Quality, Safety, and Transparency: A Rising Tide Floats All Boats

Peter C. Pairolero, MD

Division of General Thoracic Surgery, Mayo Clinic College of Medicine, Rochester, Minnesota

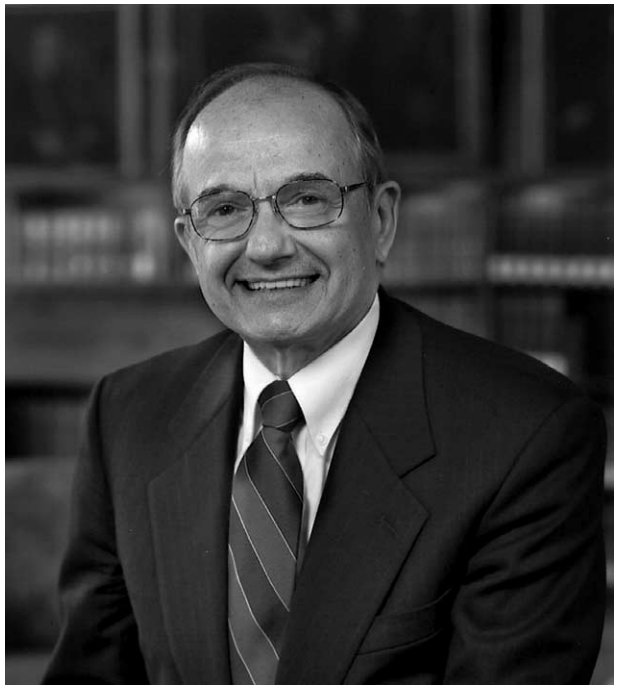
I am deeply grateful for the honor and privilege of serving this past year as the 39th President of The Society of Thoracic Surgeons. This is indeed the highest honor of my career, and I am very humbled by this extraordinary privilege. I am also grateful for the opportunity to have worked so closely with so many of you on so many issues facing the Society this past year. Serving as your President has demonstrated that a team of well-organized thoracic surgeons working intimately with our Society's Chicago and Washington, DC office staff can effectively meet the many challenges of an increasingly complex health care environment. Everything that we have achieved is directly due to the energetic and dedicated teamwork of both volunteer membership and the Society staff.

Throughout our careers each of us has been influenced by individuals who have made a significant difference in our lives, and many of us have been privileged to stand on the shoulders of giants. I put myself into this category, and for this reason I wish to acknowledge those individuals who have profoundly influenced my life and career as a thoracic surgeon.

My parents, Peter and Louise Pairolero, in addition to providing all the necessary attributes throughout childhood, made it possible, in times that were far less prosperous than today, for me to leave the economically depressed upper peninsula of Michigan and complete my undergraduate and medical education without economic debt. For this I will always be grateful.

In high school, I was influenced to choose medicine as a career by a young man from my hometown, Roger Neault, who was a senior medical student at the University of Michigan. Dr Neault served as a mentor throughout my education, and I eventually followed him to Mayo Clinic where he was a staff ophthalmologist.

At Mayo Clinic, I had the privilege of working in the laboratory of our 13th President of The Society of Thoracic Surgeons (STS), Dr F. Henry Ellis, where we studied the effect of infarctectomy in the treatment of myocardial infarction. It was Dr Ellis who mentored me into thoracic surgery. During my residency I came under the spell of Dr Dwight McGoon, whose scholarly and uncompromising approach to congenital heart surgery taught me the details of complex technical surgery. But it was Dr O. Theron "Jim" Clagett who convinced me to become a general thoracic surgeon.



In 1973, vascular surgery was a component of cardiovascular surgery, and the surgeons at Mayo Clinic suggested that I work with Dr. E. Stanley Crawford in Houston, Texas. It was with Dr Crawford that I learned that anything was possible if one was willing to work to achieve it.

I have been associated with a number of outstanding colleagues at Mayo Clinic over the 31 years that I have been on staff, far too numerous to mention individually. Nonetheless, my tenure as President of The Society of Thoracic Surgeons would not have been possible without the support of the general thoracic surgery team at Mayo Clinic and my current colleagues in the Division of General Thoracic Surgery, Dr Mark Allen, Dr Claude Deschamps, Dr Francis Nichols, and Dr Stephen Cassivi.

Finally, I would particularly like to thank my wife and best friend, BJ, and my 2 children, Peter and Steven, for their support and understanding during the past years.

Introduction

Fifty years ago, doctors were still making house calls, professional fees and hospital costs were low, medical insurance was limited to a small segment of the popula-

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Address reprint requests to Dr Pairolero, Division of General Thoracic Surgery, Mayo Clinic College of Medicine, Rochester, MN 55905; e-mail: pairolero.peter@mayo.edu.

tion, and the alphabet soup of medical jargon did not exist. However, thoracic surgery was about to be catapulted into a new era by events in Minnesota. In 1955 only two centers in the world were performing open-heart surgery with cardiopulmonary bypass on a regular basis, John Kirklin, MD at Mayo Clinic in Rochester, and C. Walton Lillehei, MD, just 90 miles north at the University of Minnesota in Minneapolis. On May 18, 1955, Dr Kirklin reported that 4 of his initial 8 patients repaired with this technique survived [1], and the new age of cardiopulmonary bypass was established. This year on May 12 Mayo Clinic celebrates the 50th anniversary of this event.

Thoracic surgery is a discipline that was both invented and matured in the 20th century. Its development parallels the unprecedented advance of scientific knowledge that has become the hallmark of our times. However, at the dawn of the 21st century, thoracic surgery is increasingly being shaped by profound social and political changes in our everyday way of life.

My purpose today is to describe how these external forces have interacted with our profession to produce the myriad of quality and safety changes that we see around us. I will divide my efforts into three segments. First, I will describe how quality and safety has influenced our specialty. Second, because quality and safety is transparent and available for all to see, I will discuss the effects of transparency on reimbursement. Lastly, and most importantly, I will discuss what we must do to grow stronger in response to these changes.

Quality and Safety

In 1990 the Institute of Medicine (IOM), a congressionally chartered independent organization to improve health care, defined health care quality as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge" [2]. Although this definition may seem intuitive to most of us, the words were carefully chosen and have been interpreted by many to have broad implications for society at large. However this definition has withstood the test of time and is widely accepted today.

Over the years, numerous reports have suggested that the United States health care delivery system did not provide consistent, high-quality care to all people. All too often Americans did not fully benefit from the therapy provided, and in many instances patients were harmed. Nearly a decade later, in 1999, the IOM released its first in-depth report on health care, *To Err is Human: Building a Safer Health System* [3]. This report described three components of health care quality, ie, (1) safety, (2) up-to-date clinical practice, and (3) patient satisfaction, and pointed out that these quality components are continuously influenced by the external forces of regulatory activities and marketplace incentives. Now, 6 years later, you cannot help but notice that much of medicine revolves around both safety and clinical practice and their interaction with regulatory activities. Today, however, patient satisfaction and marketplace incentives have not reached the same level of scrutiny as safety and clinical care, but we must be prepared to deal with them also as they are just around the corner.

Allow me to illustrate. *To Err is Human* [3] took aim at medical errors and defined them as "the failure of a planned action to be completed as intended or the use of a wrong plan to achieve a specific aim" (p 21). As we have come to learn, this report concluded that medical errors were responsible for tens of thousands of Americans dying each year and hundreds of thousands more being injured. Yet the majority of these medical errors did not result from incompetent health care providers, but rather from faulty systems and processes that allowed individuals to make mistakes rather than prevent them from occurring. *To Err is Human* [3] concluded that these mistakes could only be prevented by a total redesign of the health system that would make it easier for individuals to do the right thing and more difficult to do the wrong thing.

To achieve a better safety record across our country, the IOM recommended a four-tiered approach that included:

1. Establishing a national safety knowledge base.
2. Developing a mandatory national reporting system.
3. Raising safety performance standards through oversight organizations, professional groups, and purchasers of health care.
4. Implementing safety systems in all health care organizations.

The response to this first report was swift and supportive from both public and private sector leaders. Congress acted immediately and created the Agency for Healthcare Research and Quality (AHRQ) to improve quality, safety, and effectiveness of health care for all Americans [4]. The National Quality Forum (NQF), a private not-for-profit corporation, was also formed in 1999 to develop and implement a national strategy for health care quality measurement and reporting [5]. The Leapfrog Group, an association of private and public group purchasers of health care created in 2000, followed suit [6]. Leapfrog unveiled a market-based strategy to improve quality and reduce medical errors by implementing three perceived best practices. These included the use of computerized physician-order systems, the staffing of intensive care units with physicians credentialed in critical care medicine, and the development of an evidence-based hospital referral system. Today, Leapfrog has increased this number to 30 by incorporating all of the NQF's patient safety practices that are intended to reduce the risk of harm resulting from processes, systems, or environments of care [7].

Congress then required all state governments to collect standardized information about adverse medical events resulting in death and serious harm. Hospitals were required to begin reporting first, but eventually reporting had to be done by other health care organizations as well. Currently, only one-third of the states have responded to this congressional mandate by creating reporting requirements, and my home state, Minnesota, is leading the way. In 2002 the legislature of the State of Minnesota mandated reporting of all 27 "never-events" that the