

Surgeon Frustration: Contemporary Problems, Practical Solutions

KENNETH H. COHN, MD, MBA; MICHAEL E. PEETZ, MD

abstract Surgeons are experiencing reduced job satisfaction and feelings of powerlessness and disenfranchisement. Workloads and complexity have increased, reimbursements have decreased, and the role of surgeon as team captain has diminished. Unfortunately, our training has not prepared us to deal with the challenges we now face. Practicing surgery requires a lifelong commitment not only to learning and clinical improvement, but also to developing effective interpersonal and communication skills. If surgeons master communication skills, team building, and conflict resolution, they might improve care, change their working environment, and regain their leadership role. □

rorism are additional global forces likely to increase demands on health care resources. Isolated or individual approaches will not improve our situation. Physicians face leadership challenges that require us to learn the skills that will lead to effective communication, team-building, and conflict resolution.

Cost-Quality Pressures

Profits vs patient welfare.

Medical professionals feel demoralized because they have lost control of the medical enterprise to administrators, who seem more interested in profits than patient welfare, and because their time is increasingly spent completing paperwork and debating with clerical personnel over authorizations to provide care. For example, Medicare initially increased the incomes of US surgeons, who traditionally had provided free care to indigent elderly patients. Lately, however, Medicare has decreased reimbursement and added regulatory complexity that requires specialized office assistance to understand complex, confusing statutes, obtain reimbursement, and avoid criminal penalties.

Budget cuts. As Medicare regulations complicated the provision of inpatient and outpatient care, the Balanced Budget Amendment, which called for \$115 billion in provider payment cuts by 2002, has cut nearly \$400 billion from the health care system.⁴ These budget cuts have hindered hospitals' ability to

Widespread frustration has engulfed our profession despite the pride we feel in surgeon-led innovations that have revolutionized the care of patients. Physicians feel like hamsters on a treadmill, who must run faster and faster to keep from falling behind.¹ Daugird and Spencer identified 11 distinct losses that physicians are experiencing, including losses of financial security, status, independent clinical decision-making, collegiality, freedom of choice of specialty and practice location, and power in hospital governance.² The proportion of US surgeons citing unfavorable changes in surgery as their principal reason for retirement nearly doubled between 1984 and 1995, from 29% to 56%.³

We are spinning in a vortex of forces beyond our control. These forces include cost-quality pressures, consumerism, aging, migration of care to the outpatient setting, and the nursing shortage. The September 11 terrorist attacks and the threat of bioter-

Dr Cohn is a practicing general surgeon, Cambridge Management Group, Cambridge, Mass, and Dr Peetz is a practicing general surgeon, Northern Colorado Medical Center, Greeley, Colo.

Correspondence: Kenneth H. Cohn, Cambridge Management Group, 725 Concord Avenue, Cambridge, MA 02138-1052; telephone (617) 576-3050; fax (617) 864-5161 (e-mail: CMG725@aol.com).

provide care for the uninsured and to obtain capital to improve facilities, acquire technology, and upgrade information systems⁵ needed to comply with privacy requirements, decrease medical error, and make it easier for patients to make appointments and refill prescriptions.⁶

Advances. Insights derived from the Human Genome Project⁷ and the expansion of innovative technology are also contributing to budgetary pressures. Our ability to perform tests and to institute more individualized therapies is outpacing our ability to afford these advances.⁸

Physician supply. The 3.3% average increase in medical care costs relative to the Gross National Product (GNP) parallels the increase in the number of physicians over the past 37 years.⁹ Until 1965, medical cost increases paralleled the rise in the consumer price index (CPI). The number of physicians has grown approximately 3% annually, exceeding attrition by 12,000–14,000 physicians per year. As long as health care remains predominantly an employee benefit, and financial constraints on individual patients are largely absent, the amount of health care provided will be proportional to the number of providers, and the policy of controlling costs by administrative restrictions will remain ineffective.⁹

Actual costs of administration. Woolhandler's¹⁰ calculations at over 5,000 US acute-care hospitals showed that they accounted for 37.7% of total costs at non-profit hospitals and for 44.4% of total costs at for-profit hospitals. Based on these data, Lewis estimated that \$470 billion is spent annually on administrative costs. In contrast, the annual cost of care for the over 42 million uninsured patients is estimated to be \$190 billion.⁹

Income issues. It has been estimated that clinical faculty have had to work 25% harder to maintain their level of earning.¹¹ Leblanc¹² found that the 2001 reimbursement level in actual dollars for inguinal hernia repairs was less than the 1993 level because expenses had increased significantly. Medical malpractice costs added \$66 billion to health care costs in 2001, when the median malpractice award jumped 43% to \$1 million and the abrupt exit of St. Paul from the medical malpractice insurance business resulted in premium increases of 20%–100%.¹³ Finally, pre-

scription drug spending, which has tripled in the past 10 years and is expected to increase from \$112 billion to \$243 billion by 2010, is likely to decrease the need for surgery (eg, peptic ulcer and heart disease) and to constrain payments to health care providers further.¹⁴

Quality. Newhouse¹⁵ described five possible causes of poor quality in health care:

1. patients' inability to distinguish whether a bad outcome is due to poor-quality care or underlying disease;
2. rapid technological change that makes knowledge quickly obsolete;
3. costs and reimbursement interactions make it difficult to set prices in a way that rewards neither overuse nor underuse and which offer equitable incentives for quality;
4. difficulties in measuring performance; and
5. the interplay of federal, state, and local regulations that create a complex system in which quality and efficiency may become secondary to political issues.

In addition, hospitals have reduced nursing staffing to barely adequate levels and have employed less qualified and less trained ancillary personnel,⁹ threatening the health of sick patients and increasing the workload and stress level of already overburdened nurses.

Physicians face leadership challenges that require us to learn the skills that will lead to effective communication, team-building, and conflict resolution.

Consumerism

Consumerism has become a dominant force shaping medicine, as patients have demanded greater convenience and mastery of the health care process. Patients and their families are taking an active role in broadening the definition of quality beyond clinical competence to include factors such as availability, cost, convenience, and willingness of providers to acknowledge suboptimal service and quickly repair damage to the relationship. Patients' willingness to travel to facilities outside their communities is broad-

ening competition and requiring innovative approaches to attract and retain patients.⁵ The willingness of physicians to accommodate the desires of their patients to obtain heavily media-promoted pharmaceuticals or unproven expensive diagnostic tests is an example of increasing consumer power.

Patients tend to view health-care benefits as an entitlement, not merely as insurance against catastrophic illness.¹ Increasing numbers of patients are using the Internet to educate themselves and to challenge physicians' opinions,¹⁶ placing additional burdens on surgeons, who feel increasingly cost- and time-constrained. It is easy for us to view patients' expectations as unrealistic complaints rather than information that helps us attract and retain loyal patients. Physician discomfort with consumerism is linked to the threat of malpractice suits and consumers' unwillingness to come to grips with a basic conflict: patients want to limit health care costs when the issue is tax increases, but want all possible interventions when they or their families need care.¹⁶ It should be pointed out, however, that consumerism

Consumerism may be a double-edged sword, not only increasing expectations at a time of shrinking resources but also rewarding providers who meet enhanced expectations.

may be a double-edged sword, not only increasing expectations at a time of shrinking resources but also rewarding providers who meet enhanced expectations. Herzlinger predicts an eventual system in which patients will have enough information to make intelligent decisions regarding insurance and providers; providers will be able to set their own prices based on clinical and service quality metrics; and multiyear health insurance policies will encourage payers to take a long-term approach to health maintenance and wellness.¹⁷

Aging Population

Conservative estimates are that the portion of the US population aged 65 and older will grow from 35 million in 2000 to 78 million in 2050, increasing from

13% to 20% of the population. Furthermore, the population aged 85 and older will increase from 4 million to over 31 million by 2050.¹⁸ As patients age, they tend to place increased demands on their community health care systems. However, some of these demands may be preventable, such as adverse drug events, delirium, falls, dehydration, malnutrition, pressure ulcers, thromboembolism, and stress-induced gastrointestinal bleeding.¹⁹ The health care needs and the acuity of illness of elderly patients tend to increase, which in turn increases the need for trained professionals to monitor patients' recovery.

If trends regarding aging, obesity, and diabetes continue, we might expect surgical morbidity to increase and further stress the resources of our health care system. Health care spending on the elderly is growing at an unsustainable rate, having increased nearly 25% from 1980 to 1995.²⁰ If spending increases at present rates, it will double the 1995 rate by 2020, reaching 10% of the Gross Domestic Product.²⁰ Dozet et al²¹ note that the diffusion of expensive technology, such as heart surgery and transplantation from younger patients to the elderly, limits funding for long-term care and prescription drugs. Zweiffel et al.²² contended that the health care expenses of the elderly population reflect a higher number of people in their terminal years of life, which causes per-capita health care expense to rise with age. They concluded that the fixation on aging makes it seem as though rising health care costs are inevitable, diverting attention from the real causes of increased healthcare expenses—failures in insurance markets, diffusion of technology, and the wrong incentives for patients, doctors, and hospitals.

Migration of Care to Outpatient Settings

The shift of care from inpatient to outpatient settings is one of the most dramatic ways that surgery has changed over the last two decades.⁵ A number of factors including cost pressures, minimally invasive procedures, consumerism, and improved drugs and home-monitoring devices have played a role in this change. However, the success of improved anesthetic and surgical techniques, which allow procedures to be done in free-standing ambulatory surgical centers, is costly to existing hospitals that have not developed such centers. Ambulatory surgical centers have siphoned off low-cost patients, requiring higher staffing ratios and additional resources for surgical

in-patients with chronic medical problems.

The Balanced Budget Amendment required many rehabilitation and skilled nursing facilities that had provided postoperative care options to close.⁶ Pressures in the global economy have forced families to relocate and/or to have both adults work outside the home and thus be less likely to provide care for an aging relative in their own home. Nurses, who can bridge the gap between hospital and outpatient services, would be an attractive solution to this problem were it not for the global nursing shortage.

Nursing Shortage

Demand for nursing services in the US is expected to skyrocket 22%, from 2.08 million in 1998 to 2.53 million in 2008.²³ An increase in the supply of nurses is important to our ability to meet the demands for care. However, from 1995 to 1999, the number of nursing graduates declined 13.6%, and the median age of existing nurses rose to over 43 years.²⁴ Only 10% of the nursing workforce is under 30. Women, who account for 92.8% of registered nurses, are 40% less likely to enter the nursing profession now than 20 years ago.²⁵ Moreover, the number of registered nurses who are no longer working in nursing has risen 22%, from 387,000 in 1992 to 494,000 in 2000.²⁶

Raising wages, decreasing education costs, and upgrading the image of nursing are long-term strategies to correct the nursing shortage; however, the impact of these interventions are unlikely to be felt in time to alleviate the growing shortage. Nor is importing nurses from other countries a viable long-term strategy. Instead, improving surgeon-nurse partnerships by managing disruptive behavior²⁷ and redesigning work to enable an aging workforce to be more efficient at providing and documenting care, using revised patient-care algorithms and hand-held or voice-activated technology appear to be promising solutions.²⁴

Regaining Leadership

By blaming quality issues on events outside our control, we have abdicated leadership. Surgeons have done little to decrease variability in the frequency with which procedures are carried out or to standardize indications for care.⁹ We have largely resisted computerized order entry, which can decrease complications due to medication errors. We should have a passion for measuring what we do, rather than

ignoring or avoiding it, and should recognize that subjective assertions of quality are meaningless in the absence of real data.⁹ Finally, we need to recognize that differences in the perception of quality between patients and physicians are likely to occur because of differences in outlook, training, and information. Physicians tend to judge one another on the basis of qualifications, reputation, and outcomes, while patients tend to respond to service quality issues, such as bedside manner, promptness, and helpfulness of staff.

Since surgical outcomes are tied to patient care processes such as nursing, anesthesia, and pharmacy, which we can influence but not control, surgeons need to be in the vanguard, advocating for evidence-based innovations that improve patient care. Our professional training and experience facilitate taking prudent risks, making decisions based on limited information, and revising plans as we obtain additional information. We are able to learn new skills rapidly, as evidenced by the numbers of practicing general and thoracic surgeons who graduated before 1988 and who currently practice laparoscopic and thoracoscopic surgery.

Clinical training alone is
no longer sufficient to ensure
quality patient care.

Change feels like failure when we are in the middle of it, and failure is something that our professionalism programs us to resist. Yet, turning inward and blaming others fails to solve the systemic problems that interfere with optimal patient care. We have not been taught how to work in rapidly changing organizations, where building consensus trumps the hierarchical command-and-control mechanisms under which we trained. We can influence care processes, but cannot control the care patients will experience. *The only control that we have is our reaction to the changes to which we are exposed daily, choosing teamwork and improvement of our care processes over blaming individual health care workers.*

New Skills for a New Age

Clinical training alone is no longer sufficient to ensure quality patient care. We must become enlight-

TABLE 1. DIFFERENCES BETWEEN CLINICAL OUTCOME SKILLS AND PROCESS SKILLS

Category	Outcome Skills	Process Skills
General concept	How to weight variables to care for individual patients	How to mobilize team members to accomplish tasks in a changing environment to benefit multiple patients
Timeframe	Lagging: Do not know until end of timeframe what outcome has been achieved	Leading: Can promote (if done well) or inhibit (if done poorly) desired outcome
Surgeon's role	Proxy: Ultimately responsible, but not omnipresent	Coach: Building individual skills Supporting team efforts
Surgeon's comfort level	High: Extensive experience, intuitive decision tree	Low: Little previous experience; counterintuitive; possible to influence, but impossible to control

ened surgical leaders, which requires that we learn *process skills* such as communication, team-building, and conflict resolution.

A process involves a series of actions that leads to an end.²⁸ Surgeons deal frequently with processes during consultation, admission, treatment, and recovery. Process skills help bring projects successfully to a conclusion. Process skills contrast with clinical outcome skills (*Table 1*). Briefly, process skills describe how to mobilize team members to accomplish tasks, are indicators of successful outcomes, require surgeons to coach rather than to dictate, and may be uncomfortable initially because of surgeons' lack of prior training in process skills.

We have divided process skills into three categories: communication skills, team building/maintaining skills, and conflict-resolution skills. Wide overlap exists among these categories.

Communication Skills

In a 1997 paper that surveyed 43 residents and attending surgeons, all responses to the question, "What should be the aims of a surgical residency program?" cited technical skills, and all attending surgeons mentioned judgment; all 10 participating surgical nurses listed communication skills.²⁹ In follow-up discussions, the nurses felt that the current system of training was inadequate to prepare residents to care for patients in a multidisciplinary, collaborative setting.

The communication skills of listening, speaking, and writing are fundamental to building trust and shared vision, which are the foundation of team rela-

tionships. Many surgeons effectively use these skills when communicating with referring physicians, but not with staff or patients.

Listening is the first communication skill we address because it is the most underestimated and least well-taught of the three aforementioned skills. Listening to people makes them feel that their concerns matter.

A mnemonic for improving listening skills is **CLOSE**.³⁰

- **C**oncentrate on the speaker, maintaining comfortable eye contact for 6–10 seconds at a time without staring, giving the person the feeling that nothing else matters but what the speaker is saying.
- **L**isten with multiple senses, paying attention to the speaker's body language, facial expression, and tone of voice, in addition to the content of the message.
- **O**pen one's stance to convey receptivity to the speaker's message; avoid crossing one's arms over one's chest, which imposes a barrier between the speaker and listener.
- **S**uspend judgment, to maintain objectivity.
- **E**mpathize, trying to put oneself in the speaker's frame of reference, with summary comments, such as, "Do I understand you to say..." to build trust and credibility.

Speaking clearly and succinctly is at a premium in an era of information overload. We expect people to deliver the essence of their argument in little more than a 30-second sound bite. The opening sentence

TABLE 2. LEADER'S ROLE DURING THE STAGES OF GROUP FORMATION

Stage	Purpose	Leader's Role
Forming	Develop trust and mutual respect	Help structure agenda, vision, goals, and timetable
Storming	Negotiate diversity, boundaries, and control issues	Bring conflicts into the open Listen actively and empathically Depersonalize conflict Negotiate solutions in which both parties gain
Norming	Build cohesion	Provide information or suggest where to find it Explain terms, concepts, and techniques to bring everyone up to speed Help group members to become agile problem-solvers
Forming	Improve functioning	Explore new methods to solve problems Achieve improved outcomes Inspire excellence among fellow team-members and other teams

should provide an overview on which to hang supporting facts. The speaker should work within the listener's primary mode of thinking as well. For people whose dominant sense is sight, a speaker is most convincing when he or she paints a graphic image that is easy to visualize. Similarly, it helps to use analogies that are based on a listener's occupational background or extracurricular interests.³¹

Effective writing skills for science and medicine require precision, clarity, and brevity. Precise writing chooses words that convey rigorous and exact meaning. Clarity leaves no doubt regarding the purpose of the communication or the thought process behind it. Brevity is essential in today's fast-paced electronic world. We have so many items to read in a given day, that we are likely to put aside anything over one page.

Team-building

No matter how effectively an individual physician communicates, the pace of change and the demand for multiple skills require physicians to partner with others to achieve common goals. Effective leaders translate their vision for the future into a sustainable plan using teamwork. However, few physicians have received formal training in the mechanics of high-performance teams, which work by consensus rather than by command-and-control.³²

A team is a small number of people (2–25) with

complementary skills who are committed to a common purpose, performance, goal, and approach for which they hold themselves mutually accountable.³² Complementary skills include technical expertise, problem-solving ability, and interpersonal skills, such as risk-taking, providing and receiving feedback, objectivity, active listening, and recognizing and supporting the interests and achievements of others. Common purpose creates a leveling effect, which decreases the importance of titles and rank.

The importance of teams, and thus our dependence on others, is likely to increase as we move from leadership based on knowledge of a discipline to leadership based on knowledge of disease. Interdisciplinary teams are key to process improvement, decreased hospitalization and emergency room use, and better outcomes.³³

Leadership in a team tends to rotate based on expertise in a given area, which physicians—used to being in control—may find difficult to accept. In a high-performing team, members abandon their egos to others' talents to advance the work of the team. Leaders function by generating trust and credibility, providing direction and perspective, focusing on deadlines and results, and creating “enemies” outside the organization (eg, competing health systems) to inspire employees. Since teams tend not to possess all necessary skills at the outset, they often go through four stages:³⁴

TABLE 3. PROPOSED CHECKLIST FOR STARTING MEETINGS

As team members, we resolve to:

- Show up on time for meetings and notify leader in advance when unable to be present
 - Actively listen and participate
 - Openly exchange ideas and viewpoints
 - Build on one another's ideas
 - Refrain from personal criticism
 - Remain focused on the tasks for which we are responsible
 - Monitor our progress at regular intervals
 - Share responsibility for deadlines and ownership of results
 - Develop win-win solutions
 - Respect members' confidentiality
-

- **Forming.** Setting the agenda, sharing information, and developing a climate of trust and mutual respect.
- **Storming.** Negotiating issues of diversity, control, problem-solving, and conflict.
- **Norming.** Building cohesion, establishing guidelines for the flow of information, and developing agility in solving problems.
- **Performing.** Increasing problem-solving ability, exploring new methods to achieve improved outcomes, and inspiring excellence among fellow team members and other teams.

During forming, leaders can help to structure an agenda; during storming, they can bring conflicts into the open and demonstrate active listening; during norming, they can build cohesion and problem-solving ability; during performing, they can explore new methods to solve problems (*Table 2*).

Although leaders may be uncomfortable with conflict initially, they learn from experience that teams need to go through the storming phase to reach the performing stage.³⁴ Team members can depersonalize conflicts if they can agree upon a checklist that can guide their interactions, before they address project tasks (*Table 3*). Some actions that we have found helpful include arriving on time for meetings; openly exchanging ideas and viewpoints; critiquing ideas, not people; monitoring

progress regularly; sharing responsibility and ownership; generating solutions in which both parties gain; and maintaining confidentiality.³⁵

Conflict Resolution

Conflict is a struggle between interdependent people, where incompatibilities are perceived to exist and emotions are aroused. Conflict is predictable when people with different backgrounds work together for the first time. Therefore, we should view conflict as creative abrasion to be discussed openly, rather than failure to be avoided. Conflict creates tension, which leads to renewed energy and focus once group members have resolved the conflict successfully. We can view differences in outlook as creative assets rather than as liabilities, in which thesis and antithesis lead to a synthesis that surpasses previous approaches, if we are willing to be flexible rather than controlling.

Physicians might want to avoid conflict for many reasons. A major reason we shy away from conflict seems to arise from our lack of experience in handling conflict-laden situations. Leaders can decrease the potential for conflict by encouraging everyone on the team to contribute to a shared vision for the future. Surgeons especially must deal with our impatience to accomplish something tangible; thus, we must invest time to become acquainted with fellow team members and understand what beliefs, values, and attitudes shape their thinking. The process, or journey, is as important as the destination.

Surgeons especially must deal
with our impatience to accomplish
something tangible.

Although a leader's singular job is to get results, multiple leadership styles may be necessary.³⁶ The coercive form of leadership, which demands immediate and unquestioning compliance, may work in a crisis and tends to be routine in our operating room culture, where we take pride in overcoming obstacles to achieve outstanding outcomes. The disadvantage of overusing coercive leadership is that it produces resentment and apathy in non-crisis situations and contributes to staff turnover.³⁷ Leaders who ask questions learn more about the complexity and inter-

dependence of problems and thus tend to achieve improved long-term solutions compared with people who bark out orders. Authoritative leaders, who mobilize people toward a shared vision, have the most positive effect on an organization's working environment. Petzinger wrote: "In a time of dizzying complexity and change, they realized that tightly drawn strategies become brittle, while shared purpose endures."³⁸ Coaching leaders, who develop people's skills for the future, democratic leaders, who build consensus through participation, and affiliative leaders, who build emotional bonds and harmony, also have a positive effect. The most effective leaders use multiple styles seamlessly.³⁶

Conflict left unresolved continues to simmer. However, successfully managed conflict clears up misunderstanding, decreases anger and resentment, heightens understanding, and fosters the development of innovative services for patients and improved surgeons' and hospitals' standing in the community. If we believe that incremental solutions are inadequate to address current problems in our health care system, we need to foster creativity and innovation, celebrating differences in background and perspective among team members. Innovation will be the defining competitive advantage among 21st century organizations.

Teams that are performing well pay attention to how well they are communicating, meeting others' needs, solving problems, and using their resources; they empower their members to protect group process. Members of these teams listen actively to one another, are honest about their differences, and develop multiple alternatives. Nevertheless, emotions arise, making it important to have a mechanism for communicating anger in a nonjudgmental fashion. A generally accepted principle is to send "I" rather than "you" messages and to avoid inflammatory modifiers, such as "never" or "always." Using "and" or "at the same time," rather than "but" gives the respondent a feeling of being listened to rather than negated. The following format can convey feedback and minimize defensiveness in the respondent, compared to yelling or mocking the respondent:³⁹

"When I saw/ heard/ read...

I felt concerned/ worried/ angry...

Because I thought...

What I would appreciate in the future is..."

Conclusion

In the past, we defined the quality of our services much more by our own standards than by outcomes derived by outsiders. In return for our dedicated service, we expected autonomy to practice without standardization, protection from outside market forces, substantive incomes, unquestioned referrals, and the ability to attend educational conferences and to have vacations at times of our choosing.

However, the rapid and continual change that we now experience was not part of that understanding. Managed care has increased regulatory oversight and paperwork, demanded more accountability for costs and outcomes, and decreased our reimbursement; patients and their families are becoming increasingly knowledgeable, demanding of our time, and willing to travel to see other physicians and alternative care providers; aging patients are placing additional demands on scarce health care resources; care is delivered increasingly at outpatient settings; and a global nursing shortage threatens the foundation on which traditional care is based.

Managed care has increased regulatory oversight and paperwork, demanded more accountability for costs and outcomes, and decreased our reimbursement.

We need to develop a new compact that is focused on the needs of patients and their families, one that offers seamless, interactive, disease-based care; that encourages physicians to work interdependently with management and clinical staff, rather than independently; and that fosters accountability for results (ie, quality, safety, cost, and satisfaction).

The Institute of Medicine Report, *Crossing the Quality Chasm*, has identified the variation of care and its consequences.⁴⁰ Similarly, we know that physicians affect the costs of care through their ordering of tests and procedures.⁶ Although we complain about the consequences of delays in diagnosis and treatment, we spend little time educating colleagues in primary care about readily available cost-effective algorithms.

Leadership is the only alternative to victimhood. Certainly, taking the leadership path will involve

more time in meetings, initial frustration in dealing with teams over whom we have influence but not control, and growing pains from learning new process skills. However, building a shared vision of the future using the process skills of communication, team-building, and conflict resolution will give us the opportunity to lead rather than be led, to be part of a cause larger than ourselves, and to leave a legacy about which we can be proud. The choice is ours: either we can continue to complain about the alligators that challenge us, or we can take action together to drain the swamp.

Learning process skills is a lifetime journey that is an integral part of learning the craft of surgery. The skills we have outlined are vital to success, not only in coping with the challenges of managed care but also in mastering relationships necessary for outstanding surgical outcomes: meaningful two-way dialogue with patients, families, colleagues, and allied health care professionals. Process skills combined with outcome skills increase the likelihood of outstanding outcomes.²⁸

Leadership is the only alternative to victimhood.

We are not suggesting that surgeons place less importance on clinical outcome skills such as judgment and technique, which are the *sine qua non* of successful surgical practice. Collins and Porras wrote that visionary enterprises do not simply balance *between* two sets of skills; they *do* both sets of skills.⁴¹ Instead of being oppressed by the “tyranny of the ‘or,’” they liberate themselves with “the genius of the ‘and.’” They quoted F. Scott Fitzgerald: “The test of a first-rate intelligence is the ability to hold two opposed ideas in the mind at the same time and still retain the ability to function.”

Cross-training athletic regimens have become popular because they produce improved strength, better performance, and decreased risk of burnout and crippling injury. A recent study of 382 practicing US surgeons documented emotional exhaustion in 32% and feelings of depersonalization and low accomplishment in an additional 13% and 4%, respectively, prompting comment that we have taught residents how to perform surgery but not how to live life as a surgeon.⁴² We need to consider a cross-training pro-

gram for surgeons that allows us to build up our process skills and avoid feeling at the mercy of change.

“Physician leaders have not played their rightful role in setting the nation’s health care agenda.... If we do not get the skills we need and take a more active role in solving these problems, others will solve them for us,” Debas noted.¹¹ Although the ideal time to institute a training program in process skills is at the beginning of residency, we can improve our process skills through an iterative approach, similar to the way we learn the craft of surgery. The practice of competent surgery requires a lifelong commitment to learning and improvement and to the development of interpersonal and communications skills.⁴³ What better way for surgeons to improve communication skills than to ask them to teach their peers? Improving our process skills will improve our care processes, enhance treatment outcomes, and result in a better environment for our patients, co-workers, colleagues, families, and selves.

This paper is not based on a previous communication to a society or meeting. The authors have received no financial support to write this article. The authors acknowledge Drs. Murray Brennan, Jennifer Daley, Horace Henriques, Michael Ivy, Frank Johnson and Messrs. John Hennessey and Robert Harrington for their invaluable critiques of this manuscript; Ms. Susan Moore for graphic assistance; and Ms. Carmen Urich for information assistance.

References

- Morrison I, Smith R. Hamster health care: time to stop running faster and redesign health care. *BMI*. 2000;321:1541-1542.
- Daugird A, Spencer D. Physician reaction to the health care revolution: a grief model approach. *Arch Fam Pract*. 1996;34:497-501.
- Jonasson O, Kwaka F. Retirement age and the work force in general surgery. *Ann Surg*. 1996;224:574-582.
- Scott JS. The healthcare crisis is back again. *Healthcare Finance Management*. 2002;56:26-27.
- Welling RE, Kerlakian GM, von Zychlin C, et al. The health care crisis: impact on surgery in the community hospital. *Arch Surg*. 2001;136:176-179.
- Goldman L. Key challenges confronting internal medicine in the early twenty-first century. *Am J Med*. 2001;110:463-470.
- Collins FS. Shattuck lecture: medical and societal consequences of the human genome project. *N Engl J Med*. 1999;341:28-37.
- Kleinert S. Rationing of health care: how should it be done? *Lancet*. 1998;352:1244.
- Lewis FR. Costs, competence, and consumerism: challenges to medicine in the new millennium. *J Trauma*. 2001;50:185-194.
- Woolhandler S, Himmelstein DU. Costs of care and administration at for-profit and other hospitals in the United States. *N Engl J Med*. 1997;336:769-774.
- Debas HT. Impact of the health care crisis on surgery: perspective of the dean. *Arch Surg*. 2001;136:158-160.
- Leblanc KA, LeBlanc ZZ. Medicare reimbursement changes for selected hernia repairs from 1993 to 2001. *Surg Rounds*. 2002;25:334-340.
- Kertesz L. What is fueling the increase in health care costs: mandates,

- regulation, litigation, fraud and abuse are major drivers. *Healthplan*. 2002;43:12-16.
14. Frist B. Public policy and the practicing physician: the importance of a larger view. *Ann Thorac Surg*. 2001;71:1410-1414.
 15. Newhouse JP. Why is there a quality chasm? *Health Affairs*. 2002;21:13-25.
 16. Bottles K. Why are physicians so angry? *Physician Executive*. 2000;26:44-48.
 17. Herzlinger RE. Let's put consumers in charge of health care. *Harvard Bus Rev*. 2002; (July/August):44-55.
 18. A statement of principles: toward improved care of older patients in surgical and medical specialties. *JAGS*. 2000;48:699-701.
 19. Pories WJ, Solomon DH, Burton JR. Facing 21st century demographics: management of the surgical patient. *Current Surg*. 2000;57:519-520.
 20. Shactman D, Altman SH. Conference report: the United States confronts the policy dilemmas of an aging society. *Health Affairs*. 2000;19:252-258.
 21. Dozet A, Lyttkens CH, Nystedt P. Health care for the elderly: two cases of technology diffusion. *Social Sci Med*. 2002;54:49-64.
 22. Zweifel P, Felder S, Meiers M. Aging of population and health care expenditure: a red herring? *Health Economics*. 1999;8:485-496.
 23. Levine L. *A shortage of registered nurses: is it on the horizon or already here?* Washington, DC: Congressional Research Service Report; May 18, 2001. Report RL30974, pp. 1-20.
 24. Strategies to reverse the new nursing shortage: A policy statement of the American Association of Critical Care Nurses (AACN), American Nurses Association (ANA), American Organization of Nurse Executives (AONE), and National League for Nursing (NLN), January 31, 2001. http://www.aone.org/news/tricouncil_shortage%20strategies.htm
 25. Dasso E, Wilson T. New model helps find missing link between financial and clinical health management. *Physician Executive*. 2001;27:51-56.
 26. Jaffe BM. Where have all the nurses gone? *Surg Rounds*. 2001;24:290-291.
 27. Erickson JJ, Warshaw AL, Ditomassi M. The health care worker shortage: suggested responses from the surgical community. *Bull Am Coll Surg*. 2002;(June):13-18.
 28. Donabedian A. The quality of care: how can it be assessed? *JAMA*. 1988; 260:1743-1748.
 29. Cohn KH, Walsh DB, Farrell TM, et al. The odyssey of residency education in surgery: experience with a total quality management approach. *Current Surg*. 1997;54: 218-224.
 30. Caro J. *The Power of Effective Listening*. Shawnee Mission: National Seminars Publications; 1989.
 31. Imel S. *New Views of Adult Learning*. Clearinghouse on Adult, Career, and Vocational Education: Trends and Issues. 1999;5:1-2.
 32. Katzenbach JR, Smith DK. The discipline of teams. *Harvard Bus Rev*. 1993;(March-April):111-120.
 33. Brennan MF. The surgeon as a leader in cancer care: Lessons learned from the study of soft tissue sarcoma. *J Am Coll Surg*. 1996;182:520-529.
 34. Tuckman BW. Developmental sequence in small groups. *Psych Bull*. 1965;63:384-399.
 35. Schwartz RW, Cohn KH. The necessity for physician involvement in strategic planning healthcare organizations. *Am J Surg*. 2002;184:269-278.
 36. Goleman D. Leadership that gets results. *Harvard Bus Rev*. 2000;(March-April):78-90.
 37. Rosenstein AH. Nurse-physician relationships: impact on nurse satisfaction and retention. *Am J Nurs*. 2002;102:26-34.
 38. Petzinger T. *The New Pioneers: The Men and Women Who Are Transforming the Workplace and Marketplace*. New York: Simon & Schuster; 1999,17.
 39. Lachman VD. Breaking the quality barrier: critical thinking and conflict resolution. *Nurs Case Manag*. 1999;45:224-227.
 40. Weber DO. One giant leapfrog for health care. *Physician Executive*. 2001;27:6-11.
 41. Collins JC, Porras JI. *Built to Last: Successful Habits of Visionary Companies*. New York: Harper Business;1994:44-45.
 42. Campbell DA, Sonnad SS, Eckhauser FE, et al. Burnout among American surgeons. *Surgery*. 2001;130:696-705.
 43. Ritchie WP. The measurement of competence: Current plans and future initiatives of the American Board of Surgery. *Bull Am Coll Surg*. 2001;(April):10-15.

CS



Share your thoughts
with colleagues on anything
you've read in

CONTEMPORARY
SURGERY

Send your letters via:

E-mail: [contemporarysurgery@
dowdenhealth.com](mailto:contemporarysurgery@dowdenhealth.com)

Fax: (201) 391-2778

or Mail: Contemporary Surgery, Letters
110 Summit Avenue, Montvale, NJ 07645