Can Trauma Surgeons Survive Business Medicine?

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Although it may be apocryphal, it is said that the Chinese have a curse that states, “May you live in interesting times.” We live in interesting times. Hospitals across the country are facing financial difficulty and trauma centers are the first area examined for closure. Trauma centers in Pennsylvania, West Virginia, and Las Vegas have closed, at least temporarily, because of problems with specialist coverage. The insurance crisis in many of our states has created a situation where even physicians who are willing to care for trauma patients cannot get professional liability coverage, forcing them to either move to more physician friendly states, to come up with new alternatives such as physician or specialty owned carriers, or even to go bare. A flaw in the Medicare reimbursement formula has lead to a 10% decrease in physician payments over two years. And, even though Medicare does not pay a large role in trauma reimbursement, we all know that as Medicare does, other carriers rapidly follow. Leapfrog and other consumer groups are demanding “quality care” and are determining what that quality is, whether we agree with it or not. This quest for quality has lead to the 80 hour workweek for residents, which leads us to wonder how we will do the work we need to do and says nothing of how we will educate residents with these limitations. Finally, despite these restrictions, we still face the issue that medical students are not choosing surgical residencies as they did before, and surgical residents are not choosing trauma fellowships for training. How can trauma surgery and trauma surgeons survive in the current economic environment of medicine? Surely there have never been such interesting (and dangerous) times for our field?

As most presidents do in preparing their presidential addresses, I went back and reviewed the addresses of my predecessors to gain historical perspective and to reexamine their wisdom. In doing that, I learned once again that there are no new problems in medicine—whatever problems appear new at the time have almost certainly been considered in the past, even if the tools were not available to address them. This also applies to the problems I am considering today. Our first president, Kimball Maull, talked about the disconnect between the public perception of trauma and the actual problem that trauma presents to society.1 Our second president, Burton Harris, talked about the problems of the redefinition of surgery and the surgical specialties, the lack of interest of many surgeons in doing trauma, and most fearsome of all, the evil effects of business on the field of medicine.2 Len Jacobs talked about the forces of diversification and specialization which were affecting trauma care and noted that “Uncompensated trauma care and maldistribution of trauma centers
along with poorly thought-out strategies of reimbursement have caused entire systems of trauma care to begin to disintegrate.” He also stressed the importance of ICU care to trauma as well as the impact of increasing healthcare costs on companies and the economy. Our fourth president, Howard Champion, talked about the problem of recruitment and retention of trauma surgeons, especially in light of all of the perceived negatives of traumatology. He also noted that trauma and critical care are intertwined. Many other Eastern Association for the Surgery of Trauma (EAST) presidents, such as Boyd, Hassett, and Reath have discussed these themes, often expanding on them.

EAST has been a vibrant and aggressive organization since it was founded by these four surgeons—Kim Maull, Burt Harris, Len Jacobs, and Howard Champion. This energy arises because of its dedication to youth—it was designed to give young trauma surgeons a voice and a vehicle for their ideas and energy. In this fertile soil, the careers of young trauma surgeons blossomed. Since its birth, this organization has been refining that idea—which has lead us aggressively into areas that other organizations are slower to find—areas such as exploring the epidemic of handgun violence lead by C. William Schwab, Practice Management Guidelines, lead by Michael Rhodes, and links with Military Medicine established by William Fallon and expanded to Disaster Medicine by Eric Frykberg. However, one problem with youth is that we tend not to understand the importance of history. In fact, we often discount the importance of history. As a result, our energy and enthusiasm drives us to dive into new arenas, but we may find ourselves relearning old lessons. It is important to understand a little of our history where we have come from—to better understand where we are going and how to get there. As Santyana said, “Those who cannot remember the past are doomed to repeat it.”

Most physicians, including our former president Dr. Harris, feel that the introduction of business to medicine has lead to the deterioration of medicine. In his presidential address, Dr. Harris stated that “Although the business of America may be business, the business of medicine is medicine.” He implies that business is an evil to be battled and that physicians must fight that battle, much like disease, since physicians are bound to serve only their patients. I agree with Dr. Harris that the business of medicine is medicine, and that we all strive to provide good medicine. But, I would take his statement a step further and say that good medicine is good business. It is time that we as physicians understand business as well as medicine so that we can take back medicine from the pure bean counters and preserve it for our patients. This is like the need to understand pathophysiology to allow management of disease. We also have to understand business and money to allow management of medicine.

We have to practice medicine that is scientifically sound and fiscally prudent and not that which is most likely to line our own pockets. We, as trauma surgeons, have done that for years—setting the standards which trauma centers must live by, limiting the number of centers that have these resources available, beginning the process of regionalization of resources. We also have been leaders in practice guidelines, basing management on sound scientific data, and discarding practices, such as steroids for head and spinal cord injuries, when those data do not support the practice.

To understand the current perspective that business has concerning medicine, we must understand the history of healthcare financing. Although I am fast approaching senior status and have lived during much of this recent history, I did not follow the issues closely in my youth. The perspective on that history that I am presenting comes from a book titled Severed Trust, by George D. Lundberg, MD, the former editor of JAMA.

Insurance for healthcare first entered the picture in 1929, when Baylor University Hospital offered teachers in Dallas hospitalization benefits. For $6 per year, a teacher was entitled to 21 days of inpatient hospitalization. This was seen as a charitable social movement at the time, and was made tax exempt for the teachers who bought the insurance. The concept provided potential benefits for the teachers for a relatively small amount of money, but it also provided a steady, reliable stream of income for the hospital.

During World War II, the federal government, concerned about inflation because of a shortage of workers and goods, imposed wage and price controls. This lead to a dilemma for business—how could they recruit or retain workers? Labor unions wanted fringe benefits exempted from these controls. They went to the government who agreed that a 5% increase in benefits would not be considered inflationary. At this time, employers began to add health insurance as a fringe benefit for their employees, gained a tax exemption, and separated the consumer from healthcare costs.

The role of the federal government in American’s health was clearly stated in 1945. Truman declared that every American had the “right to adequate medical care.” In 1946, the Hill Burton act was passed, to provide billions to build hospitals. Still, in 1950, healthcare costs represented only 4.4% of the gross domestic product of the United States.

Before 1955, healthcare was underfunded, since it was viewed as a charitable effort. Hospitals existed as charitable institutions, staffed often by nuns who did not expect much pay, and served basically as institutions for the poor to die in, since anyone with any money or support would die at home with their doctor in attendance. In the mid-1950s, the federal government mandated minimum wages and benefits for healthcare workers, making it a more attractive field for people to work in. Also, during the 1950s, new technologies such as X-rays and lab testing became more commonplace and hospitals began charging for these services.

In the 1950s, the postwar expansion of the economy stalled and unemployment, which had been extremely low, increased. Gaps in the concept of employment-based health insurance became apparent at that time, especially when looking at elderly retirees. Public pressure lead the govern-
ment in 1965 to create Medicare and Medicaid programs—insurance for the elderly and the indigent, respectively.

The 1960s also saw the recognition of a doctor shortage. President Johnson increased medical school enrollments. Following classical supply and demand economics, the production of more physicians would increase competition, leading to improved distribution of doctors while driving down their fees. The failure in this thinking was not recognized until later—that medical practice had changed. No longer were most doctors general practitioners with patients directly responsible for paying for services. Now, there were more specialists with more technology being paid by insurers that paid the usual and customary rate, which was usually and customarily increased. When first proposed, the expected annual cost of Medicare and Medicaid combined was set at $6 billion. Five years later, in 1970, the costs doubled. Ten years after they began, the costs were $24.2 billion. Today, the combined costs of Medicare and Medicaid are over $400 billion.5

The 1970s saw a number of attempts to control the costs of healthcare. Professional Standards Review Organizations were designed to ensure medical necessity of procedures, while Health System Agencies were developed to lead to the rational diffusion of new technology. Neither worked. At the end of the 1970s, business became aware of the costs of healthcare to them when General Motors announced that Blue Cross/Blue Shield was a more costly supplier for them than US Steel. Comparison of the Consumer Price Index and the Medical Consumer Price Index shows a separation of these two indices over time. In the early 1950s, these two indices paralleled each other. They began to separate in the mid 1950s when minimum wages and benefits were set for hospital employees. The rate of separation continued to increase until the mid 1990s with the growth in the Medical CPI far exceeding the overall CPI.

A new problem was noted in the 1980s. New insurers entered the market stating that they could maintain lower rates. Using employer group ratings, rather than community ratings, they cherry picked the groups of patients least likely to need medical care. Potentially sicker patients were left looking for other means of coverage. The Reagan administration tried to control the increases in healthcare costs by paying an amount based on average cost for a given diagnosis—the DRG. This drove hospitals to try to make money by releasing patients earlier and using less resources. Reagan also froze physician fees for two years. Despite these extreme measures, healthcare costs still rose from $300 billion to $800 billion. Figure 1 demonstrates the continued increase in healthcare costs since the 1980s with projections of a cost of $2.5 trillion by 2005, representing as much as 18% of the gross domestic product.

In 1993, the Clinton administration proposed a comprehensive health care system based on universal insurance. This insurance was truly universal, as it would provide the same level of insurance for everybody. As we know, this proposal made everyone universally unhappy and was ultimately defeated. However, during the debates over this proposal, we often heard people stating that we should not interfere, but we should let free market forces work. Unknown at that time, those forces were already working. The early 1990s brought another group of insurers based loosely on the early health maintenance model. These insurers negotiated reduced-fee contracts with hospitals and doctors by promising to steer patients to them and fill their beds. They required procedure pre-approval to hold the line on costs. These insurers were able to hold down costs for a time; however, backlash from consumers and providers caused costs to increase again.

Healthcare financing has changed dramatically over the years. Figure 2 demonstrates the changing relationship between private and government payors. In 1965, the government provided about 25% of healthcare payments versus 75% for private payors. In 2005, the ratio is projected to be 50/50 in the United States. In some regions of the country, including my home state of Tennessee, this ratio is already exceeded.

In 1994, the state of Tennessee began an experiment in healthcare financing called Tenncare. The goals of the state were simple—to limit the increase in healthcare costs to the state budget and to expand insurance coverage for the uninsured in Tennessee. To do this, the system used standard managed care concepts—negotiated lower rates, a gatekeeper

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Fig. 1. Growth in National Health Care Expenditures in Dollars and as a Percentage of Gross National Product. Reprinted with permission from The Physician’s Essential MBA: What Every Physician Leader Needs to Know, Aspen Publishers, Inc.

Fig. 2. National Health Expenditures by Source of Funds. Reprinted with permission from The Physician’s Essential MBA: What Every Physician Leader Needs to Know, Aspen Publishers, Inc.
model with capitation, and precertifications and other paperwork hassles. Many problems had to be overcome in the implementation of Tenncare. Upon its initiation, Tenncare provided coverage for more Tennesseans than Medicaid had, yet there was no increase in funding. Poor information systems, the breakdown of the gatekeeper system, and an increased level of bureaucracy lead to rampant confusion on the part of patients and providers. Tenncare provided a better benefit package than any commercial insurance plan, and a court case limited the amount of managed care that could be applied to deny benefits. A loophole in eligibility requirements allowed commercial insurance plans to increase cherry picking—thus, anyone with any degree of risk was denied commercial insurance and signed on to the TennCare roles.

How did we as physicians respond to Tenncare? At the University of Tennessee we learned how to deal with it. We created an Independent Practice Association to which all of our physicians belong. We learned to work with capitation, applying our own information systems to the problem. We negotiated and provided delegated credentialing to assist our individual physician practices in dealing with multiple carriers. We negotiated contracts with all major commercial carriers in the region, convincing them to pay for quality, not simply the lowest price. Have we enjoyed this? No. Have we been successful? Yes. We have had successes by working together and learning the language of business.

Tenncare has been successful in reducing the number of uninsured patients in Tennessee. Uninsured patients currently make up less than 10% of our population. However, uninsured patients remain a huge problem in the United States—one which is growing. There were 41.2 million uninsured in the US in 2001, the latest date for which we have data. Since then, we are in a recession with rising unemployment. It is expected that there will be 50 million uninsured by 2005 and 60 million by 2010. Eighty-five percent of these people are the working poor—they have jobs that do not provide insurance and they cannot afford to pay premiums themselves. Who then provides care for these patients? Often, we as trauma surgeons do. Eventually, this problem will become the driving force in healthcare reform.

When we think of business in relationship to medicine, we think of several, usually bad, things. The first is insurance companies. Insurance may have begun as a good idea, to help people and to spread risk, but now it has become to us the epitome of big business—increasing paperwork and oversight, risk reduction for the company by cherry-picking customers, using any trick possible to avoid paying claims, all to improve the bottom line for shareholders, rather than taking care of the sick and injured. The ultimate insult to us as physicians is that paying benefits is referred to as the “medical loss ratio.”

The second area of business that we dislike is the effect it has had on hospitals. We have witnessed the rise of for-profit hospital chains and specialty hospitals that seem to concentrate on the “profitable” areas of medicine, while leaving the unprofitable areas for academic trauma centers. We have also seen our own hospitals concentrate more on the bottom line at the expense of items that we feel we need to care for our patients.

The final area of business that we dislike is the drive for quality care, dictated not by medical quality but by business’s definition of quality. For years, businesses have been trying to drive down healthcare costs, while we complained that they paid no attention to quality. “Quality is assumed” was the byline and the excuse, so that they could search simply for the lowest price available. We argued that quality did matter, and they are beginning to take us at our word. Now, they are looking for quality. Unfortunately, we are caught—we have not had the guts to define quality for them, so they are defining it themselves whether we agree or not.

Well, let’s look at this from the perspective of business. Although some might disagree, the American model of capitalism, guided by Adam Smith’s invisible hand, is the most successful and pure economic model that exists. It is driven by a very simple principle—self interest or the bottom line. Certainly at the outset this appears to be simply greedy. Yet, as Adam Smith pointed out, when everyone in a situation is driven by their own self interest and has the freedom to make their own decision, the ultimate result will be better for everyone. Certainly, if this is not applied fairly, or if participants bend the rules to their advantage, it can be unfair. We live this. Unfortunately, much of what we see as wrong with the healthcare system is due to the ability to bend the rules, often as a result of government intervention that is put in place to meet the needs of special interest groups rather than society as a whole. We as physicians have put ourselves at a disadvantage because we don’t speak with one voice and we don’t speak the right language. As Pogo said, “We have met the enemy and he is us.”

Business is driven by competition and success. After World War II, much of that competition came from the countries that were defeated. Initially, Japanese products were laughed off by American companies because of their inferior quality. The label “Made in Japan” meant cheap. However, Japanese companies embraced quality movements, such as Juran and Deming, and suddenly, as American companies rested on their laurels, quality was stolen from them. During the 1970s and 1980s we saw headlines that Japan, Inc. was going to destroy American business, and American business deserved it. But again, American business responded—sending people to Japan to learn these techniques or adopt the Six Sigma system, which was made famous by GE. These quality techniques concentrated on examining systems, standardizing processes, and eliminating the opportunity for errors. They realized that most errors occurred because of system problems, not people problems. This is something that we in medicine must realize and act on. We need to use technology and redesign our systems to reduce errors—using CPOE, guidelines, and protocols.
Competition also forces businesses to understand their costs and look for ways to reduce these costs while maintaining quality. If one cannot increase prices to increase profits, because of competition, then the only way to increase profits is to decrease costs. Quality must be maintained, however, because of the competition. To survive, businesses must know their costs—all of their costs. And, as we have seen, one of their biggest costs, while not contributing directly to the products they produce, is healthcare. This is why business is paying so much attention to healthcare. We also all know that our hospitals have no idea of their true costs.

What can EAST do to face the original problems I mentioned? How can we have an impact on these issues? How can we ensure the future of trauma surgery as a career in the light of these issues?

I believe that EAST and trauma surgeons, as well as other physicians, have to take back control of healthcare. We have to reframe the healthcare discussion on what is best for the patient and for society as a whole. However, this does not mean that we can ignore issues such as access, quality, or cost. We have to frame responsibility for these issues—and be willing to do that from the perspective of our patients and not ourselves. As trauma surgeons, we already do this better than anyone in the healthcare system. As trauma surgeons, we are decisive, diligent, but most of all determined.

At the University of Tennessee over the past 15 years, we have seen tremendous growth in the trauma service. Although a number of factors come into play, the main reason for this is that we provide open access for the injured. We place absolutely no barriers in the way. Our system has been set up, like most trauma systems, so that if someone calls with an injured patient, the patient is automatically accepted. No call backs. No searching for accepting physician. No financial inquiries. No questions of bed availability. Just send us the patient.

Doesn’t this policy simply lead to economic triage on the referring end and the dumping of nonpaying patients on us? This certainly was the rap that our trauma service carried for years—until my partner and I analyzed the data and presented it to our administration. I mentioned earlier that less than 10% of patients in Tennessee are currently uninsured, due to TennCare. Certainly, TennCare is not an ideal payor mix for the trauma service at UT, we found that it was better than the overall hospital payor mix—in fact, one of the best payor mixes in the hospital. Why? Because we deal mostly with blunt trauma patients, as do most trauma centers in the US. Do we cover our costs? That is not so obviously clear, since most payment formulas do not account for the level of services and readiness required for trauma care. This is one area that EAST must work on—ensuring that reimbursement formulas adequately cover necessary trauma care.

How can we as trauma surgeons do this? We have to return to the charge of our first president, Kim Maull—we have to dispel fatalism in a cause and effect world.¹ We have to convince the public, the government, and the business of the importance of trauma care and prevention. To do this, we have to begin to speak their language, rather than ours. One language that can be understood universally is the language of business—simple cost/benefit analysis. This has already been applied to the Oregon healthcare system in which diseases and conditions were ranked based on relative benefits versus cost. What conditions came out at the highest ranked categories to be paid? Traumatic injury—the acute, sudden injuries that can be treated and cured and that most commonly occur in young people who have their whole productive life left ahead of them. We have to present this picture to government, carriers, students, and ourselves—that we are caring for people who still have much to contribute to society, and it is worth the cost. Too often we allow ourselves to buy into the line that all we care for are the dregs of society. This is simply not true. We have examined our trauma population at UT and found that 80% of our trauma patients are employed and economically productive members of society. Morris has previously shown that almost 60% of severely injured trauma patients do return to productive activity for society.⁷

How do we speak the language of business? Do we all have to go to business school? Certainly not. Much can be learned simply from being involved in the normal administrative duties that we have in running trauma services if we are willing to learn. We also have to be willing to support those of our colleagues who have gone to business school and who are in administrative and/or leadership positions. Too often, we as surgeons disparage those who move into these roles—we state that they must not be true surgeons since they are willing to decrease their operating time. We have to stop tearing down these leaders and be willing to let them represent us. To achieve effective change in the healthcare system, we have to be at the table speaking with one voice.

What is EAST doing to ensure that we are at the table in these discussions? On July 2, 2002, an ad hoc committee I appointed, The Future of Trauma Surgery As a Career, held its first meeting, under the guidance of the Dr. Michael Rotondo, the chair. Representatives from 5 states and 2 countries outside the US were present. The committee has held several meetings and is convinced that its role is going to be to ensure that EAST has a voice in these discussions. The vision of the committee is “to secure and sustain the surgery of trauma as an integral and diverse part of general surgery and ensure that high quality trauma systems are available to serve the needs of the injured patient.” The mission of the committee is to demonstrate advocacy and activism on behalf of trauma and critical care surgeons in an effort to ensure that the surgery of trauma be sustained as an integral and diverse part of general surgery. To demonstrate advocacy and activism on behalf of the injured patient in an effort to ensure that high quality resources and trauma systems be developed and maintained.

How can EAST pay for some of these activities? Over the past couple of years, under the guidance of Presidents...
Reath and Cunningham, among others, the groundwork was laid for establishment of the EAST Foundation. The first meeting of the board of the EAST Foundation was held in Philadelphia on September 14–15, 2002. There was vigorous debate about what the mission of the EAST Foundation should be. Unlike a number of foundations of medical societies, the board decided that the EAST Foundation should not be simply a means to give scholarships or to fund lectureships, although these are important. Rather, the board of the EAST Foundation adopted a wider and more forward-looking mission—to assure the future of the care, investigation, and prevention of injury. The purpose of the foundation was elucidated to be to garner, manage, and disburse funds to support the mission. This mission allows the Foundation to move in many potential directions while supporting the mission of EAST.

Why will others be willing to listen to us? Because we have already demonstrated that we embrace quality, cost effective healthcare. Michael Rhodes first discussed this in his presidential address when he discussed practice management guidelines. The practice management guideline committee, which Michael Rhodes started, has continued to grow under the leadership of Michael Pasquale and Fred Luchette. Our guidelines are well researched, scientifically based, and accepted by other organizations. We also continue to review and revise as new scientific information becomes available. We did not set out to establish hard and fast rules for patient care, but we are recognized as leaders in this area. Tim Fabian, our 11th president, revisited the issue of practice guidelines in his address and has also taken the process back to link with the AAST.

EAST has also embraced technology. The need for this was discussed in John Morris’ presidential address—how does a scientific society survive in the electronic age? EAST has a vigorous and constantly changing website thanks to the leadership of Michael McGonigal and Samir Fahkry. Not only does it provide a source of information on the organization, on job availability, and the practice guidelines (our most frequently hit portion of the website), but it also enables us to communicate with our membership, it allows our committees to do much of their work electronically rather than live meetings or by transmitting paper, and it continues to expand. Plans are underway to develop a data repository for multi-institutional trials, and this can be expanded to collect information to help us in our discussions with the public, business, and government.

Other uses of technology by EAST include the technology used to have the Future of Trauma Surgery committee meetings—it allowed interaction from around the world in a virtual conference room with controlled discussion, the ability to show slides and data, and the ability to vote, clap, laugh, and raise your hand to get the attention of the chair. This same technology has been used by EAST for three years to allow live broadcast of portions of our annual meeting across the country with realtime participation and questions from the electronic audience. This at a time when most organizations are selling tapes of their discussions at best or having difficulty with or banning electronic projection at worst.

EAST must continue its history of taking on positions that are right for our patients, even if the positions are unpopular. We have to examine closely what patients want, while ignoring what our prejudices are or what is convenient for us. We have to embrace the issues of patient safety, cost, and access and find ways to demonstrate that commitment. We also must embrace the new training regulations and find new ways to train surgical residents and traumatologists. We will do this because EAST has always been committed to young trauma surgeons. That is our founding mission. We are designed for the young. We have a committee dedicated to the young. Dr. Paul Cunningham stressed in his presidential address the importance of mentorship. We may not see now how it can be done, but we will find a way to do it—and to ensure that continuity of patient care continues. We have to fix this problem—to ensure the public that we are committed to safety, but more importantly, to continue to attract young physicians into our field and nurture them.

EAST cannot do all of this alone. We will have to work with other organizations interested in trauma. EAST has been around now for 16 years—it’s not so young anymore. Although we may have not been popular when we first began, we have proven ourselves to the others. We have taken on issues in which others have eventually followed. We have trained a new generation of leaders who are now moving into leadership positions in other organizations that will strengthen these links. Dr. Howard Champion has established the Coalition for American Trauma Care, to which EAST belongs, to monitor trauma related legislation in Washington and help with lobbying. Dr. Len Jacobs is now the President of the American Trauma Society. He also serves on the Future of Trauma Surgery Committee and is very interested in these problems. Our incoming president, Wayne Meredith, is the chairman of the American College of Surgeons Committee on Trauma, and he is vitally interested in these problems. Our past president, Tim Fabian, is on the board of governors of the AAST, along with former EAST board member, Andrew Peitzman. These links will be very helpful in dealing with our current problems and should become only stronger in the future. Yet, as EAST works through these alliances, it is vital that we as an organization do not allow them to degrade our energy. EAST is youth—youth is impatient. As EAST ages, let us not say that youth is wasted on the young, but let us accept the wisdom and accumulated experience of those chronologically older but still young at heart. EAST will provide the energy and driving force to solve these problems, but we have to be willing to temper this with wisdom, historical perspective, and political skill.

REFERENCES

**Books Received**

We gratefully acknowledge receipt of the following books in the editorial office of The Journal of Trauma. Books appearing to be of interest to the Journal’s readership will be reviewed only at the invitation of the Editor, and the reviews published on a space-available basis.


