My subject tonight is the dichotomy between the success of individual physicians and what I believe to be the failure of our profession to assume a true leadership role in furthering the health of Americans. I believe that there is a narrow window remaining during which professional leadership is possible, but I believe even that window is beginning to close.

Health care is about access, quality, and cost. Unfortunately, organized medicine lost the opportunity to provide real leadership in areas of cost and access. The profession has been reactive, if not reactionary, as well as defensive, complaining, and often whining, instead of showing leadership in the public interest. As the cost of health care escalated for >3 decades, we, as a profession, had an opportunity to seriously control the rate of rise of costs in health care. Instead, we added one technology after another, often without replacing the previous technology. I am still professionally embarrassed by an experience I had several years ago in which I argued at a program of Continuing Medical Education that 90% to 95% of patients with mitral valve prolapse could be evaluated with a careful history, a thorough physical examination, and an ECG. I was attacked by several members of the audience not on the basis of scientific merit, but because I was “taking away [their] bread and butter” by not recommending an echocardiogram, treadmill test, and Holter monitor for each suspected patient; these patients constituted perhaps as many as 6% to 8% of the total practice of those present.

Our assertion of the primacy of the patient-doctor relationship without serious attention to the cost-effectiveness or marginal value of what we did contributed to a healthcare system that now consumes one-seventh of the gross domestic product and in which cost is beginning to accelerate again. As a consequence of our professional failure to control healthcare costs, forces outside the profession undertook to do so. Corporate purchasers, insurance companies, managed care companies, and the Balanced Budget Agreement were among the powerful forces acting to control the rate of rise of healthcare costs. Efforts to control costs were made that were often neither in the best interest of the profession nor of the patients.

We have not done any better with access. The number of uninsured Americans continues to rise every year; >44 million were uninsured last year. Even with incontrovertible evidence that those who are uninsured receive less than optimal health care, organized medicine has, until very recently, done little to stem the rising tide of the uninsured and of the additional millions of underinsured individuals. It is ironic that our profession bitterly fought the enactment of Medicare and Medicaid legislation when these efforts dramatically increased the number of insured Americans and ultimately produced a financial bonanza for physicians. With the notable recent exception of the leadership by the American College of Physicians, a sincere, concerted effort to extend insurance coverage to all Americans has been lacking. As a result, many other organizations are now taking the lead in extending coverage to the uninsured. The recent alliance of Families USA and the Health Insurance Association of America is an example of the kind of serious effort to reduce the number of uninsured that is being led by organizations outside of the profession. These efforts will help patients to varying degrees, but we, as professionals, are not effectively participating.

I would like to see our profession, and particularly the American College of Cardiology, assume substantial leadership in areas of cost and access to care. However, I believe the last remaining major opportunity for credible, compelling, aggressive leadership is in the area of quality of health care. I will argue that the internalization of continuous quality improvement into cardiological practice and into the policies of the College of Cardiology and its members in a manner that is serious and publicly responsible can provide a method for reestablishing professional leadership in health care and, in so doing, ultimately improve access and control healthcare costs.

The Institute of Medicine defines quality of care as “the degree to which health services for individuals and populations increase the likelihood of successful health outcomes and are consistent with current professional knowledge.” Quality of care can be measured. This requires data. It has been repeatedly demonstrated that physicians who claim to know quality when they see it are often inaccurate. These data have produced incontrovertible evidence that a substantial gap exists in this country between the quality of average care and the quality of best care and that important opportunities exist for introducing continuous quality improvement into the healthcare system to close that gap.

Quality of care can be measured both by processes and by outcomes. The role of β-blockers and aspirin in the management of acute myocardial infarction or the use of warfarin in the atrial fibrillation occurring in those aged 65 to 80 years are well-documented examples of “current professional knowledge” that define good processes of care, yet the
appropriate use of these agents is limited to only 40% to 50% of eligible patients treated by cardiologists; an even lower percentage of eligible patients is treated by other physicians.3

I have had the privilege to chair the New York State Cardiac Advisory Committee, which has been documenting the outcomes of coronary bypass surgery. More recently, the outcomes of angioplasty, pediatric cardiac surgery, and valve surgery have been determined. The gap between average and best care was particularly striking for coronary artery bypass surgery in the first years of evaluation. In 1989, in-hospital risk-adjusted mortality from coronary artery bypass grafting ranged from 2.46% to almost 8.97% when comparing the outcomes of performance in the top tercile of hospitals performing this surgery versus the bottom tercile—a 3-fold variation.4 Not surprisingly, the highest mortality occurred in low-volume institutions with low-volume surgeons. Reporting the results of bypass surgery had a remarkable effect on performing this surgery versus the bottom tercile—a 3-fold variation.4 Not surprisingly, the highest mortality occurred in low-volume institutions with low-volume surgeons. Reporting the results of bypass surgery had a remarkable effect on the gap in outcomes. Within 4 years, in-hospital risk-adjusted mortality for the top tercile had decreased to 2.20%, but the operative mortality for the bottom tercile had declined to 2.80%. This trend has continued, such that the gap between the highest and lowest tercile has continued to close and overall outcomes have also improved. There is also a lesson in the New York State studies. When Hannan et al8 examined a large number of variables to risk-adjust outcomes, they discovered that risk was overwhelming determined by a half-dozen parameters.

Our studies at the Institute of Medicine have emphasized that the gap in health care is not about fee-for-service versus managed care. One can find examples of higher quality care for some conditions in fee-for-service plans and some conditions in which the higher quality of service is found in managed care.3 In both situations, substantial gaps persist. Many physicians think that they know quality of care when they see it and that they know who the best performers are in their community. In many situations, this is simply not true. A cardiologist who refers a patient for a transurethral resection rarely knows the actual morbidity and mortality results of the urologist to whom the patient is referred. The urologist may have 2 or 3 times the acceptable morbidity and mortality, without the knowledge of the referring cardiologist.

In New York state, a highly regarded, high-volume cardiac surgery program repeatedly had risk-adjusted mortality rates of >2 SDs above average for the state. The physicians and staff at the hospital insisted that the defect was in the risk-adjustment methodology and that their results were outstanding. When we sent a site team to the hospital, the team discovered that operative mortality for elective coronary bypass patients was excellent, but that substantial excess mortality existed in unstable patients admitted through the emergency room. On examining the system of care, the team discovered that a substantial difference existed between this hospital and others in the state. All other surgical programs stabilized such patients in the emergency room before taking them to the operating room. The surgeons in this hospital were so confident of their technical skills that their strategy was to move the patients to the operating room as rapidly as possible, rather than stabilizing them in the emergency room. It was in this group of patients that mortality was excessive. When this was pointed out to the surgeons, they changed their routine to a stabilization strategy and proceeded to operate on 55 patients before they had a death. In this case, the surgeons indeed had technical skills, but the system of care was defective.

What is remarkable to me is how often such less-than-optimal systems persist without the knowledge or attention of the physicians who are performing them. When the New York State Advisory Committee initiated studies of pediatric cardiac surgical care, we were stunned to find a university hospital with mortality rates that were totally unacceptable. A site visit revealed children being cared for in the same postoperative recovery room as adults by nurses and anesthesiologists without the necessary special training for dealing with pediatric patients. Many other flaws existed in the system of care. The hospital eventually agreed to suspend pediatric cardiac surgery pending a reorganization of their system of care. Without the data and disclosure, children would still be dying unnecessarily in that institution.

We know that the introduction of systems for continuous quality improvement can substantially improve outcomes. There are many examples of critical pathways being applied in cardiovascular surgical procedures. Cardiology programs such as that at the University of Virginia are leaders in the development of computerized patient records, which are essential to the provision of timely, appropriate, and nonredundant care. Among the leaders in the use of information systems to improve quality of care is the Intermountain Health System of Utah. Investigators there have documented that a computerized system for ordering antibiotics in the intensive care unit improved the accuracy of antibiotic use, avoided drug-drug interactions and allergic responses, and reduced injuries. An injury reduction rate of 59% was associated with a 29% reduction in cost for patients in that intensive care unit, with a significant reduction in length of stay as well.4 Improved quality of care can save money!

Quality of health care represents an opportunity for our profession, and particularly for the College, to exert important national leadership. Leadership implies being proactive rather than reactive.

Although I am proud of the effort made by the Institute of Medicine to identify the importance of errors in health care in To Err is Human6 and of the vigorous public/private responses to that report, I remain concerned by the images of organized medicine, the American Hospital Association, and others as reacting to the report, rather than themselves having taken a leadership role. The Leap Frog Group of 8 major American corporations will now require >85 managed care organizations to document plans for computerized order entry and other efforts to decrease errors. The President has instructed the Health Care Financing Administration to require Medicare providers to demonstrate patient safety programs. These are all positive steps, but they are again responses by the profession to outside pressures. Will you as Fellows of this College do your part to ensure patient safety and decrease errors in your practices and your institutions?

What can the College of Cardiology do?

1. It can publicly commit itself to the support of continuous quality improvement as an integral part of cardiological care in America. This will require enhanced standardized data systems for collecting comparable data about the outcomes and processes of care.
2. It can publicly commit itself to closing the gap between average care and best care for cardiological conditions in the United States for all Americans and disadvantaged and underserved populations.

3. It can introduce the principles of quality improvement into the educational program of medical students, residents, and fellows. These steps are essential for the profession to internalize a quality agenda, rather than only respond to outside threats.

4. The College can identify the best practices, critical pathways, and other strategies that have been developed within the field of cardiology so that they can be applied by institutions and practitioners throughout the field. Included in this agenda should be support for computerized patient records and for computerized data entry. Again, there are outstanding successes in this regard in isolated programs in cardiology around the country that could be generalized through the College.

5. The College can define the ranges of high-quality performance, with or without risk adjustment, for common conditions and procedures. This can be presented as the mean ± 2SDs of actual outcomes or it can be provided on the basis of results achieved in excellent programs. In either case, the patient undergoing a referral for a particular procedure should be given a card describing the acceptable range of outcomes for that procedure. These data need not be developed for every condition or procedure because a relatively small number of situations characterize much care. These situations should include medical and surgical management.

6. When a referral is made, the consultant or surgeon should provide the patient with a statement regarding his or her morbidity and mortality results so that the patient can compare these results to the College’s data.

7. The College should vigorously pursue and articulate the critical relationship between minimal volume and outcomes of cardiological care. Although patients and families may choose the convenience of a local, low-volume facility, they should know the data about the volume-outcome relationship when they make their decisions. They should be given the volume recommendations on the same card that describes acceptable outcomes. If insurers or managed care organizations are choosing less costly providers who have a poorer quality of care and outcomes, purchasers and the public should know this. Some will argue that in any such evaluation process, there will be winners and losers. However, if the descriptions are the range of acceptable outcomes, motivation exists for all performers— institutions and individuals—to improve their results.

8. This annual meeting should permanently feature systematic approaches to improving cardiological care. This year, 2200 papers were presented. As far as I can see, 12 might be considered approaches to systems improvement in care, and 4 papers demonstrated improved results and lower costs for creating systems of care for patients with congestive heart failure. Will you as a Fellow of the College seek to implement or strengthen such programs in your institution or practice? Valeti et al? demonstrated that a simple reminder about the indications for warfarin and aspirin appended to the routine ECG report of patients with atrial fibrillation increased appropriate warfarin use by 35% to 39% and appropriate aspirin use by 62%. Will you test this hypothesis in the ECG laboratories of your hospital and practice?

9. The significance of a College initiative in quality would be dramatically enhanced by the active participation of patients and patient groups in the process. Creating procedures in which nonphysicians are engaged in reviewing the data and articulating policies is an essential step in demonstrating that the activity is not simply a self-serving one, but is, in fact, devoted to the public interest. At a time in which the authority of physicians to define quality and to articulate their positions exists in a contentious managed care, market-driven environment, alliances with consumer groups provide a powerful way to deal with these problems.

10. Finally, the creation of formal alliances with corporate purchasers is also an important strategy in promulgating quality and in identifying those factors that tend to inhibit or interfere with the best procedures or outcomes in quality. The College should offer to develop acceptable performance standards that can be shared with corporate purchasers when they contract for care.

While the economy is booming, corporate profits are rising, and unemployment is at a very low level, there is very little pressure for major tinkering with the healthcare system. A recession will change this dramatically. At that time, purchasers will reassess costs in a substantial way. As a profession, we must be able to change the argument from one involving cost to one of value, ie, what it is that one is purchasing. Value must relate those expenditures to the quality of care that is being provided. Without good measurements, we will not have evidence that we have closed the gap between average and best care and that we have the information systems and the data to document these outcomes. It will be difficult to prove value.

You, as fellows, have each accomplished a great deal professionally. Now is the time to determine if the College as an entity that includes so many distinguished individuals can seize the lead in creating a high quality, optimal value healthcare system. President Garson said yesterday in reviewing the American Health Care System that “We must do something.” I agree. Carpe diem: seize the day. Lead a revolution in quality of health care. I believe that the College is positioned to play a crucial national leadership role to define and to maintain the highest quality of cardiological care. Such an effort by the College is entirely consistent with its tradition, values, and promise.

References

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Kenneth I. Shine

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