Give neurosurgery a place to stand

The 2001 presidential address

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In his 2001 Presidential Address to the American Association of Neurological Surgeons, Dr. Dunsker calls on all neurosurgeons to become active participants in the ongoing debates over healthcare. He reviews some history of the debates and points out that regulation of healthcare has been left to bureaucrats—both government and private—with physicians, who have intimate knowledge of the field, being excluded. Dr. Dunsker encourages neurosurgeons to volunteer in local, state, and federal medical societies and to join forces with other physicians to gain leverage in the healthcare debate. In this manner it is hoped that better ways of delivering the best healthcare to patients can be accomplished.

KEY WORDS • healthcare • American Association of Neurological Surgeons

Dr. Kusske, Guests, Ladies, and Gentlemen:
I can attest that the AANS office is working well, with a staff of unbelievable dedication. This year was challenging. There was a midstream change in executive directors, and our new executive director, Mr. Tom Marshall, has performed extraordinarily, rising to the occasion and leading the organization, without our having missed a beat.

There has been an innumerable list of outstanding individuals with whom I have crossed paths. I am indebted to those at the Mayfield Clinic, both physicians and administrative officers. I know how much they have supported me, as individuals and as a group, and I thank them. The individuals with whom I have worked most closely for many years, at the same hospital and office, have been Lee Greiner and Bill Tobler, who, along with Roberta Holden, my administrative assistant, have given me so much support. They all deserve a special thanks.

Sir Isaac Newton said, “If I have seen further, it is by standing upon the shoulders of Giants.” I also have had the opportunity to stand on some broad shoulders: Drs. Henry Schwartz, Frank Mayfield, Sidney Goldring, and William Cox. I remember their commitment and I have tried to give my shoulders to others to use. Only time will tell whether my shoulders were broad enough and/or whether I lifted others high enough to see further.

Shiela, our daughter, has always understood the meaning of my frequent travels and she has stood behind me.

Above all, I am indebted to Ellen, my wife, closest friend, and best advisor, who has been incredible in encouraging me all through the years. I know it has been lonely for her at times, but she never complained.

At this annual meeting, we celebrate the 70th anniversary of the AANS, originally founded as the Harvey Cushiong Society. I am very proud to stand here in front of this organization that has carried the traditions of the past into the practice of the present, so that we can realize the promise of the future.

Obstacles to Healthcare

Initially, medical and surgical learning were the only reasons for the AANS to exist. Let me declare clearly, so that there can be no misunderstanding: medical and surgical education are still our primary focus.

Despite that declaration, there have been events in the political and economic arenas that partially distract our efforts. Each president of the AANS believes that he has seen the pinnacle of senseless obstruction to patient care by various bureaucracies, which have only been outdone by later problems. Without dedication to science and education, our mission would be thwarted. Unfortunately, science and education cannot be our only focus. We would ignore the inappropriate burdens placed on us by the government and insurance companies at the peril of our patients, at the peril of an excellent healthcare system, and at our own peril. The

Abbreviations used in this paper: AANS = American Association of Neurological Surgeons; HCFA = Healthcare Financing Administration; US = United States.
traditional neurosurgical call to arms has always been the challenge of the nervous system: to protect and to preserve it. Now our challenge is to add the protection and preservation of healthcare, and not to be drowned in this bureaucratic swamp.

Costs of Healthcare

Whether governments fund healthcare systems by private insurance and/or by government payments, the cry of payers in every country is that providers get too much money. The solution in every country, in general, is to praise the healthcare system and, simultaneously, to cut the healthcare budget!

The cost of healthcare in the US has risen faster than that in any other country in the world. I am not afraid of publicizing that fact. I do not like it and I am not proud of it, but I am not afraid of conclusions formed from looking at that fact. If high healthcare costs are a problem, however, let us analyze the problem and propose a realistic solution. Currently, healthcare administrators provide solutions that remind me of Procrustes. He was a robber in Greek mythology who put his victims in a bed. If they were too long he cut their legs off, and if they were too short he stretched them. These procrustean solutions hardly fit the important bed of healthcare for our citizens.

How did we get to this point at which the bureaucratic tail wags the healthcare dog?

In the US following World War II, the government stimulated hospital construction and encouraged medical schools to expand research, education, and clinical care. Once the snowball of healthcare services started rolling, it gathered a momentum that surprised industry and government. Then instead of stimulating healthcare expansion, elements of society looked for ways to curtail it.

For more than three decades, those increasing costs have been the focus of attacks. Industry, private insurance, and government have joined forces and attacked providers, rather than focus on costs. New delivery systems were born: health maintenance organizations, preferred provider organizations, and managed care organizations. Each was heralded as the salvation of healthcare delivery and each failed to slay the dragon of exorbitant costs.

In the absence of a solution, we have had cost controls imposed by HCFA and by insurance companies; but these controls will not solve the problem. Cost controls have never succeeded in providing long-term solutions to economic problems, and we will have to learn that again.

The recent electric power crisis in California is a perfect example of what happens in an industry in which charges are controlled but costs are permitted to escalate. California has seen brownouts as a result. If we have medical brownouts, patients will be knocking on locked emergency room doors and more patients will die.

I mention the parallel of controlling provider charges without controlling costs because, despite the fact that one-third of hospitals are losing money, a federal advisory commission reported that "the financial condition of the nation's hospitals has significantly improved, so there is no need for Congress to increase their Medicare payments, despite insistent pleas from the industry."

I can only assume that those federal commissioners have not seen hospital units with fewer nurses to take care of sicker patients and that they did not see the report from the Institute of Medicine stating that there were too many errors in hospitals that should be corrected by increased nursing participation. Can there be any question that there is a direct correlation between a general shortage of nurses in hospital units and errors in hospitals? The nursing shortage is not quite nationwide, but it is intensified in exactly the areas that dominate managed care and in which hospital reimbursement is inadequate for needed medical care. That same scene is being played out with radiology technicians, pharmacists, and even with cleaning personnel.

Why have healthcare costs gone up so much in this era of managed care? The assumption in the press (both electronic and print) is that inappropriately large fees just go to wealthy doctors. If we take physicians out of the equation, we will see that the rate of increase does not change. Physicians not only are receiving less, but also are burdened by the increased bureaucracy spawned by insurance companies and government, with such programs as precertification, a topic about which I will talk later.

Role of Technology in Driving Healthcare Costs. Technology is the primary driver of rapidly rising costs, but it is also the primary factor in improving longevity and decreasing disability. To the bureaucrat and economist, these are problematic outcomes because both cause increased costs; but is that not exactly what the healthcare system is supposed to do?

Victor Fuchs, the noted healthcare economist, recognized that Medicare expenditures increased rapidly even when physician and hospital reimbursements were held down. He attributed the rise of such expenditures almost exclusively to the development and use of new technologies. Advances in medical technology make it feasible to provide greater care for each patient and for more patients, and contribute to a longer and better quality of life in many of them.

That increase in technology will require a large increase in taxes to fund those new expenses. Because Fuchs sees no likelihood that public taxes would be raised sufficiently to cover an increase of this magnitude, he concludes that the only reliable way to slow spending growth is to slow the growth of services to patients. Furthermore, he concludes

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**TABLE 1**

<table>
<thead>
<tr>
<th>Age (yrs)</th>
<th>Increase in Annual Spending (%)</th>
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<tbody>
<tr>
<td>&lt;1</td>
<td>9.8</td>
</tr>
<tr>
<td>1–64</td>
<td>4.7</td>
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<tr>
<td>≥65</td>
<td>8.0</td>
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* Based on data presented by Cutler and Meara.

**TABLE 2**

<table>
<thead>
<tr>
<th>Percentage of Population</th>
<th>Percentage of Total Expenses</th>
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<tbody>
<tr>
<td>10</td>
<td>64</td>
</tr>
<tr>
<td>2</td>
<td>25</td>
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* Based on data presented by Wise. In younger age groups, in contrast with the Medicare population, employers find that only some of the patients use most of the resources.

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that the most important strategy for slowing that growth is to slow the development of new technology by having government refuse to pay for it. In summary, Fuchs wants us to stop improving medical care and slow down progress: a typical procrustean solution.

Despite the increased costs associated with advanced technology, there is increasing pressure placed on physicians by consumers to use the latest techniques and medications. The nightly news is filled with reports and advertisements about miraculous cures and new medications. When Vice President Chaney underwent his latest cardiac catheterization, he walked out of the hospital the next day because of high-priced technology, and resumed his important duties. That feat could not have been accomplished 8 years ago. Nevertheless, the news reports did not highlight the fact that he returned to work the next day, a scientific wonderment, but rather that he did not receive the latest technological innovation, which was available down the street.

Two other factors that play a prominent role in increased expenditures in our systems are the cost of employees and patient age.

*Health Service Providers.* In the face of a general nursing shortage, pay for nurses has increased and we see the consumer price index for hospitals increasing in the same pattern that wages increase.19

Effect of Aging on Costs. Between 1953 and 1987 medical spending increased disproportionately at the extreme ends of the life span. It was almost twice the rate of that in the remainder of the population. In patients older than 65 years, the rate of spending for healthcare has increased 170% more than that in patients aged from 1 to 64 years (Table 1). Moreover, 10% of Medicare enrollees accounted for 64% of Medicare expenses (Table 2). The growth of Medicare was similarly concentrated in a few individuals; that is, 2% of Medicare patients accounted for 33% of the growth of Medicare expenditures. Interestingly, the individuals responsible for high expenditures 1 year are not usually responsible for those expenditures in the following year (Table 3).

In the US we have another factor: the cost of dealing with insurance companies. The precertification program was thought to be the answer to curtailing physician-ordered tests. Physicians and hospitals have hired cadres of employees to call insurance companies. This year, however, Aetna discovered that it had wasted $32 million per year on precertification programs.17 Similarly, United Healthcare canceled its precertification program after it discovered it had lost $90 million more than it attempted to save.2

We have seen these failures before. In the 1980s the introduction of mandatory second-opinion programs failed to produce anticipated savings and have since been abandoned. Those programs were based on research studies in which the medical design was flawed but the statistics were correct. That is a perfect example of what happens when healthcare economists dictate medical policy.

In summary, the factors driving healthcare expenditures over which no one has any control are the following: aging population, increased rate of growth of an aging population, increased demand for and access to expensive new technologies and/or medicines, and increased labor costs. These statistics will not disappear whether we have a single government payer or multiple payers. Focusing on payments to providers will not solve problems of increased costs to the system. Although my reference is primarily to the US, the same problems abound everywhere. Each country bemoans the amount spent on medical care, each assumes it can do it cheaper, and each attacks charges but not costs to the system.

International statistics continue to focus in longevity of life as the measure of improved health. For example, the cost of healthcare expenditures is compared with outcome indicators such as life expectancy and infant mortality.1 The US is frequently criticized for being in the bottom quartile among the 29 industrialized countries, and its relative ranking has been declining since 1960. In response to treatment of coronary occlusion, it is easy to assess that stenting and coronary-artery bypass grafting provide prolonged life and decreased morbidity. Measuring longevity when we are expending resources on hip replacements and spine surgery, so that our aging population can continue to be physically active, however, is nonsensical. The statisticians may be pleased about demonstrating correlations or lack of them, but the folly of that measure is obvious to the clinician.

Response of Government to Healthcare Costs

The HCFA is notorious and unrelenting, for example, in attacking physicians by distorting the reimbursement formula and by inappropriately evaluating practice expenses. Three years ago, the HCFA launched an attack on practice expenses, originally proposing that surgeons should not be paid for the expense of an office when they were in the operating room, as though their offices were closed and there was no rent or phone bill to pay. Currently the HCFA, through the Office of Inspector General, is launching punitive investigations of individual physicians’ offices by former agents from the Federal Bureau of Investigation. The regulations threaten felony convictions for minor accounting errors.

If the HCFA is intent on developing plans that ignore fiscal realities, if its goals are only politically motivated, if its administrative officers are the only judges to resolve disputes, and if it has all the resources and money, how can the voices of neurosurgeons, who are such a small percentage of physicians, be heard against such overwhelming odds?

What have we learned from the past? The answer lies in the writings of Archimedes, the Greek inventor and mathematician who described the mechanical advantages of the simple lever. He demonstrated that in using a long lever, an individual could move many times his or her own weight. He recognized the power of the lever when he said, “Give me a place to stand and I will move the earth.”
**What Does American Neurosurgery Need?**

American neurosurgery needs leverage, and we get that from each physician who will volunteer. Neurosurgery needs volunteers to work at the local level and the national level. It needs volunteers to work not just in neurosurgical organizations, but in other organizations such as the American Medical Association, the American College of Surgeons, county medical societies, and United Way campaigns. Every neurosurgeon can be a lever, and 5000 levers can move the government and the insurance companies. The lever will work for neurosurgery today, just like it has in the past.

We need neurosurgeons to provide expertise and effort at all levels within the political arena so that we can continue to treat very sick patients with appropriate techniques and resources. Neurosurgeons have not labored at the bedside just to watch bureaucrats deprive patients of needed care. The issues before us did not arise overnight and they will not be resolved overnight. The issues of managed-care reform, how healthcare will be provided and paid for in the future, healthcare quality, and patients’ rights will again be hotly debated, and we must take part in that debate not in the halls of hospitals, but in the halls of legislative assemblies and in front of conference committees of Congress.

There is no question that both physicians and politicians must find a way to deliver healthcare effectively and efficiently, but I do not understand the desire to keep practicing physicians from the development of this strategic plan. The physician who labors at the bedside has intimate knowledge not only of medical suffering, but also of how to deliver medical care. Physicians must fight to have our views heard and weighed in the balances of political decisions.

Why is there an effort to keep practicing physicians from the policy committees? Some claim that physicians have not studied the subject; they are too wrapped up in patient care. We should leave it to healthcare economists who have studied the problem. Indeed, the physician’s first-hand knowledge gives an expertise that cannot be learned in books. Those healthcare economists are the ones who brought us the failed programs of second opinion and pre-certification requirements, and they are the ones who championed drive-by deliveries of babies.

I do not fear the truth or unpleasant statistics. What I fear are those demagogues who would deceive the people. What I am concerned about is that, in most circumstances, Congressional advocates for government healthcare expansion stay married to the federal healthcare plan provided to Congress, postal workers, and other federal employees, and remain oblivious to the notion that the same government program could be offered to the American people.

The federal organization HCFA may get all the press, but do not overlook the important battles in state legislatures. How does neurosurgery become effective in the state legislature? It is by having neurosurgeons leverage their effectiveness by working at county and state medical societies. It takes time, but other physicians seek your input, and your input is effective in swaying opinions.

Malpractice reform was an area in which leverage played a major role. In the mid-1970s professional liability insurance became unavailable. How did physicians fight that problem? In Michigan and California, malpractice crisis committees formed, unifying physicians’ efforts. These organizations mobilized public opinion and they established insurance companies. In Ohio the state medical society started to form a professional liability company only for primary care physicians. I invited physicians from different specialties from around the state to meet and work together. Then I presented a plan to the Ohio State Medical Association: either work with the surgical specialists or we would set up a rival society and start our own insurance company. The Ohio State Medical Association decided to work with surgeons, and together we formed a successful insurance company that got us through that crisis.

With odds so great against us, how can we, a few thousand neurosurgeons, succeed against the mighty government? The answer is that we must never give up fighting. The Congress and HCFA are the proverbial 800-lb gorillas, and when you make love to a gorilla, you do not stop when you are tired, you stop when the gorilla is tired.

**A Look to History**

There are many instances in history that serve as examples of times when the odds were stacked against individuals and the weak beat the mighty because of tenacity.

**Colonel George Goethals.** In 1907 President Theodore Roosevelt appointed a 48-year-old army major, George Goethals, to take over the construction of the Panama Canal. The French had tried for 8 years and failed because of the daunting challenges of mountains, tropical diseases, and rebelling laborers. The US had been failing at this construction for 3 years. There were 40,000 laborers who could not be disciplined; there were repeated rockslides; and two famous engineers quit. Despite that scene, this low-ranking army major had the audacity to tell the president of the US that he would take the job only if he had absolute control and would not have to cave in to a bureaucratic commission. President Roosevelt agreed.

The odds against completing this backbreaking project were staggering.

Goethals established his own police force, which arrested unruly workers. He served as judge and jury. He routinely worked 16-hour days and demanded the same from his assistants. He would not quit.

His laborers worked hard, but they were treated well, with clean sleeping quarters, good healthcare, and good food. Indeed, they were treated better than women and children working in sweatshops in the US. Goethals gave those 40,000 workers a purpose: to finish that canal.

The cave-ins continued: supplies did not arrive on time, the jungle heat and humidity were unbearable, malaria and yellow fever killed the workers. But Goethals would not quit!

In 1913 the job was almost complete. A messenger ran into Goethals’ office: there had been a huge collapse, burying men and supplies. It had destroyed months of work and incalculable hours of sweat and brawn. A lieutenant collapsed in a chair, “This, after 6 hard years. What can we possibly do now?” Goethals glared at him, “Hell, dig it out again!”

Nothing stood in the way. They dug it out again and again. After many disappointments, the first ship went through the canal on August 15, 1914, 6 years after Goethals began the task.

**Spinal Neurosurgery.** In 1987, as now, the majority of
work for neurosurgeons was spinal surgery, and yet we were told that neurosurgery had lost spine. The orthopedists outnumbered us eight to one. They had spine fellowships. They understood instrumentation, biomechanics, and the principles of fusion. They could stop us from performing complex spine operations in most hospitals and in most university centers. Even if we wanted to do such surgeries, there were very few neurosurgeons who could perform complex procedures on the spine. Neurosurgeons could not even buy the only universal spine instruments—the Cotrel-Dubousset system—that was necessary to perform complex spinal surgery.

Members of the AANS asked, “How can we preserve or get back into spine surgery?” I had some trepidation telling the AANS Board of Directors how to train spinal surgeons. We needed to do the following: 1) train neurosurgeons to perform complex spinal surgery; 2) get neurosurgeons to begin performing spinal research; 3) tell the world that neurosurgeons were performing it; 4) establish a neurological academic effort to identify with spine activities, such as the Journal of Neurosurgery: Spine; 5) start a task force that could go to other societies; and 6) alter official requirements in our residency programs.

We produced breakfast seminars and lectures in plenary sessions at prime times. The Spine Task Force, chaired by Dr. David Kelly, was developed to cross organizational boundaries. It developed new guidelines for training spine surgeons. Using the AANS Professional Development Program, spine courses were used to teach 3000 neurosurgeons the concepts of fusion, bone pathology, and how to use the appropriate instruments.

To circumvent the problem that neurosurgeons could not buy instruments, I invited Dr. Ives Cotrel, the French inventor of the universal system, to be the guest of the AANS Spine Section. After that, neurosurgeons could purchase the equipment.

Consultant’s Corner was started at annual meetings so that practitioners with problems could meet some of the experts.

The AANS’ prestigious Journal of Neurosurgery started a new Journal of Neurosurgery: Spine that gave specialists another important outlet for publishing spine-related articles and, by its mere presence, encouraged spinal neurosurgeons to produce and disseminate work in this area.

It has been a long and fruitful climb back to prominence. Currently, a neurosurgeon, Ed Benzel, is Chair of the Council of Spine Societies, and another, Volker Sonntag, is President of The North American Spine Society.

Neurosurgery did not lose spine!

Why do I recount that history? I do because it exemplifies what a few neurosurgeons can do when their minds are set on a goal. Our numbers are few within the ranks of physicians, but we are not without power. Our challenge is to grab power, to take advantage of it, and to leverage our effectiveness.

Sir Winston Churchill. By May 1940, Nazi Germany had invaded or conquered most of Europe. In England, Prime Minister Churchill formed a war cabinet. Great Britain was faced with supplying fighting forces in northern Europe as well as on the Mediterranean coast. Churchill’s message to Parliament was not encouraging:

I have nothing to offer, but blood, toil, tears, and sweat. . . . You asked, what is our aim? I can answer in one word: Victory . . . victory at all costs; for without victory there is no survival.

On May 29, 1940, British troops were trapped at Dunkirk and were evacuated by a heroic effort undertaken by every ship and boat that England could muster. Churchill again addressed Parliament,

. . . even though large tracts of Europe and many old and famous states have fallen, we shall go on to the end, we shall fight in France, we shall fight in the seas and oceans, we shall fight with growing confidence and growing strength in the air. We shall defend our Island, whatever the cost may be. We shall fight on the beaches, we shall fight on the landing grounds, we shall fight in the fields and in the streets, we shall fight in the hills, we shall never surrender.

Give Neurosurgery a Place to Stand

I call upon all neurosurgeons to do the following. Work in the state chapter of the American College of Surgeons. Work in your hospital committees not just to preserve neurosurgery, but also to render your expertise, your opinions, and your time. Work in the county medical society. Your opinion will be carried from the county society to the state legislature. With that we can change Medicare enforcement, because that occurs at the state level. To abdicate those roles will lead to failure, and failure for us means defeat for our patients. Anybody can do this. It does not take special training; it only takes commitment.

If you are upset with the government’s regulatory reign of repression and the insurance companies’ irresponsible control of patient care, then I ask you to put your back into it and lean on the political levers with all your strength and time. We must leverage the politicians and the legislators. You can claim you are too busy with your practice. But I am reminded of the comment by Mae West, “Do you want a little action or do you just want to talk about it?”

I am convinced that for all those who will work in the future, it is clear what the attitude must be. We must work as an organization that is inspired to the highest degree by centering on patient care based on the ideal that care of the sick must do more than just render profits to insurance companies and must be more than a source of promises for politicians.

It is easier to sit back and let some other physician do the work. Sitting back and taking care of patients is what we all love. Taking care of patients is certainly more rewarding than fighting a battle with the government. Nevertheless, if we believe in it, if we are willing to stand up, if we refuse to surrender, then we can make a difference. The more we work and the more we bring physicians into the spirit of our cause, the more likely we are to change the future.

Concluding Remarks

I am reminded of the closing lines of Tennyson’s poem Ulysses:

Come my friends,
’Tis not too late to seek a newer world.
Push off, and sitting well in order smite
The sounding furrows; for my purpose holds
To sail beyond the sunset, and the baths
Of all the Western stars, until I die . . .
To strive, to seek, to find, and not to yield.

We must decide where our destiny lies. With the same skill and determination that enabled us to become neurosurgeons, we can make a difference and we can create a better future for our patients. We may lose a fight, but if we surrender we fail forever. We must not quit!

Give neurosurgery a place to stand and we will move mountains of bureaucracy. Come volunteer with me. Come pull on the oar to strive, to seek, to work to win, and not to yield!

References

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