

***Making the future brighter for aspiring physicians***  
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Thank you for the invitation to speak tonight. I'm very humbled to stand before you. And what a delight to speak to people who are neither bleeding, intoxicated nor asking for Percocet! And in a setting where no one will burst through the back door on a stretcher!

As you know, I'm an emergency physician at Oconee Medical Center. But before I go on, let me tell you about my path to medicine.

I was a poor science student in high school. In fact, I was convinced that I would never have a career in anything related to science. When we failed to make nitroglycerin blow up in high school chemistry, I lost interest.

I went to Marshall University and majored in journalism. That is, for about two semesters. After that, through some twist of maternal coercion, coupled with some divine providence, I decided I would try to go into medicine. I struggled and succeeded in college science and did well in my prerequisites. I went to medical school at West Virginia University, then on to residency at Methodist Hospital of Indiana, in Indianapolis. And here I am, 19 years later, having practiced successfully for what seems like a very long time; but really isn't that long at all.

I was fortunate, because at no point in my premedical or medical education did anyone ever take me aside and discourage me from the pursuit of my chosen career. Sadly, too many students, who are aspiring physicians, are subjected to just this phenomenon.

'Don't go into medicine, it's terrible.' *Well, no, it isn't.*

'Don't go into medicine, go into law. That's where the money is.' (*Evidence suggests this is not true at all, by the way.*)

'You'll hate your life!' *Only if you make very bad decisions...*

When I meet aspiring physicians, I don't discourage them. I tell them it's a great career, full of depth, challenges and meaning. I tell them my career is fulfilling and often a source of joy.

What I don't do is sugar-coat the truth. What I don't do is lie to them. Because that would be grossly unfair.

I know this, because my career as a physician has made some things eminently clear to me. Medicine as a profession has problems, and we need to address them if we hope to continue having physicians.

However, I'm not talking about the ones we usually hear of in the media.

I'm not here to tell you that American medicine is bad medicine. In fact, it's very good. A residency

director told me, just a few weeks ago, that he had offered to translate an ultrasound text into Chinese, for use by physicians at a hospital in western China.

The administrators there implored him: 'Only translate the content. Leave the cover in English, because our doctors won't use it if it's Chinese. They'll only use it if they believe it's American.'

There's a twist on popular thinking on medicine, isn't it?

I submit that movie stars and political figures from around the world come here because medicine, for all its failures, is very good in the United States.

I'm also not here to discuss, in any great detail, my views of Obamacare. That would take up the lecture time, then several hours afterward. I will discuss a little of the economics of medicine as it pertains directly to aspiring, young physicians.

The problems of medicine are not insurmountable. But we must work on them. If only so that we can maintain an ongoing procession of fresh, new faces and innovative new thinkers to fill our medical shoes as my generation of physicians, and several others, fades off the scene of active practice.

In other words, kids still need to choose medicine as a career, and we have to help them make it work!

America is facing an estimated shortfall of physicians to the tune of over 20,000 doctors by 2020. I think we need to put our heads together and make the future brighter, more attractive and more available for aspiring physicians.

And knowing that medicine has become not only a difficult profession to enter, but a difficult profession to practice, I think we can do better, as practitioners, as policy makers and as educators.

First of all, I wonder if we do a good job choosing who goes into medicine. Not that the physicians we have are bad, but I ask myself, 'can we do better?' Can we select more carefully for the traits we need; What traits come to mind?

Among others:

the ability to learn and use large amounts of information. The compassion necessary to feel genuine empathy for others. A love of human beings and a desire to work closely with them in difficult settings. Discipline. Flexibility. Physical and emotional stamina. And the willingness to endure the length and difficulty of the process.

So far, it has worked. No doubt about it. I meet pre-medical students from Clemson University. They are intelligent and articulate; but I suppose I wonder if we asked them to do far too many things that will not really impact their practice of medicine. Will their Calculus class improve their surgical skills? Will their memorization of biochemical cycles make them more effective radiologists? As we face fewer and fewer physicians (both from inadequate numbers of new doctors and increasing exodus of existing practitioners), we may need to trim the process.

Here's one example of how we could educate our students more effectively:

A little known phenomenon in medicine today is the medical scribe. The scribe works for a physician

and does charting. This is because so many physicians find electronic medical records to be a hindrance, rather than a panacea. (In fact, EMR reduces productivity by 30% across the board...I'll bet nobody has mentioned that much, have they?)

I think pre-medical education should include appropriate scientific preparation, but that it would be dramatically enhanced by opportunities for apprenticeship, as in the scribe model. The practice of medicine is about repetition and pattern recognition, communication and 'people skills' as surely as it is about memorization and algorithms. Apprenticeships would prepare our physicians earlier, and more effectively, for lifelong careers of actually caring for the sick. In the process, students might find out that they don't really care for the the practice of medicine, and might learn it well before four years of college and two years of basic sciences in medical school.

The reality is that Medical schools are already looking for applicants who have worked in these capacities; clearly, they're entering their educational process ahead of the curve. And while research is lovely, and stands out nicely on an application, the overwhelming majority of practitioners are not involved in any kind of research once they begun practice.

We can also improve their educational plight by preparing them for the rigors of business, the hard realities of economics. Education, pre-medical and medical, that speaks to aspiring doctors about the glories of caring for the sick, that tells them only about their economic security, is entirely unfair (and unrealistic) if we do not teach them that medicine is also a business; or at the very least a kind of financial transaction, no matter who writes the checks.

They should have exposure to management and business classes in their premedical days, so that they can have those concepts in mind as they consider their economic futures. The cost of their educations, balanced against their own assets and motivations, will have to be factors in their educational process. And universal healthcare, if passed, won't change this reality. It will only change the customer from the patient to the government.

How about the cost of medical education? Does it matter? Absolutely. With young physicians exiting medical school with debut burdens in the range of \$160-180,000, and with reimbursements for their care dwindling below the cost of running a practice, we are fast approaching a breaking point. Physicians with that kind of debt cannot buy houses, cannot easily have children or even automobiles. And opening innovative practices, in which they are business owners, is nearly out of the question. Into that mix, the likelihood that they will have either inclination or capacity to see the poor at a reduced rate (or for free), is next to zero.

It also makes the lower paying primary care positions nearly impossible, unless those positions are supplemented through loan repayment or scholarships.

This financial problem also explains the general trend in medicine away from call. For those unaware, specialists (especially surgical specialists) are abandoning call responsibilities in droves, not only to avoid sleeplessness, but to avoid time spent on patients for which they will receive neither compensation nor protection from litigation.

What can we do? Among other things, we could structure loans to allow physicians to get credit towards those loans at a Medicare rate for each non-paying patient they see. Over a few years, they could work off that student loan debt. The same applies to other physicians in practice, but perhaps without student loans. We could allow them to receive tax deductions based on the same formula for

caring for the indigent. A simple solution. It would provide care. It would build good feelings and rapport. And many of those cared for would one day have jobs, and insurance, and become paying patients of those physicians who saw them in their time of medical, and financial need.

This has been suggested by many legislators, but never enacted. It appears to reward the rich. Pity. Doctors, and especially primary care providers, are fast losing their financial power, even as they are considered wealthy. For future physicians to thrive, this perception has to be addressed.

Physicians have all heard this argument. 'Don't worry about insurance payments, or government, or memberships or licensing or anything else. You're a rich doctor. Don't worry about your loans. You'll be a rich doctor.'

Coincidentally, I heard a wonderful lecture last month entitled 'Life at \$200,000/year,' which broke down the costs of medical practice and life in general after residency. After a physician in practice pays his family's health care insurance, his retirement, disability, malpractice, license fees, professional organization fees, mortgage, care payments and all the rest (since he or she is typically responsible for his or her own benefit package), each month's salary leaves about \$600 of free money. Before child-care. Young physicians can't be overwhelmed with taxes and fees, and still treated like the filthy rich, after spending 11 to 16 years on post-high school education. It just isn't fair. And before long, the bloom will fall completely from the rose and bright students will be warned away in droves.

But there's more. To make medicine viable we have to reconnect the physician with the patient. The recent debate on the contraceptive mandate raises the question of the intervention of government in the patient physician relationship; but the government has long been involved in that transaction, ever since Medicare and Medicaid came to be. The arms of government regulate more and more of our medical lives from screening tests to certification, from required labs to admissibility of patients! Government, at the local, state and federal level is inextricably involved in health care. And in far more ways than the provision of birth control. I frequently have to look at the little lady with the injury, who has no broken bone but can barely walk, and say 'I'd love to admit you, but Medicare won't allow it. I'm sorry. How else can we help?' Again, the payer makes the rules. If we could somehow change that formula. If individuals could make the decisions, rather than the government, the insurer, the employer, then some of the sanctity of our relationship with patients would be restored. Of course, state medical boards, federal regulators like the DEA, and others all insert themselves into the relationship.

Furthermore, regulatory bodies like Joint Commission, while existing for noble purposes, often fall down in practicality as care providers are focused on pleasing evaluators more than caring for patients. Even our specialty boards, which exert increasing influence on the practices of their diplomats, are raising costs dramatically, while asking more and more from physicians; even though no study has demonstrated that board certification has any real benefit in patient outcomes. And even as evidence mounts that the \$300,000,000 per year paid to the American Board of Medical Specialties may be as much about profit as quality.

My point is that many groups are part of the physician patient equation. And as with so many equations, we need to simplify to solve. And we can do that for future physicians by asking hard questions about utility, cost and outcomes, rather than relying on that old medical tradition of saying : 'Well, we've always done it that way and it worked.'

Maybe, it worked in spite of the way we did it, because the doctors were so good and so committed that they made it work.

But wait, there's more!

For future physicians to succeed, they need to be freed from the tyranny of ideas imposed upon them by those not working at the bedside of the patient.

We need to empower physicians to rise up and proclaim self-evident truth. What examples are there?

Most physicians understand that the 'customer service' model of medicine is perilous. While medicine is a business, the idea of using satisfaction surveys (an industry in itself) to determine quality of care, has always been problematic. Physicians are often pressured to give medications, or order tests, because patients desire them, or perceive they know the right thing. Although we must listen to our patients, although they often have excellent ideas and insights, we have to be the final word. When administrators punish or threaten physicians to practice bad medicine for customer service, there is danger afoot. A recent study published in the Archives of Internal Medicine illustrates this. It suggested that physicians with higher satisfaction scores were having poorer patient outcomes. No surprise there. Most of us could have predicted it. Smart, young physicians need a voice. We have to empower them, and teach them not to roll over to top down leadership, but to be the individualists, the patient advocates that physicians have traditionally been.

We must listen to physicians in the field. Many of us have, for years, protested the use of the pain scale and the general belief that physicians treated pain poorly and should give more narcotics. We were scoffed at and scolded. Now, the data arrives which confirms what we believed. Patients are receiving too many narcotics and dying; as are the people the so called patient sell them to.

And if medicine is to continue, we have to address the vast unfunded mandate of EMTALA, the Emergency Medical Treatment and Active Labor Act, which crushes physicians with a mandate to see and treat everyone who presents to any hospital that takes Medicare. A compassionate and appropriate idea at its inception in 1986, it is the main reason many young (and old) physicians leave call duties, and that emergency rooms and entire hospitals close. For it is a mandate without funding, and it is remarkable expensive.

The future of medicine for aspiring students cannot be bright until we address the many bad ideas that have come to burden the practice of medicine today.

There is another gift we can give our future physicians. It is the gift of leadership. Despite the rise of many allied health fields, such as physicians assistants and nurse practitioners, and despite their importance and contributions, the fact remains that one of our most important jobs, one of my most important jobs, is leadership and accountability.

Yes, medicine is multidisciplinary, and involves everyone from paramedics and home care-givers to pharmacists, physicians and nurses. However, ultimately someone has to be in charge. This is true in every profession. Combat may be multidisciplinary, but a commander has to have a final word. It matters for expediency and effectiveness; so that care can be fluid and responsive to change. But it also matters because, like it or not, someone has to be able and willing to accept and endure blame. Few things are more evident in medicine than this fact.

It is evidenced by the reality, often startling to young physicians, that every significant decision that anyone 'on the team' makes must be verified by the signature of whom? The physician. When blame,

and malpractice premiums, are equally shared by all stake holders and team members, then physician leadership might dwindle (though the team would become less efficient). But not until then. Until then, it may seem unfair, or arrogant for us to insist on being in charge, but we have to be. We are educated to see the global perspective, and we are treated as if we are the one to blame. Our students might as well be educated to step up and embrace their role as leaders, unashamed and uninhibited.

In addition, we have to teach our young physicians the primacy of family and relationships. Tragically, there have been residency programs in America who felt that their divorce rates were points of pride. That's scandalous, and cruel. Medicine is not the least antithetical to marriage or parenthood; it simply requires forethought and realistic expectations. The spouse of a physician can expect, especially during training, to spend lots of time alone. But with wise guidance, these couples can have creative times together, and can cement their relationships through struggle in ways that ease cannot accomplish. Likewise, while having children is costly and time consuming, especially small children don't really care what time of day or night mom or dad play with them. They just want the time. Even the busiest physician in training, or in practice, can make the time....if it's a priority. I'm always saddened when young people are told that they can have medicine or marriage. It isn't a dichotomy. I once told my wife that I had heard 'medicine is a jealous mistress.'

I never told her again. The look in her eyes was sufficient warning.

Finally, and perhaps most important of all, in order to help future medical students, we need to give them a sense of calling! A sense of purpose! Money is one very important, and very natural reason to pursue the profession; let's not denigrate that, in light of the fact that our culture holds up for adulation so many who are wealthy, like Steve Jobs, /Bill Gates, Beyonce, LeBron James and others. We need not be ashamed that we work hard, and do hard and often dangerous things, and are rewarded.

However, money is insufficient. Physicians who are entirely defined by money are typically very unhappy. I've known them down the years, and there's never enough money to pay back the time they spend, ironically, making more money. In the same way that it is a mistake to be defined by one's medical title, it is terrible to be rewarded only by money.

Hippocrates oath (whether written during his lifetime or not) spoke to the relevance of a higher authority.

*I swear by Apollo the physician, and Asclepius, and Hygieia and Panacea and all the gods and goddesses as my witnesses, that, according to my ability and judgement, I will keep this Oath and this contract...*

We are making tremendous technological strides in medicine. Students are better at science and technology than ever in our history.

But so often in the modern Western educational process, we educate science and medicine students to scoff at transcendence, at objective truth, at philosophy and at religious faith as seeming wastes of time.

I'll speak from experience when I say that faith may often be the only source of strength left when our aspiring students face the realities of medical practice, the horrors of human inhumanity, the seeming cruelty of disease.

I am often asked about the worst thing I have seen. There are many. From dismembered individuals to

burned ones, from abused children, to murdered men. From sudden cardiac arrest to lifelong suffering. Unless our young physicians have a framework within which to comprehend all of this, we do them a disservice. Double blinded studies, however well constructed, do not erase the terrors we sometimes see, and they do not offer explanations for the question 'why.'

It is entirely unfair to ask them to perform what is arguably one of the most dangerous jobs in America, to expose themselves to disease, sometimes to violence, to litigation and to intensely delayed gratification, only to tell them they should make less money, work harder, follow more rules and then deny them any possibility that their faith, their belief in meaning or eternal reward, is silly and irrelevant.

Fortunately, their older mentors are on this path. Religious belief and worship service attendance by physicians is very high, according to a survey in 2005 by the University of Chicago. In fact, it showed that 90% of doctors in the US attend religious services at least occasionally and 55% said their beliefs influenced their practice.

We can have materialistic physicians ( in the philosophical sense) but we must reward them materially. If we want physicians who are more, we must allow them a hope of something greater than mere financial transactions or nebulous societal good.

The idea was well spoken by noted English physician and scientist, Thomas Sydenham in 1668:

*It becomes every man who purposes to give himself to the care of others, seriously to consider the four following things: First, that he must one day give an account to the Supreme Judge of all the lives entrusted to his care. Secondly, that all his skill, and knowledge, and energy as they have been given him by God, so they should be exercised for his glory, and the good of mankind, and not for mere gain or ambition. Thirdly, and not more beautifully than truly, let him reflect that he has undertaken the care of no mean creature, for, in order that he may estimate the value, the greatness of the human race, the only begotten Son of God became himself a man, and thus ennobled it with his divine dignity, and far more than this, died to redeem it. And fourthly, that the doctor being himself a mortal man, should be diligent and tender in relieving his suffering patients, inasmuch as he himself must one day be a like sufferer.*

In summary,

We older physicians and other professionals must not discourage young people from medicine but encourage it as a field. The future is short of physicians, and especially so in rural areas. There will always be work as long as illness and injury exist (and gravity); or as long as we fail to predict with absolute accuracy what may happen to us. Young people must be told that their careers in medicine will have depth and purpose, meaning and joy, mixed with hard work and respect. And that they will be financially rewarded for the work and responsibility.

If we do not do this, if we do not use our wisdom and experience to smooth their paths, then we only harm ourselves, for we will all need physicians. We only harm the future generations who will lack new cures, new drugs, new procedures and fresh faces of compassion. And we may, inadvertently, harm our own descendents, who might find themselves suffering with no one to intervene. What a tragedy that would be indeed.

Thank you, and good evening.