

The Medical Commencement Archive

Volume 4, 2017



Robert M. Wachter, M.D.

University of Pennsylvania School of Medicine
Commencement Address

Talk to the Radiologist

Robert M. Wachter, M.D. is Professor and current Chair of the Department of Medicine at the University of California, San Francisco. He is also former President of the Society of Hospital Medicine and former Chair of the American Board of Internal Medicine. Having coined the term “hospitalist” in 1996, he is often considered the “father” of the hospitalist field, the fastest growing specialty in the history of modern medicine. Doctor Wachter is the author of 250 articles and 6 books.

In the safety and quality arenas, he edits the U.S. government’s leading website on patient safety and has written two books on the subject, including *Internal Bleeding and Understanding Patient Safety*, the world’s best selling safety primer. In 2004, he received the nation’s top honor in patient safety -the John M. Eisenberg Award. In 2016, *Modern Healthcare* magazine ranked him as the fourth most influential physician-executive in the U.S., his ninth consecutive year in the top 50 (he was #1 on the list in 2015). He has additionally served on the healthcare advisory boards of several companies, including Google. His 2015 book, *The Digital Doctor: Hope, Hype and Harm at the Dawn of Medicine’s Computer Age*, is a New York Times science bestseller. He recently chaired a blue ribbon commission advising England’s National Health Service on its digital strategy.

*D*ean Jameson, Trustees, Faculty, Family and Friends, and most of all, Graduates of the Class of 2017:

Standing before you on this wonderful day, seeing all the proud parents and significant others, I can’t help but think about my father. My dad didn’t go to college; he joined the Air Force right after high school, then entered the family business, which manufactured women’s clothing. He did reasonably well, and my folks ended up moving to a New York City suburb, where I grew up.

There were a lot of professionals in the neighborhood, but my dad admired the doctors the most. He was even a little envious of them. This became obvious on weekend evenings when he’d get dressed to go out to a neighborhood party. He’d look perfectly fine – slacks, collared

shirt, maybe a sweater. But there was one thing out of place: he'd be wearing our garage door opener on his belt. "Dad, what exactly are you doing?" I would ask, somewhat mortified.

"There'll be lots of doctors at the party tonight," he'd reply. "They all have beepers, I have nothing." The strangest part was when the party was next door, the garage door would sometimes go up and down, as dad showed off his "beeper."

You can just imagine how proud my dad was when I was accepted to Penn Med and chose to come to this special place.

When I was a second year med student, evidence was emerging in the literature that an aspirin a day might prevent heart attacks. I told my dad he should start taking one. A few months after starting the aspirin, my mother called to tell me my father was in the E.R., having passed out on his way to work. He was bleeding into his stomach.

I was overcome with guilt, certain that my baby aspirin had caused the GI bleed. I rushed home to be there for his endoscopy. The gastroenterologist attached a teaching scope, so I got to watch my dad's procedure. "I'm sure we'll see an ulcer or gastritis," he told me reassuringly. He was wrong.

My 51-year-old father had gastric cancer. It had already spread to a lymph node, which dropped his chances of cure to 5-10 percent. In fact, it probably was my aspirin that caused the cancer to bleed. After a massive operation, my father quit his job, got his affairs in order, and hoped.

One of his hopes was that he'd live to attend my Penn Med graduation three years later. He did, and I recall his pride, a pride that all of you are feeling today as you reflect on your loved one's accomplishment.



By the way, my dad turned 87 last month.

The experience taught me many things. How terrifying illness is for patients and family members. How doctors aren't necessarily too great at prognosticating. And how important human-to-human contact is in medicine – not just between doctors and patients, but also among members of the care team. That's what I want to talk to you about today.

When I started my ward rotations at HUP, it became clear that the central hub of the hospital was not the mahogany-paneled C-suite, or the glittering Operating Room of the most famous transplant surgeon. Rather, it was in the dimly lit chest reading room in the radiology department on the ground floor of the Dulles Building.

You see, there lived Dr. Wallace T. Miller, chief of chest radiology and the kind of teacher that you remember vividly 35 years later. Every day, each clinical team – medical, surgical, ICU – cycled through Wally Miller's chest room like cars going through a car wash. Sure, they were coming to look at their films – perhaps later, some of the elders can explain to the young folks what films were. But mostly, they were coming to “See the Oracle”.

I was a third-year student, and my team had admitted an elderly man with a fever and cough. Wally pulled up the film, and I began my little speech. “This is a 78-year-old man with a week of fever and productive cough,” I said. “What do you think?” asked Dr. Miller, pointing to an upper lobe infiltrate. “Pneumonia,” I answered feebly. “Mwaaaaa,” he said, an unforgettable sound that was both endearing and terrifying. “Look at this,” he said, pointing to a subtle area of cavitation. “It's tuberculosis.”

Two decades ago, the field of radiology went digital. This was no less of a magic trick than podcasts, Amazon, or GPS. You could now see images anywhere – on the wards, in the clinic, even at home. The films, the contraptions called alternators on which they were hung, the cluttered film library... they all left the building, literally overnight.

Sadly, just as abruptly, radiology rounds ended. Nobody said that they should, nobody predicted that they would. They just did. Now that you didn't need to schlepp down to radiology to see your films, people simply stopped going.

And with that, an important medical ritual died. Not only did we lose the collegial exchange and the learning – learning that enriched both the front-line clinicians and the radiologists – but we all lost the opportunity to slow down for a few minutes and to think deeply about each case. Instead, we briefly glanced at the image on a computer screen (or sometimes didn't even do that), read the radiologist's report, and continued on our sprint to get through rounds and polish off our checklists.

Your careers are launching at the start of a period of massive transformation in health-care. When you entered college, medicine was an industry whose information backbones were the piece of paper, the three-ring binder, the post-it note, and the fax machine. Now it is the electronic medical record.

History has shown that, while information technology ultimately reshapes every industry it touches, it doesn't immediately deliver on its promised improvements in quality and productivity. This lag is known as the Productivity Paradox of I.T. You see, humans aren't quite imaginative enough to appreciate the opportunities or to understand the changes inherent in going digital... until they've actually gone digital. So they get it wrong. As it happens, this is an age-old problem in technology: Henry Ford was reputed to have said, "If I'd asked people what they wanted, they would have said, "faster horses." They had no ability to imagine their world with cars until there were cars.

“We’ve learned from other industries that it takes about a decade after widespread digitization for the massive potential of IT to be realized.”

During the past few years, we've witnessed our own maddening version of the Productivity Paradox. Doctors and patients no longer looking at each other, both feeling alienated and more than a little pissed. Residents hunched, dead-eyed, over their computers. The numbers tell the story: from the E.R. doctor's 4,000 clicks a day; to the 2.5 million alarms – virtually all of them false – that go off in my hospital's ICUs each month; to skyrocketing rates of physician burnout. There are a number of culprits, but high on the list are digital tools that are poorly designed, often unhelpful, and sometimes even dangerous.

You'll be glad to know that the history of the Productivity Paradox offers room for hope. We've learned from other industries that it takes about a decade after widespread digitization for the massive potential of IT to be realized. In healthcare, of course, it'll take longer – we're complicated, there are boatloads of regulations, and the Silicon Valley mantra of "failing fast" isn't terribly appealing when failing can mean a dead patient.

But IT will eventually deliver on its promise in healthcare.

There are two messages I want to leave you with regarding this transformation. The first is that you will be the ones to figure out how to make this work. Believe me, we're counting on it! It turns out that the key to overcoming the Productivity Paradox is that people need to reimagine the work. It's smart young people like you who are best positioned to do that.

They ask – you've probably already asked this yourself – Why is the doctor's note a flat digital document, accessed by clicking on a tab? Because that's what the note looked like when it sat in a three-ring binder. And so, when we ditched the paper, we just digitized the same old note. And young people say, "That's absurd. Haven't you ever seen a Facebook wall? Or a Twitter feed? How about a collaboratively created note, a la Wikipedia? Why isn't there audio or video?"

Reimagining the work doesn't mean that you need to learn Java Script, move to Menlo Park, and begin hitting up VCs to fund your start-up. It does mean that you are constantly on the lookout for ways to improve the systems you work in. This involves some skills, yes, but much more importantly a mindset – one that says that the great doctor is no longer just a smart diagnostician or a talented proceduralist. He or she is also a great leader, an improver of systems, a relentless re-imaginer. Having graduated from this extraordinary school, everyone will be looking to you for leadership and inspiration. I know you'll deliver.

“...The great doctor is no longer just a smart diagnostician or a talented proceduralist. He or she is also a great leader, an improver of systems, a relentless re-imaginer.”

My second message to you is just as important. As the work becomes digitized and the software gets better, we will spend more of our time interacting with our digital tools, and less interacting with each other, and with our patients. This is natural, and – assuming the tools are any good – it might even be OK. After all, computers will hold much of the information, and they will be where we develop and implement many of our diagnostic and treatment plans.

But, there is a huge danger from hunkering down in our digital caves. You can never fully understand a consultant's thinking by reading her note. You can never place a complex radiology finding in context without speaking to the radiologist. You can never allay the anxiety of a sick patient's spouse by sending a text message. And you can never comfort a dying patient without sitting at the bedside and holding his hand.

In his magnificent commencement address at Kenyon College in 2005, the late author David Foster Wallace began with the classic parable about the two young fish swimming along. An older fish briefly joins them and asks, “How's the water?” A bit later, one of the younger fish turns to the other and asks, “What the hell is water?”

Wallace ends his speech – the only commencement address he ever delivered – by talking about the real value of an education: “[It] has nothing to do with grades or degrees,” he said, “and everything to do with simple awareness – awareness of what is so real and essential, so hidden in plain sight all around us, that we have to keep reminding ourselves over and over: ‘This is water.... This is water.’”

Our digital tools offer us breathtaking capabilities, and we have to use them to our fullest. But it is the people who are real – our patients, our colleagues, our teachers, our students. They are what matters. They are our water.

So take full advantage of the magic of technology, and figure out how to make it work. And then go to radiology. Talk to your colleagues. Be with your patients. You'll be a far better doctor. And you'll be happier.

Several years ago, our UCSF department chair at the time was leading a faculty meeting. He was ticking off the massive changes in the world of medicine: new payment models, new technologies, new regulations, new pressures to improve value. I could see many of the faculty, particularly the older ones, squirming in their chairs. A few were mentally tallying the value of their Roth IRAs to see when they'd be ready for retirement.

“We have the opportunity today to do more for our patients than ever before.”

One of our senior cardiologists, an amazing clinician-teacher but most decidedly of the old school phenotype, got up to speak. He was usually quiet in these meetings, so all of us perked up.

“You know,” he began, “this could be worse.” This was surprising, coming from him. But then he continued. “I could be younger,” he said.

You, my young colleagues, should listen to such lamentations with sympathy – after all, change is hard – and humor. And then you should emphatically reject them.

We have the opportunity today to do more for our patients than ever before. And you have the knowledge, skills, values, and habits of mind to thrive in this changing world. You are the ones who will reinvent the work to deliver for our patients. And you will figure out how to balance our new digital capabilities with the enduring truth that medicine is, and must remain, the most human of professions.

Thank you for the honor of speaking to you today. Congratulations to each and every one of you.