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SSAT PUBLIC POLICY COMMITTEE PANEL

Staying Alive: Strategies for Accountable Health Care

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Abstract The Patient Protection and Affordable Care Act signed into law in March 2010, has led to sweeping changes to the US health care system. The ensuing pace of change in health care regulation is unparalleled and difficult for physicians to keep up with. Because of the extraordinary challenges that have arisen, the public policy committee of the Society for Surgery of the Alimentary tract conducted a symposium at their 52nd Annual Meeting in May 2011 to educate participants on the myriad of public policy changes occurring in order to best prepare them for their future. Expert speakers presented their views on policy changes affecting diverse areas including patient safety, patient experience, hospital and provider fiscal challenges, and the life of the practicing surgeon. In all areas, surgical leadership was felt to be critical to successfully navigate the new health care landscape as surgeons have a long history of providing safe, high quality, low cost care. The recognition of shared values among the diverse constituents affected by health care policy changes will best prepare surgeons to control their own destiny and successfully manage new challenges as they emerge.

Keywords Health care reform · Quality of health care · General surgery · Patient satisfaction · Delivery of health care

Introduction

Although the federal government has a long history regulating health care, the current pace of change and complexity in health care as a result of changes in public policy is unprecedented and is difficult to manage and understand (Table 1). A number of simultaneous forces are driving these changes. As the first wave of baby boomers reaches retirement age, many predict that the aging population will be awash in chronic illness that will overwhelm the capacity to provide care. Widespread state budget gaps, increasing unemployment, lower rates of health care utilization, and increased pressures on provider and institutional revenue streams have all converged to force the transformation of health care.

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Table 1 Major enacted federal health care legislation[a]

Legislation (year)	Key elements
Act for the Relief of Sick and Disabled Seamen (1798)	First federal involvement in health care
Snyder Act of 1920	Health care for native Americans
Maternal and Infancy Act of 1921 (Sheppard-Towner Act)	Grants to states for maternal and child health services
Veteran's Act of 1924	Extends federal responsibility for healthcare services for veterans injured in the line of service
Social Security Act (1935)	Benefits to the elderly except health care
McCarren-Fergurson Act (1945)	Exempts insurance industry from federal antitrust legislation
Social Security Act of 1965	Landmark federal health insurance programs created: Medicare and Medicaid
Health Planning and Resource Development Act of 1974	Created health systems agencies and the certificate of need laws to control costs
Tax Equity and Fiscal Responsibility Act of 1983 (TEFRA)	Created Medicare's inpatient Diagnosis Related Groups (DRGs) prospective payment system
Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA)	Portability of health insurance, hospice care added to Medicare
McKinney-Vento Homeless Assistance Act (1987)	Services for homeless people
Americans with Disabilities Act (1990)	Protections for disabled
Child Immunization Act (1993)	Provides vaccines for all children
Health Insurance Portability and Accountability Act (1996)	Improves continuity of health insurance coverage, promotes medical savings accounts, improves access to long-term care services and coverage
State Children's Health Insurance Program (1997)	Medical care for children in low-income families
Medicare Prescription Drug, Improvement and Modernization Act (2003)	Prescription drug coverage added to Medicare
American Recovery and Reinvestment Act of 2009	Provides $155 billion economic stimulus for health care
Patient Protection and Affordable Care Act of 2010	Expansion of health insurance coverage

[a] Adapted from the Associated Press, entitled "A historical look at health care legislation," March 20, 2010

Several legislative acts have been passed recently that aim to expand access to affordable care by redesigning the health care delivery system with a focus on improving quality and patient safety. Insurance and payment reform initiatives have challenged providers to deliver high quality medical care at reduced costs, commonly referred to as value-based purchasing. The Health Information Technology for Economic and Clinical Health (HITECH) Act was enacted as part of the American Recovery and Reinvestment Act of 2009 (ARRA). ARRA specifies the components of "meaningful use" which include using certified electronic health records (EHR) in a meaningful manner (i.e., e-prescribing), for the electronic exchange of health information to improve the quality of health care and to submit quality measures to external agencies. Large capital investments, significant ongoing operating costs, and the complexity of clinical data have limited the expansion of EHR despite the financial incentives available for compliance. The Patient Protection and Affordable Care Act (PPACA) and the Health Care and Education Reconciliation Act were signed into law in March 2010 and constitute the principal legislation regarding health care reform. The sweeping changes to the US health care system, being put in place by PPACA, are intended to be implemented over several years through 2018. Many aspects of PPACA have been legally challenged, particularly those related to insurance reform. However, programs aimed at enhancing care coordination, patient safety, and clinical and financial accountability have been widely embraced as representing the best interests of our patients.

A significant professional knowledge gap has emerged with this rapid pace of change. Such a gap can lead to fear, erosion of trust, and poor decision-making by the various constituents involved in health care. Alternatively, these changes may be navigated successfully with a greater degree of understanding and collaboration by adopting a patient-centered approach to health care. In this regard, Ravikumar et al.[1] have reported that shared values of both surgeons and hospitals related to a patient-centered model of care can improve patient safety, quality of life, and patient experience.

The public policy committee of the Society for Surgery of the Alimentary Tract (SSAT) decided that a mini-symposium addressing the myriad of public policy changes would allow participants to prepare themselves with ideal strategies for the future based on mutual understanding of the perspectives of the patient, the hospital, and the surgeon. The symposium, entitled "Staying Alive: Strategies for Accountable Health Care in 2011," was presented at the 52nd Annual Meeting of

the SSAT held in Chicago, IL, USA, in May 2011. The following is a summary of the proceedings.

Do No Harm: Keeping Patients Safe

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The patient safety movement can trace its roots to the Crimean War in 1854 when Florence Nightingale, a nurse, analyzed mortality data among British troops and was able to employ process changes and infection control practices to achieve significant mortality reductions. She is widely recognized as the first epidemiologist, statistician, and pioneer of evidenced-based practice and patient safety. Ernest Amory Codman, M.D. (1869–1940) is the recognized founder of outcomes management, as he catalogued his surgical procedures along with the diagnosis and the outcome of each case, recorded diagnostic and treatment errors, and reported them publicly.[2] When the American College of Surgeons was founded in 1912, Codman was named as the first chair of the Committee on the Standardization of Hospitals. This committee eventually evolved into the Joint Commission on Accreditation of Health Care Organizations, today known as The Joint Commission (TJC). From his position as chair, Codman was able to promulgate his ideas widely only to witness their widespread rejection. In 1915, he publicly chastised the Boston medical establishment for greed and inattention to outcomes, and as a consequence was ostracized for much of the remainder of his life. The Joint Commission created the Ernest Amory Codman Award in 1996 for organizations demonstrating achievement in the use of process and outcome measures to improve organizational performance and the quality and safety of care provided to the public. Florence Nightingale and Ernest Amory Codman have established that the foundations for improving quality in patient care included effective leadership and measurement of results.

More recently, two well-known expert consensus reports from the Institute of Medicine (IOM) drew national attention to a substantial and growing body of literature in patient safety and health care quality. "To Err is Human"[3] and "Crossing the Quality Chasm"[4] challenged individual practitioners and health care institutions to focus attention on individual performance and system processes to improve care. These reports articulated a previously under-recognized problem in health care that ineffective communication among health care professionals was one of the leading causes of medical errors and patient harm. A review of TJC reports reveals that communication failures were implicated in over 70% of sentinel events.[5]

Surgeons have traditionally supported steep hierarchies in which junior staff and ancillary staff do not question senior staff.[6] Although surgeons perceive themselves as team players, the remainder of the team does not necessarily share this view.[6] Team training and simulation models, similar to the aviation industry, have been recommended as a proven method to improve patient safety.[3] An important feature in a culture of safety is the empowerment of all team members to speak up and stop a procedure if they feel that safety is being compromised. In 2006, Sexton and colleagues[7] introduced the Safety Attitudes Questionnaire (SAQ), a validated survey that assesses the safety climate in health care settings and has been used in operating rooms, intensive care units, pharmacies, and outpatient clinics. Studies using the SAQ have demonstrated repeatedly that a culture preoccupied with safety, where health care providers of various disciplines collaborate and work together towards a common goal, results in improved patient outcomes.[8]

In addition to establishing a safe culture, optimal patient care requires adherence to evidence-based guidelines. Employing specific tools such as checklists can enhance compliance with the established best practices and result in significant decreases in catheter-related blood stream infections,[9,10] ventilator-associated pneumonias,[10] and overall postoperative surgical complications.[8]

The adoption of information technology to facilitate data collection and analysis and the use of computer-based information systems to support clinical decision-making are important steps to improve patient safety.[4] The Society of Thoracic Surgeons (STS) database is one of the most successful quality improvement programs in the US. This registry includes databases focused on adult cardiac surgery, thoracic surgery, and congenital heart surgery.[11] Established in 1989 as an initiative for quality improvement, it is the largest clinical database of its kind, which includes more than 4.5 million surgical records and represents an estimated 94% of cardiac surgery centers across the country. Through measurement and analysis of patient outcomes, the STS (www.sts.org) have developed several quality performance measures to guide patient care.

The National Surgical Quality Improvement Program (NSQIP) is another program that provides risk-adjusted outcomes data to facilitate quality improvement in participating hospitals. In a recent analysis of 118 hospitals, 66% of NSQIP hospitals improved risk-adjusted mortality, and 82% improved risk-adjusted complications.[12]

Public reporting of patient safety events has been recommended by the IOM[3] as motivation to drive improvements in patient safety. There has been significant resistance to

public reporting of specific events and of data on individual providers because of fear that these could be used in medical malpractice cases and disciplinary procedures or to gain market advantage. However, an increasing volume of hospital data on processes and the outcomes of care are now publicly reported. As of May 2011, 27 states required public reporting of hospital-acquired infection rates. A US government website, www.hospitalcompare.hhs.gov, allows the public comparison of hospitals in the various measures of the processes of care, outcomes of care, use of medical imaging, surveys of patient hospital experiences, composite measures of patient safety, Medicare payments, and volume data.

It is a natural role for general surgeons to assume leadership positions in patient safety initiatives through participation in the quality improvement programs that monitor outcomes and define best practices. Surgeons should know the evidence, comply with guidelines, promote a culture of safety, and utilize technology that facilitates data collection, analysis, and dissemination.

Becoming a Patient: A Surgeon's Perspective

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The patient experience has become an important component of modern health care. Safe, high quality care has always been the focus of what we do. Now, the patient's perception of that care is a factor in the assessment of providers and overall hospital reimbursement. The patient experience is based on many elements, and patient–physician interactions are among the most important. Many surgeons do not routinely consider the impact their behavior may have upon the patient's perceptions of his or her care. Over the past 30 years, I have had several eye-opening experiences as a patient, and these have changed the way I practice my craft.

My first two hospitalizations, in 1979 and 1994, were marked by an abundance of practices that were later shown to lack any scientific evidence to support them and, to the contrary, may actually have been harmful. In 1979, I experienced hourly routine rectal temperatures when admitted for a viral fever, and in 1994, underwent total body shaving the night before coronary surgery. These practices represent examples of the complete disregard for patient dignity that were commonplace at the time.[13,14] Although these practices are no longer considered acceptable, I experienced other practices that unfortunately can still be found today.

I was also forced to question the process of the informed consent. My interactions with my treating physicians were limited to intervals with little information exchange or sharing of treatment plans. There were some days when I did not see my physician at all. As a physician-patient, I found it difficult to understand everything that was happening to me, so you can only imagine how lost our patients must feel. In my more recent experiences, information exchange improved dramatically with the use of "informed consent" which is now considered a moral necessity. Unfortunately, standards on obtaining adequate informed consent is limited, and variation in the consent process from physician to physician is unfortunately the norm. Both patients and physicians struggle with the volume of information that needs to be conveyed: how the information exchange should be documented, who should witness the consent and what exactly is being witnessed, whether the information conveyed is really understood, and whether the patient is informed adequately as to the experience of the surgeon.

Furthermore, the number of physicians currently taking care of the patient has dramatically increased. We no longer have a single physician to confide in. Instead, medical care has become a parade of groups of specialists who change almost on a daily basis. On a given day, three different hospitalists may take care of a patient in shifts. Patients indeed are like passengers on an airline jet without any knowledge of who their captain or flight attendant is, and they may not be able to tell the difference.

Dr. Abraham Verghese has elegantly and accurately stated that the modern patient encounter can be characterized as the "iPatient." iPatients are handily discussed (or "card flipped") in the call rooms, while the real patients keep the beds warm and ensure that the folders bearing their names stay alive on the computer. Patients have already been scanned, tested, and diagnosed, so that interns meet a fully formed iPatient long before seeing the real patient. The iPatient's blood counts and exams are tracked and trended like the Dow Jones index, and pop-up flags remind caregivers to feed or bleed.[15]

As a patient myself, there was a lot of extraneous talking about me, outside my room, and most often, I could hear it all. Facts being told about me left me more scared, and at times, the information being discussed was different from what was being told to me by a different specialist or even misquoting what I said. I was utterly confused, upset, and not sure of my real informed consent.

In one of my hospitalizations several years ago at a very prestigious hospital, I received a daily birth control pill instead of another medication. This was discovered by my brother who was a pharmacist and was baby sitting me for the night in the hospital. Even though I got excellent care in the hospital and walked away very thankful for lifesaving care, I continue to champion all efforts on medication errors,

computerized physician order entry systems, and drug reconciliation efforts.

As a patient, I have learned that the perceptions of a physician's communication skills and a patient's hospital experience not only influence patient compliance and outcomes but also can have profound effects on practice building and referral patterns. A 2006 survey of surgery clinic patients reported that specific suboptimal behaviors in communication resulted in patients stating that they would not recommend specific surgeons.[16] With ever increasing time pressures, appropriate clinical encounters represent improvement opportunities for surgeons that can lead to an enhanced reputation, increased career satisfaction, and a more successful practice.[17]

Perhaps each of us should take a trip lying supine on a gurney in the hospital to develop a new appreciation of the patient experience as we count the stains on the ceiling and see the backlit silhouettes of our physicians and others, looking down over our frightened faces, as we journey to different parts of the hospitals for various tests and procedures.

Keeping Hospitals Afloat

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Hospitals and physicians are facing a wide assortment of challenges as we enter a new era of uncertainty. The only certain things are that reimbursement to providers will be significantly reduced and that there will be a fundamental change in provider reimbursement incentives. Reduced reimbursement is expected as a result of the inability of the federal government to sustain the current cost of care in the Medicare system. In addition, with the expected increase in the number of enrollees into state Medicaid plans, reductions in Medicaid payments are anticipated as states attempt to manage their soaring budgets. Private insurers are being asked to expand the coverage to include patients with preexisting illnesses. It is anticipated that increased costs incurred by private insurers will be passed on as increased costs to beneficiaries and reduced payments to providers.

It will be a challenge for providers to remain fiscally solvent in the face of these ongoing public policy changes. With reduced payments on the horizon, providers will need to be able to generate a positive margin on reduced Medicare reimbursement. To further complicate the situation, the existing system of episodic care payment is likely to transition to payment for continuum of care and for value. These concepts are inherent in value-based purchasing which emphasizes activities that aim to improve the quality of care that patients receive, resulting in an overall improved health status for individuals and communities with a primary goal of reducing overall cost. Prerequisites for achieving this goal include an integrated care delivery system with a strong primary care network that coordinates care over time for specific conditions. Important adjuncts to providing such high quality/low cost care are electronic health records, integration of physician extenders, and a common financial/management platform to allow real-time physician-specific performance assessment. Quality metrics already commonly measured include patient satisfaction scores, readmission rates, elimination of preventable adverse complications ("never" events) such as retention of a foreign object at surgery, wrong surgical procedure, or hospital-acquired stage III or IV pressure ulcer. Finally, providers will need to cooperate to prepare to handle bundled payments which Medicare believes will provide incentives for medical providers to work in a coordinated fashion to achieve high quality/low cost care.

In response to these unsettling changes, it is estimated that providers must implement cost reductions in the range of 10–20%. Cutting budgets across the board will not work, but rather organizations will have to focus on areas of strength and divest nonperforming assets and noncore business units. Within areas that are maintained, the model of care will need to be changed to increase productivity while maximizing efficiency.

Accountable Care Organizations (ACOs) have been proposed as a model to facilitate hospitals and physicians working together to align incentives and achieve the goals of value-based purchasing. An ACO is a type of health care delivery system that seeks to tie provider reimbursements to quality metrics and reductions in the total cost of care for an assigned population of patients. Successful ACOs have the potential to reduce expenditures by managing patients with improved care coordination across the spectrum of health, from prevention to end-of-life care. With broad participation of payers, providers, and patients and the successful implementation of information technology to integrate the health care delivery system, ACOs can reduce expenditures by using various methods including decreasing waste such as duplicate testing, by reducing unnecessary clinical variation in chronic disease management with evidence-based medicine, and by using physician extenders appropriately to provide lower cost care.

Another technique that providers can use to reduce the costs of care is Comparative Effectiveness Research (CER) which is a direct comparison of existing health care interventions to determine which works best for which patients and which pose the greatest benefits and harms. The 2010 PPACA passed by Congress established an independent Patient-

Centered Outcomes Research Institute (PCORI) to conduct research to provide information about the best available evidence to help patients and their health care providers make more informed decisions. Annual PCORI funding is estimated to be $500 million by 2014, and an additional $1.1 billion for CER has been allocated by ARRA for the Agency of Healthcare Research and Quality (AHRQ), the National Institutes of Health (NIH), and the office of the Secretary of Health and Human Services (HSS).

In the not-too-distant future, CER and value-based purchasing will determine the usage of pharmaceuticals, biotechnology products, medical/surgical devices, and surgical procedures that will reshape industries, force hospitals to reprioritize areas of clinical focus, drive down costs, and define new "clinical best practices." ACOs and CER could be positive changes in health care. For major tertiary interventional/surgery centers, there will be an increased need to align with or own large primary care feeder networks, offer differentiated higher quality services compared to their peers to attract patients, and expand geographic reach to maintain current volumes of interventional and surgical activities. The challenge going forward will be to provide greater value to our patients by reducing the cost of care and improving the quality of care while maintaining patient satisfaction. We will need to fundamentally change our models of care delivery to become more efficient and more productive. We will need to do the right thing for the right patient at the right place and at the right time, every time.

Surgeons Adjusting to the Changing Landscape

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Surgeons are unhappy and are not adjusting well to their current situation. The underlying problem is that they are no longer professionals; they have become employees. Many surgeons are now working for someone else. Revenues derived from surgical departments in academic medical centers are directed towards departments that cannot support themselves, leaving promising surgical research unfunded. Surgeons in private practice, many in rural settings, are seeking hospital employment as they simply cannot make ends meet, keeping their offices open and simultaneously supporting their families.

Not so long ago, in return for the freedom and independence of being treated as professionals, surgeons had obligations to society that were readily accepted as part of their work. Today, society endures an unacceptable problem of lack of adequate surgical coverage for the indigent and less fortunate as well as emergency surgical care, such that a new specialty has arisen: the employed acute care surgeon.[18]

The current situation of surgeons can trace some of its roots to the 80-h work week. Please do not get me wrong. I do not believe that residents should work the same inhumane hours that I did as a resident, but if you are busy either in academics or in private practice, you will often work more than 80 h. The principal question from the standpoint of patient care is this: Is the patient better off with a somewhat fatigued resident who has a personal interest in the case, having been in the operating room with the attending surgeon for that tenuous anastomosis or with a fresh resident who has never seen the patient before and is treating the patient based on a chain of sign-outs? Who is better positioned to promptly diagnose and care for that patient at 3:00 a.m. on the fifth postoperative day when the patient's temperature is 103°F, and she becomes hypotensive? The strictly enforced 80-h work week is creating a generation of surgeons where availability is not a priority.

Financial issues play a significant role in the current situation for surgeons. Educational debt for finishing residents, ages 33–35, is typically $120,000 and can be substantially higher. Current reimbursement from professional fees no longer supports the ability to repay educational debt without sacrificing their children's education and preparation for retirement. Having gone through 13–16 years of post-high school education, surgeons are very educationally oriented and would prefer that their children receive the same level of education that they did but without the debt. A specialty that cannot repay educational debt, allow children to have freedom in their educational endeavors, and prepare for retirement is doomed as a specialty, and that is where general surgery may be heading.

The current situation of general surgery is reflected in the observation that there is an impending general surgeon shortage with no increases in general surgery residency training positions, and a preponderance of general surgeons seeking subspecialty training (Fig. 1).[19,20] General surgeons

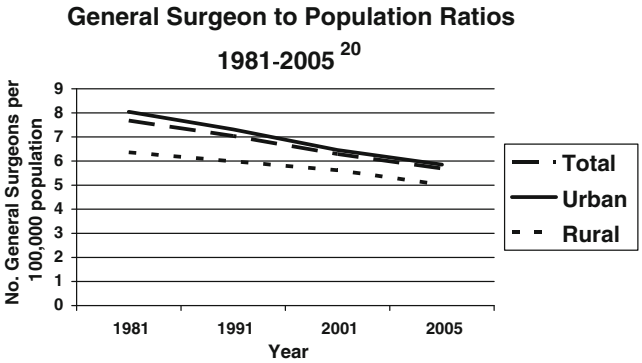

Fig. 1 The general surgeon to population ratio has declined steadily over 25 years from 1981 to 2005 (*solid line*). The decline has been evident in both urban (*long dashed line*) and rural (*short dashed line*) areas, but has been most marked in urban areas[20]

are not reproducing themselves, and our workforce is aging. Older surgeons staffing smaller hospitals may wish to retire if they could afford to, but cannot because there is no one to replace them. There are many factors motivating medical students to choose careers other than general surgery, including the perceived lifestyle of the general surgeon with inordinate amount of call, the inexorable pressure on reimbursement, significant professional liability, and lack of mentors. In their current situation, general surgeons are unhappy and may even dissuade their children and their residents from following in their footsteps. It is not unusual to see general surgeons whose fathers and grandfathers were general surgeons who now are begging off surgery as a career.

General surgery is a wonderfully fulfilling career, and there are possible solutions to restore its luster. Of course, we can increase reimbursement. General surgeons need representation at the table when reimbursement decisions are made, when CPT codes are reviewed, and when ICD-10 is implemented. In rural hospitals, employing at least two general surgeons who are adequately compensated including payment for call and care of the uninsured or underinsured and who are incentivized to work in a cooperative fashion covering for each other may serve as a satisfactory model.

But if the basic issue is that we have lost our professional standing and have become employees, then as employees, we should have the opportunity for collective bargaining and therefore some control over our existence. For our specialty to survive, the basic principle of collective bargaining is essential. I personally believe that some form of collective bargaining is inevitable, and with an impending workforce shortage, the need to restore our profession has never been more of an imperative. The current situation is detrimental to our patients, our families, and us. There is opportunity to control our own destiny. If others control it, they must ask this question: Will there be a general surgeon when you need one? The asnwer is “possibly not”.

Table 2 Successfully navigating public policy changes in health care

Component of patient care	The role of the surgeon
Patient safety	Promote a culture of safety
	Improve communication among other physicians and health care providers
	Support team training and simulation
	Assess safety culture with Safety Attitudes Questionnaire
	Adhere to evidence-based guidelines
	Adopt information technology
	Participate in NSQIP
	Be aware of public reporting requirements
Patient experience	Empathize with each patient
	Exchange of information candidly with patients during the informed consent process
	Avoid public discussion of patient care
	Explain new medications to patients
	Explain rationale for ordered testing and procedures
	Seek patients' feedback on their surgical experience and clinical encounters
Efficiency of care	Understand physician and hospital reimbursement challenges
	Consider costs in decision-making
	Seek feedback related to quality metrics
	Coordinate care with other physicians and health care providers
	Reduce unnecessary clinical variation by following guidelines
	Avoid duplicative testing
	Participate and seek funding in Comparative Effective Research
Life of the surgeon	Advocate for general surgery, be involved
	Actively engage and seek opportunity in health care transformation
	Educate medical students and residents on public policy changes
	Support medical students to explore careers in general surgery
	Proactively address new challenges as they emerge
	Appreciate that surgeons have long provided safe, high quality, low cost care

Conclusions

The transformation of health care resulting from public policy changes includes a shift of incentives from high-volume acute, episodic care to high-value-coordinated care across a disease spectrum. Integrated care brings together the various components of patient care so that, from a patient's perspective, the services delivered are consistent and coordinated. With their clinical knowledge and influence over the costs of health care, surgical leadership is critical to successfully navigate the health care landscape (Table 2). This symposium was designed to help surgeons understand the critical issues and emerging trends that they and their organizations will likely face in the foreseeable future. As presented, continued dialogue and greater attention and energy to innovation addressing the patient experience, patient safety, institutional solvency, and the profession of surgery offer a basis for the opportunity to thrive on the cutting edge of health care policy. Education of surgical residents and medical students on policy changes that benefit our patients such as value-based purchasing, coordinated care, and the delivery of safe patient care provide an additional opportunity for surgeons to actively engage in the current health care environment. The recognition of shared values among the diverse constituents affected by health care public policy changes will best prepare surgeons to successfully address new challenges as they emerge and offer us the greatest opportunity to maintain the specialty of general surgery at the forefront of providing safe, high quality, low cost patient care.

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