety Program (CUSP). The ACS National Surgical Quality Improvement Program® (ACS NSQIP®) was also discussed as a program being used to help more than 500 hospitals across the country achieve better surgical outcomes and reduce costs.

Cross-industry and cross-hospital partnerships centered around shared goals can accelerate change.

Several forum presenters demonstrated how collaboration and partnerships are successful drivers of meaningful change and improvement. For example, ACS is partnering with The Joint Commission and the Centers for Disease Control and Prevention (CDC) on important projects to measure and improve outcomes in key areas, including reducing surgical site infection (SSI) rates. The forum hosts announced the recent creation of the Georgia Surgical Quality Collaborative (GaSQC), a partnership of 14 hospitals (as of December 2012) that will begin sharing data and best practices to improve surgical care across the state. Alexandra Leopold with BlueCross BlueShield of Georgia, also added that her organization is focused on partnering more with hospitals because they share a goal of helping patients and members stay healthy.
SPEAKER HIGHLIGHTS (in order of appearance)

LAMAR MCGINNIS, MD, FACS
Dr. McGinnis highlighted the significance of holding this ACS forum at the American Cancer Society—both organizations emerged from a similar nucleus of collecting data, setting standards, and leading research initiatives, and each organization commemorated its 100th anniversary beginning in 2012.

KENNETH E. THORPE, PHD
As a leading health care policy and public health expert, Dr. Thorpe talked about how chronic disease and preventable conditions, like obesity, affect the health care system and elevate costs. Most health care delivery costs are linked to chronically ill patients—84 percent nationally and 98 percent in the Medicare system alone. The good news is that evidence-based methods can improve quality and reduce costs. For example, Dr. Thorpe highlighted the Diabetes Prevention Program, a major multi-center initiative that developed a lifestyle modification program for overweight adults at risk for developing Type 2 diabetes. This intervention reduced the risk of developing diabetes by 58 percent across gender and ethnic groups. He emphasized that these types of programs, if integrated into Medicare, health plans, and workplace wellness initiatives with employers, would make a significant difference in transforming the health care system.

OTIS WEBB BRAWLEY, MD, FACP
Dr. Brawley spoke on the inefficiency in the American health care system. He highlighted the discrepancy in the amount that the U.S. spends on health care each year and the life expectancy rate compared with developed countries around the world. Some of the spending can be attributed to unnecessary treatments, including scans and other diagnostics, while other culprits are the result of the country’s “tsunami of chronic disease” caused by conditions such as obesity. He encouraged his colleagues to rally behind a coordinated effort to standardize care so that every American can get optimal care in a way that’s efficient.

DAVID B. HOYT, MD, FACS
ACS Executive Director Dr. Hoyt provided an overview of the College’s quality improvement programs and highlighted some of the key factors that distinguish ACS NSQIP from other data systems, namely the use of clinical risk-adjusted data and the ability to benchmark the data nationally. He explained the overwhelming trend seen since ACS NSQIP began reaching civilian hospitals in 2004: when physicians are provided with clinical data, and shown how that data is benchmarked against national averages, they will improve their outcomes.
ANA PUJOLS MCKEE, MD

Dr. McKee described the expansive reach of The Joint Commission and the successes The Joint Commission Center for Transforming Healthcare has had with organizations when using quality methods like Lean and Six Sigma to identify and define a hospital’s most pressing safety problems; measure the impact of the problem; develop specific solutions; and thoroughly test the solutions in real-life situations. She highlighted the success of a recent project, in collaboration with the College, using ACS NSQIP to decrease colorectal surgical site infections (SSIs) at seven participating hospitals (see Case Studies section). Superficial colorectal SSIs decreased by 45 percent, all types of colorectal SSIs by 32 percent, and the average length of hospital stay for patients with colorectal SSI dropped. Cost savings of more than $3.7 million were estimated for the 135 estimated colorectal SSIs that were avoided.3

RYAN FAGAN, MD, MPH

The CDC National Healthcare Safety Network (NHSN) is a web-based surveillance system in 5,000 U.S. acute care hospitals that report SSIs and other health care-associated infections. Dr. Fagan said that because both NHSN and ACS were working toward developing SSI measures, in 2010 both organizations were encouraged by the National Quality Foundation (NQF) and the Centers for Medicare & Medicaid Services (CMS) to partner and develop a prototype measure for surgical areas the programs had in common, colorectal procedures and hysterectomy. In January 2012, this measure was endorsed by NQF as a national outcome measure and was also included in the CMS Inpatient Prospective Payment System as part of the FY2012 final rule. ACS has also joined NHSN and other specialty societies on the Healthcare Infection Control Practices Advisory Committee, a federal advisory board that advises on improvements to SSI surveillance methodology and aligns NSQIP and NHSN definitions where possible.

JOHN F. SWEENEY, MD, FACS

As forum cohost, Dr. Sweeney summarized how the opening presentations provided valuable context and framed the timeliness of the program. He announced that Georgia is working to develop a surgical quality collaborative much like Tennessee and Florida, with nine hospitals already on board, and five additional hospitals slated to sign on in 2013.

BRYANT W. WILSON, MD, FACS

Dr. Wilson discussed how his hospital system, Piedmont Healthcare, is focused on improving outcomes at the unit level using the Lean and Six Sigma methodology to improve efficiency and reduce waste; the tracer methodology designed to maintain compliance with The Joint Commission; and a CUSP. Dr. Wilson said that by combining these efforts, Piedmont expects to achieve improved safety, compliance, quality, and efficiency, and it will be important to share that experience and knowledge with other hospitals across the state.

The cost of care per person in the U.S. is twice as expensive as anywhere else in the world, yet the quality is at the lower end of the industrialized nations—obviously we don’t get what we pay for. We’re very interested in developing a statewide surgical quality collaborative in Georgia, with nine hospitals currently participating and another five hospitals likely coming on in 2013.

—John F. Sweeney, MD, FACS
CARL R. BOYD, MD, FACS
Dr. Boyd discussed how his academic institution, Memorial Health University Medical Center, has seen improvements using ACS NSQIP to identify and reduce ventilator-associated pneumonia and urinary tract infections. He said upon receiving the initial data reports when the organization joined ACS NSQIP in 2006, hospital administrators immediately saw the program’s value and expanded it across specialties. He stressed the importance of sharing data among surgeons and clinical teams to drive cultural change, and added that if surgeons believe what the data is telling them, they’ll inherently want to do better.

BRUCE A. FEINBERG, DO
Dr. Feinberg moderated the Q&A portion of the forum and reinforced the need to move from solely talking about quality improvement to taking action to integrate best practices at any given institution.

ALEXANDRA LEOPOLD
Ms. Leopold said that BlueCross BlueShield of Georgia’s focus on evidence-based medicine and quality are yielding huge returns on investment for the plan’s members as well as the entire health care cost structure. She said they are focused on collaborating more with partnering hospitals and other stakeholders that share the goal of having healthy members and healthy patients.

DANE C. PETERSON, MBA
Mr. Peterson said one way Emory Hospital Midtown is addressing quality improvement is first by focusing on internal areas of improvement such as surgical complications, length of stay, and staffing needs, as those are items that are easier to control and improve, compared to external concerns such as government readmission policy changes.

KAREN WATERS, RN, MHA, MBA
Ms. Waters said the Georgia Hospital Association is looking to leverage initiatives that have been successful within one organization and share those best practices with hospitals statewide to encourage broader implementation of quality improvement efforts.

JERRY DUBBERLY, PHARMD, MBA
Dr. Dubberly said the Georgia Department of Community Health is making a concerted effort to leverage the large volume of in-house data and share that information with health care practitioners who interface with the patients.

PARTICIPANTS

HOSTS: LaMar McGinnis, MD, FACS: Past President, ACS; senior medical advisor and liaison, American Cancer Society • John F. Sweeney, MD, FACS: W. Dean Warren Distinguished Professor of Surgery, vice chair of clinical affairs, chief, division of general and gastrointestinal surgery, department of surgery, Emory University School of Medicine KEYNOTE SPEAKER: Kenneth E. Thorpe, PhD: Robert W. Woodruff Professor and chair of the department of health policy and management, Rollins School of Public Health, Emory University; co-director, Emory Center on Health Outcomes and Quality MODERATOR: Bruce A. Feinberg, DO: vice-president and chief medical officer, Cardinal Health Specialty Solutions; host, The Weekly Check-Up, WSB Radio OPENING PRESENTERS: Carl R. Boyd, MD, FACS: general/critical care surgeon, Memorial Health University Medical Center; professor of surgery, Mercer University School of Medicine • Otis Webb Brawley, MD, FACP: chief medical and scientific officer, executive vice president, American Cancer Society • Ryan Fagan, MD, MPH: medical epidemiologist, Centers for Disease Control and Prevention, Surveillance Branch, Division of Healthcare Quality Promotion • David B. Hoyt, MD, FACS: Executive Director, American College of Surgeons • Ana Pujols McKee, MD: executive vice president and chief medical officer, The Joint Commission • Bryant W. Wilson, MD, FACS: medical director, acute care surgery program, Piedmont Healthcare PANELISTS: Jerry Dubberly, PharmD, MBA: chief, Medicaid Division, Georgia Department of Community Health • Alexandra Leopold: regional vice president, Provider Engagement and Contracting, BlueCross BlueShield of Georgia • Dane C. Peterson, MBA: chief executive officer, Emory Hospital Midtown • Karen Waters, RN, MHA, MBA: senior vice president of professional services and strategic planning, Georgia Hospital Association
A systems approach can move the quality improvement needle and increase health care value

ROLLINS COLLEGE, WINTER PARK

The American College of Surgeons (ACS) Surgical Health Care Quality Forum Florida, held at Rollins College in Winter Park, featured a variety of health care perspectives and focused on achieving higher quality health care in the state through a systems approach. Among other statewide initiatives, the forum highlighted how the Florida Surgical Care Initiative (FSCI)—a partnership between the ACS National Surgical Quality Improvement Program® (ACS NSQIP®), the Florida Hospital Association (FHA), and Florida Blue—is already resulting in improved surgical outcomes in more than 65 Florida hospitals.
KEY THEMES

Statewide systems and collaboratives can effectively and efficiently improve patient outcomes.

With Florida’s unique population and demographics, Florida Surgeon General and forum keynote speaker John Armstrong, MD, FACS, focused on the importance of moving from microsystem quality improvement within hospitals to macrosystem improvement regionally and across the state. The Florida Department of Health is currently implementing improved systems of care related to trauma and cancer, and the FSCI is bringing hospitals together throughout the state and quickly producing improved surgical outcomes. Jonathan B. Gavras, MD, FCCP of Florida Blue discussed how his organization sponsors the third largest Patient-Centered Medical Home (PCMH) in the country, which helps to decrease hospital stays and reduces costs.

Integrating quality improvement programs into education and training is key to sustaining a “culture of quality” in the future.

Quality improvement is not only a national priority among hospitals, clinicians, policymakers, and insurers, but is increasingly becoming integrated into national standards for residency education and training. Panelist Michael S. Nussbaum, MD, FACS, University of Florida College of Medicine–Jacksonville, shared recent studies that have shown how engaging residents in hospital quality improvement initiatives fosters an early working knowledge of quality measures and development of skills to critically investigate systems improvement.

PARTICIPANTS

HOSTS: John P. Rioux, MD, FACS: general surgeon; Member, ACS Board of Governors, Secretary-Treasurer, ACS Florida Chapter • Joseph J. Tepas III, MD, FACS, FAAP: professor of surgery and pediatrics, University of Florida College of Medicine–Jacksonville OPENING PRESENTERS: John H. Armstrong, MD, FACS: Surgeon General and Secretary of Health for the State of Florida • David B. Hoyt, MD, FACS: Executive Director, American College of Surgeons PANELISTS: Martha DeCastro, MS, RN: vice-president for nursing, Florida Hospital Association • Vincent A. DeGennaro, MD, FACS: chief of staff, assistant chief, surgical services, Miami VA Healthcare System; affiliated associate professor of surgery, University of Miami School of Medicine; president, Florida Medical Association • Jonathan B. Gavras, MD, FCCP: senior vice-president, delivery system, chief medical officer, Florida Blue • Brian Kiss, MD: senior director for medical programs, Florida Blue • Michael S. Nussbaum, MD, FACS: Methodist Medical Center Professor and Chair, department of surgery, University of Florida College of Medicine–Jacksonville
JOSEPH J. TEPAS III, MD, FACS, FAAP, AND JOHN P. RIoux, MD, FACS

Dr. Tepas pointed out the timeliness of the forum, given that Florida state Congressional leaders were holding committee meetings that very day in Tallahassee to discuss everything from caring for the most vulnerable populations, to graduate medical education and Medicaid funding. He emphasized the importance of the forum in bringing together the very people responsible for patient care to define what quality means in an effort to inform health policies and ultimately address costs and value.

Dr. Rioux added that the forum discussion also helped shed light on key quality improvement issues for clinicians and surgeons as hospitals continue to move toward achieving a “culture of quality and patient safety.”

DAVID B. HOYT, MD, FACS

As ACS celebrates the Centennial of its founding, ACS Executive Director Dr. Hoyt emphasized the significance of the ACS Inspiring Quality forums in “raising the collective consciousness” on how far surgery has come and how surgeons can continue advancing health care quality and innovation. He noted collaboration—on national and local levels—is redefining professionalism and fostering both evidence-based transparency and public interest in the pursuit of quality improvement. One example of this pursuit is a partnership between ACS and The Joint Commission’s Center for Transforming Healthcare on a project to decrease the risk of colorectal surgical site infections (SSI). Data released in November 2012 shows that participating hospitals avoided 135 SSIs and saved $3.7 million over a two-and-a-half year period as a result.1 Dr. Hoyt congratulated FSCI on its success achieving significant improvements in postoperative complication occurrences among the 67 participating hospitals across the state. He mentioned that FSCI is the largest ACS NSQIP collaborative in the country with a broad commitment from hospitals and announced the initiative would continue for at least three additional years.
JOHN H. ARMSTRONG, MD, FACS

Dr. Armstrong described how his state of Florida is evaluating its current health initiatives against evolving demographics and geography, and determining how to balance the health care needs of the state’s unique population with shrinking budget ceilings. He said the state of Florida is about to eclipse New York as the third most populous state in the nation, with 17 percent of the population 65 years of age or older, 22 percent Hispanic/Latino, and 16 percent African American. The state faces challenges with health care inequity, including 20 percent of the population being uninsured. Further, 10 percent of the state’s population lives in rural areas and does not have proper access to health care services. Twenty-six percent of Florida’s adult population is obese, 10 percent has diabetes, and cancer is the leading cause of death in the state followed by heart and lung disease.

Dr. Armstrong emphasized that the state is responding to its health care challenges with a systems approach to managing disease and prevention. For example, the state will be working with ACS to evaluate its current statewide trauma system, exploring ways to better allocate resources and regionalize trauma care to meet the needs of the entire population. He also announced the state’s new Cancer System of Care, which will use Florida’s current cancer registry coupled with a public/private partnership to create a statewide clinical care network and ultimately establish standards for each stage of cancer care. Dr. Armstrong expressed how exciting it is that the private sector has stepped up to make a difference with FSCI and how these partnerships will continue to help Florida move to a macrosystem of quality improvement in all hospitals throughout the state.

This particular initiative [ACS NSQIP/FSCI] in our state has proof in concept. It has demonstrated across the nation that we can increase quality and reduce cost at the same time—something that most have said is impossible. And thus, we’ve turned the conversation in Tallahassee from one about pure cost to one about value.
In his role as chief medical officer of Florida Blue (BlueCross BlueShield Plan of Florida), Dr. Gavras noted how despite an unprecedented decline in health care utilization over the last few years, health care costs have not decreased in tandem as one would expect. The state of Florida and the nation are moving toward a “pay for value” system, and although there is some refinement needed in how value and improvement are measured, the state is moving in the right direction with FSCI. In addition to its support of FSCI, Florida Blue has seen quality improvement success through other programs it supports, including the third-largest PCMH in the country. With 2,200 participating primary care physicians, the program has seen a 12 percent reduction in emergency room utilization, 9 percent fewer inpatient hospital stays, and costs down by 4–5 percent year over year.

Dr. DeGennaro elaborated on the history of surgical quality improvement in the Department of Veterans Affairs (VA) system, namely the VA Surgical Quality Improvement Program (VASQIP), which served as the inspiration for ACS NSQIP. Using VASQIP between 1991 and 2011, the VA has decreased unadjusted 30-day mortality from 3.2 percent to 1.2 percent, and decreased unadjusted 30-day morbidity rates from 17.4 to 7.7 percent. He explained that VASQIP is continuing to evolve by moving beyond 30-day outcomes data and looking at readmission rates. In 2011, the VA was also awarded a contract to integrate the Surgical Quality Workflow Manager program into its information technology infrastructure,2 which will better track surgical data from the patient’s first visit to the clinic through the health care system, including return to work/activities and specialty measures, such as cancer and orthopaedic outcomes.


citation


Jonathan B. Gavras, MD, FCCP

Vincent A. DeGennaro, MD, FACS

Participation in quality improvement collaboratives like FSCI, and data measurement registries like ACS NSQIP, are becoming more and more critical for hospitals to consider as regulators and health plans move toward value-based care delivery models and formulate accountable care arrangements.

—Jonathan B. Gavras, MD, FCCP
MARTHA DECASTRO, MS, RN

Ms. DeCastro shared 2008 data from the Agency for Healthcare Research and Quality (AHRQ) that showed Florida hospitals were performing “weak” to “average” compared with other higher-performing states in the nation. The FHA Board quickly realized quality improvement needed to be a priority for hospitals, and FHA found its niche as a facilitator for implementing FSCI, the state’s first hospital quality improvement collaborative with ACS NSQIP as its foundation. Ms. DeCastro pointed out that medical literature has suggested it takes 17 years from the time clinical practice is published until it is actually implemented, but statewide collaboratives such as FSCI can accelerate the adoption of best practices in hospitals. Early results of FSCI validate this claim, as hospitals participating in the program have shown a 10.5 percent reduction in postoperative complication occurrences within the first 13 months of the program (March 2011–April 2012). In addition, AHRQ data in 2011 showed Florida hospitals performing “average” to “strong.” FHA is committed to continuing the initiative in partnership with ACS and Florida Blue for an additional three years and continuing the momentum in Florida hospitals indefinitely.

Florida Surgical Care Initiative –
Total postoperative complication occurrences
March 2011–April 2012

10.5% Reduction

MICHAEL S. NUSSBAUM, MD, FACS

Dr. Nussbaum with the University of Florida College of Medicine–Jacksonville made the case for incorporating quality improvement into residency education and training. Hospital quality improvement initiatives are becoming increasingly common, yet little is known about the influence of these initiatives on resident learning and attitudes. Several recent studies have shown that residents training in a hospital that is committed to involving them in continuous quality improvement would influence learning. For example, the department of surgery at Danbury Hospital in Connecticut has initiated a dedicated research year to performance improvement, which has benefited their residents by giving them a working knowledge of quality measures and their institution with multiple projects that have yielded significant improvements in the quality of patient care.”

Quality improvement in education is also being standardized at a national level. As a component of its next accreditation system, the Accreditation Council for Graduate Medical Education has established the Clinical Learning Environment Review program to assess the graduate medical education learning environment of each sponsoring institution and its participating sites. Dr. Nussbaum said resident education needs robust exposure to quality measures, such as ACS NSQIP and the Surgical Care Improvement Project (SCIP) to prepare surgeons for tomorrow’s health care system.

BRIAN KISS, MD

Dr. Kiss represented Florida Blue on the panel for the audience Q&A discussion and added that in order to sustain quality improvement in hospitals, his organization has integrated participation in quality improvement programs such as ACS NSQIP and/or the Society of Thoracic Surgeons National Database in its hospital pay-for-performance contracts. Also, in order for hospitals to get payment from Florida Blue under its PCMH and accountable care organization, they have to hit a series of quality metrics.

CASE STUDIES

KEYSTONE INTENSIVE CARE UNIT (ICU) PROGRAM CUTS CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS.

(Baltimore, August 30, 2011)

At the Baltimore forum, Sean M. Berenholtz, MD, MHS, FCCM, described a project to tackle health care-associated infections (HAIs), which he said claim more lives than breast cancer and Acquired Immunodeficiency Syndrome (AIDS) combined. Two HAIs in particular, central line-associated blood stream infections (CLABSI) and ventilator-associated pneumonia (VAP), account for more than two-thirds of all deaths due to HAIs. Four years ago, results were published of the Keystone ICU program,¹ a partnership between Johns Hopkins and the Michigan Health & Hospital Association, that showed a 66 percent reduction in CLABSI across more than 100 participating ICUs. These improvements have been sustained for more than three years, and the results were later replicated in Rhode Island, with a 74 percent reduction in CLABSI. The next step is to disseminate this intervention to all 50 states through a program called “On the CUSP (Comprehensive Unit-Based Safety Program): Stop BSI,”² which has 1,500 participating hospitals in 47 states. Preliminary results suggest a 35 percent reduction in CLABSI rates.

For more information about the Keystone ICU program, visit www.mhakeystonecenter.org/icu.htm or about CUSP, visit www.onthecuspstophai.org/on-the-cuspstop-bsi/.
HIGH-PERFORMING HOSPITAL GETS EVEN BETTER AT REDUCING INFECTION RATES.
(San Diego, March 2, 2012)

No outliers existed in the first American College of Surgeons National Surgical Quality Improvement Program® (ACS NSQIP®) report Scripps Green Hospital received six years ago, said Ralph M. Dilley, MD, FACS. Since the hospital was performing at expected levels on all complications measured, it was decided to focus on studying one postoperative complication in detail. Urinary tract infection (UTI) was selected as the first target. Dr. Dilley said the UTI rate at Scripps Green was 1.8 percent, while the national average was 1.1 percent. A committee formed to address the UTI rate and put in place an intense education program and other measures. Within two years, the UTI rate fell to 0.6 percent. He said ACS NSQIP also played a role in catching an emerging problem early. A few years after ACS NSQIP was instituted, surgical site infections (SSIs) at Scripps Green spiked to 7.8 percent, compared with the national average of 2.3 percent. The hospital responded rapidly by organizing a team to investigate every SSI; the team quickly pinpointed the origin of the problem and made necessary changes. As a result, the SSI rate fell to 1.8 percent within one year, well below the national average.

WASHINGTON STATE AND ACS TARGET PATIENT RISK FACTORS AHEAD OF AN OPERATION.
(Seattle, April 11, 2012)

The Seattle forum highlighted the success of Washington State’s Surgical Care and Outcomes Assessment Program (SCOAP), a collaboration of more than 50 hospitals in the state working to improve quality by reducing variation in care delivery and outcomes. SCOAP’s founder, David R. Flum, MD, MPH, FACS, announced the launch of the Strong for Surgery initiative—a partnership between the University of Washington’s Comparative Effectiveness Research Translation Network (CERTAIN), the Washington surgical community, the American College of Surgeons Division of Education, the Agency for Healthcare Research and Quality, the Life Sciences Discovery Fund, and Nestlé HealthCare Nutrition—to bring preoperative checklists and nutritional interventions to doctors’ offices and engage patients as their own health care advocates to help further improve surgical outcomes. Studies show that the most influential risk factors are not always things that happen in the operating room, but rather are patient risk factors, including smoking, nutritional status, glycemic control, and medication use. In the next phase of the initiative, the campaign will address the nutritional status of all patients before surgery through implementation of nutritional screening and use of evidence-based nutritional support. After being piloted in 2012, the initiative will roll out to about 55 partner clinics throughout Washington State.

For more information, visit www.becertain.org/strong_for_surgery or www.scoap.org.

Strong for Surgery takes the idea of checklists and moves them to where decisions are mostly being made before the patient enters the hospital. There would never be an airplane that would start reviewing a checklist when it is already moving down the runway, and the same concept applies to surgery. The doctor’s office is the last opportunity to have those important discussions about whether the patient is ready for an operation.

—David R. Flum, MD, MPH, FACS
PARTNERS HEALTHCARE REDUCES COLORECTAL SURGERY INFECTIONS.

(Boston, June 4, 2012)

Nearly one-third of the time, surgery to remove part of the colon is prone to many complications. This high rate of complications is one reason the Partners HealthCare quality consortium in Massachusetts—which is composed of Massachusetts General, Brigham and Women’s, and Faulkner in Boston; Newton-Wellesley in Newton; and North Shore Medical Center in Salem—chose partial colectomy as a target for improving patient outcomes. Although the hospitals’ collective 29 percent complications rate was lower than the national average, they knew they could do better.

Given the high cost of treating complications—which add more than $11,000 to a procedure on average, according to conservative estimates—the consortium negotiated a pay-for-performance contract with an insurer that would offer an incentive to reduce the consortium’s average complication rate by one percent over a year. Even a seemingly minor reduction in complications has major implications for overall patient health and cost savings.

The consortium used ACS NSQIP to track its risk-adjusted, 30-day outcomes data. The participating hospitals collaborated to review present practices at each hospital, scan the scientific literature for best practices, and brainstorm improvements. It ultimately decided to focus on reducing infections and compiled a list of seven recommended process measures—dubbed “better colectomy lite”—which included practices such as administering preventive antibiotics an hour before the procedure, warming patients whose core temperature falls below 97.8 °F, and opting for a less invasive (and less prone to infection) laparoscopic approach when possible. In one year, the consortium was able to reduce the average complication rate from 29.1 percent to 22.4 percent.3

For more information, visit http://commonhealth.wbur.org/2012/06/commentary-colon-infections.

TENNESSEE SURGICAL QUALITY COLLABORATIVE DEMONSTRATES THE VALUE OF PARTNERSHIPS AND MARKEDLY IMPROVES OUTCOMES IN THE STATE.

(Tennessee, August 3, 2012)

The Tennessee forum highlighted the success of the Tennessee Surgical Quality Collaborative (TSQC), a collaborative using ACS NSQIP and forming a three-way quality improvement relationship between hospitals, health plans, and surgeons—a unique model that could work in other states. Early TSQC results for the 10 participating hospitals showed 25 percent fewer surgical patients experiencing kidney failure, an 18 percent decrease in infections, and 15 percent fewer patients experiencing the need to be on a ventilator for a prolonged period of time. Further, 60 percent fewer graft failures and 34 percent fewer wound disruptions meant a significant reduction in patients who had to undergo follow-up surgical procedures. The collaborative also showed an estimated savings of $2.2 million per 10,000 general and vascular surgery cases, or approximately $8 million overall.4 The success of ACS NSQIP and the TSQC in the state has led to an increased number of Tennessee hospitals participating—a total of 21 since 2012—and the TSQC received a $3.9 million grant from the BlueCross BlueShield of Tennessee Health Foundation to fund the program through 2014.

For more information visit www.tnacs.org/information/information.html.
**USING COMPARATIVE EFFECTIVENESS DATA CAN REDUCE GALBLADDER READMISSIONS.**

*(Houston, September 10, 2012)*

A nine-year study between 1996 and 2005 found 25 percent of Medicare patients admitted to the University of Texas Medical Branch with acute gallbladder disease were not having their gallbladders removed on initial hospitalization. One-third of these patients were readmitted within two years, and lack of definitive therapy was associated with a 27 percent cholecystectomy rate and a 38 percent gallstone-related readmission rate. In 2009, a quality initiative was implemented to reduce these readmissions by performing cholecystectomy on all patients with gallbladder disease within 48 hours of initial hospital admission. Taylor S. Riall, MD, FACS, and her colleagues hypothesized that this change would reduce readmission rates and costs, while improving surgical outcomes.

Implementation required a multidisciplinary effort and significant culture change. For example, it was difficult to treat these cases in the daytime. Now, many cholecystectomies are performed in the evening or on weekends. As a result of the initiative, the hospital’s cholecystectomy procedure rates rose from 48 to 75 percent in the first year and are now more than 90 percent. Readmission rates for gallbladder disease dropped from 33 percent to less than 10 percent, and the length of patient stay for this procedure has decreased by three days. Each readmission generated an average of $19,000 in additional charges.

**HEALTH SYSTEM IN TEXAS ACHIEVES HIGH RELIABILITY STATUS.**

*(Houston, September 10, 2012)*

In his presentation at the ACS Surgical Health Care Quality Forum in Houston, and in a subsequent commentary piece in the Houston Chronicle, M. Michael Shabot, MD, FACS, FCCM, FACMI, chief medical officer of Memorial Hermann Healthcare System, described the positive consequences of his system’s seven-year quest toward becoming a High Reliability Organization (HRO). In 2006, aspiring to have its 12 hospitals be among the best in America, Memorial Hermann implemented an internal HRO program called “Breakthrough to Patient Safety,” or BIPS. Among the many changes, Memorial Hermann implemented an Electronic Health Record for all facets of patient care, trained its staff on BIPS, rewarded full compliance with CMS quality measures, and worked with The Joint Commission to improve hand hygiene. As a result of its commitment to quality, complications and hospital-acquired conditions at Memorial Hermann have dropped dramatically, including zero cases of transfusion reaction between 2007 and 2012, and no retained foreign bodies in any of the hospitals in more than a year.

*My own health care system embarked in 2006 on a journey to become a high-reliability organization and prevent all avoidable harm. For preventable harm like hospital-acquired infections…by far, far, far the most common monthly report audited from our hospitals is zero. That’s what it needs to be. All of our hospitals have gone over a year without a retained foreign body. We haven’t had a transfusion reaction in our hospital system since 2006 - and never expect to see one again. That’s what high reliability is all about.*

— M. Michael Shabot, MD, FACS, FCCM, FACMI
HOSPITAL ZEROES IN ON SURGICAL SITE INFECTIONS.

(New York, November 16, 2012)

Alfons Pomp, MD, FACS, FRCSC, chief of laparoscopic and bariatric surgery at NewYork-Presbyterian/Weill Cornell Medical Center, described his hospital's use of eCOMP, an in-house data collection system, and ACS NSQIP to track complications and interventions. The hospital's ACS NSQIP report for 2011 showed its mortality rate was below the expected rate (low outlier), but morbidity rates were relatively high. The hospital's surgical site infection (SSI) rate of almost 5 percent in the 200 colorectal surgery cases reviewed, placed the hospital in high outlier territory. Wound infections can cost $3,000–$27,000 per incident.7

The hospital formed a committee to improve wound care with colorectal surgery patients. One action the committee took was to require the use of chlorhexidine skin prep solution, which was not the hospital's standard even though it had been scientifically validated. Education was conducted with all hospital staff and residents on administration of appropriate prophylactic antibiotics, and precise antibiotic dosing information was recorded in operating room documentation. Also, individual surgeons with below-average SSI outcomes were made aware of the need to improve. As a result of this focus, Dr. Pomp said SSI rates declined rapidly. The report for the first two quarters of 2012 showed that the SSI rate had declined to 2.4 percent from 4.9 percent in the previous reporting period, in line with comparable institutions.

UNITING TO REDUCE CARDIAC COMPLICATIONS IN AN ACADEMIC AFFILIATE.

(New York, November 16, 2012)

As an academic affiliate, Albany Medical Center works with private physician groups, said Steven Stain, MD, FACS, Henry and Sally Schaffer Chair, department of surgery, Albany Medical Center. In 2009, when an ACS NSQIP report showed that 30-day vascular surgery morbidity at the hospital needed improvement, Dr. Stain said conversations with the group that performed the operations would be "more convincing than mandating."

Cardiac complications in vascular surgery cases were a high outlier, at an observed rate of 3.58 percent, almost two standard deviations from the expected rate. The hospital pulled relevant data for each operation that resulted in myocardial infarction for the surgeons to review. They discovered that while each patient had a preoperative cardiology consult, there was no in-hospital cardiology follow-up—patients were being managed by the intern on the floor.

A multidisciplinary team conducted a risk assessment and implemented an action plan to reduce cardiac complications. The physicians in the private cardiology group agreed to follow patients into the hospital. A cardiac anesthesiologist was brought in for every major vascular case. A vascular ICU with intensivists was instituted. By using high-quality data to identify the source of the problem, and including everyone involved in vascular patient care—regardless of whether they were employed by the hospital—the rate of cardiac complications at Albany Medical Center trended down to an expected rate over three years.
THE JOINT COMMISSION AND ACS TACKLE COLORECTAL SURGICAL SITE INFECTIONS.

(Georgia, December 12, 2012)

In August 2010, The Joint Commission Center for Transforming Healthcare and the ACS launched a project to target and reduce colorectal SSIs. SSIs are one of the most common HAIs, and colorectal operations were chosen as a focus because these procedures are commonly performed in many different hospitals, and are also associated with significant complications and a high variability of performance across hospitals.

Using data from the ACS NSQIP, the seven participating hospitals worked together to identify risk factors and develop targeted solutions, such as standardizing preoperative instruction to patients and caregivers, establishing criteria for wound management, performing patient temperature and warming interventions to maintain optimal ranges for wound healing and infection prevention, and establishing antibiotic administration protocols. In November 2012, The Joint Commission Center for Transforming Healthcare and ACS announced that the participating hospitals reduced superficial incisional colorectal SSIs by 45 percent and all types of colorectal SSIs by 32 percent. The project yielded an estimated cost savings of more than $3.7 million for the 135 estimated colorectal SSIs avoided. In addition, average length of stay for patients with any type of colorectal SSI decreased from 15 days to 13 days.

For more information, visit www.centerfortransforminghealthcare.org.

References:
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