

**Additional Bonus Chapter to:
The Scalpel and the Soul
Encounters with Surgery, the Supernatural, and the Healing Power of Hope
by Dr. Allan Hamilton, MD, FACS**

**What Doctors Need to Know about Practicing Spiritually-Enhanced Medicine
or Twenty Ways to Get More Out of Your Doctor**

I'll outline some rules that I've devised during my own time as a resident in training and, later, while I served as an attending neurosurgeon and Chairman of Surgery. I don't admonish physicians to adhere to a particular code of conduct. Instead, I would urge each physician to see his or her own practice of Medicine in the context of a personal spiritual quest. Ask yourself: During the course of my career as a doctor, did I strive to improve myself to the limit of my abilities so that the healthcare I provided was as efficient, thorough, and compassionate as I could achieve?

It may help you to grasp what I mean by imagining you have arrived at the end of your life. You die and your soul passes up to heaven and now you must face a panel of the world's greatest physicians. You stand before a heavenly tribunal. You see Hippocrates there. Sir William Osler. Freud. Halsted. And Semmelweis. Behind the bench are also a few of your own mentors you trained under. The physicians you admired the most during your own professional training.

This panel of doctors will now play back the entire record containing every act you ever carried out as a physician. It will be evaluated and then you will be judged. And not just on the outcomes. This panel is made up of the great *souls* of Medicine. As they review each act, they will also know what you were thinking and feeling at the time. They will ask you the hardest questions: Did this action make you feel important? Were you being genuinely charitable or just putting on a show? Why were you in such a hurry there? Why didn't you ever reveal to anyone the error you committed? They will know what was in your heart. They will know if you tried your best.

As terrifying a prospect as this hypothetical tribunal may be, imagine how much better a physician you would become if you critiqued your own medical practices and attitudes in a similar vein. It could push you to see your medical

duties not just as an opportunity to practice medicine but also a challenge to improve yourself spiritually.

Each doctor must decide when and how to undertake this transformational pilgrimage, when to take the soulful plunge. Each of us knows this self-reflective journey will require periods of doubt, loneliness, and confusion. It may be punctuated by pain, suffering, and loss—our own or that of one of our patients. To find the true heart of Medicine—the true power that elevates any of us to the status of healer—we must ultimately confront ourselves. It's when we experience forgiveness, understanding, and love for our own fragility that we begin to express “the healing arts” in a powerful and personal way.

We need to discipline ourselves, as rigorously as samurai warriors, constantly reminding ourselves to never tire in our efforts to improve. We must practice repeatedly and strenuously to cherish virtue. We must rehearse the manifestations of our character, to show greater integrity in word and deed. We must dedicate ourselves to becoming better and worthier. To improve as individuals. To make ourselves into better spouses, parents, and friends. In the process, we also will improve as physicians.

Most of us went into the medical field, dreaming of the ability to express the goodness and kindness we hoped dwells in our hearts. All of us need to periodically get in touch with those dreams, and know they all are still within our reach.

Rules for Physicians

Rule No. 1: Treat every patient the way you would want your loved one looked after.

Notice that it's not exactly the “golden rule.” I specifically did *not* say “the way you would want to be treated.” Why? Because physicians are notorious for abusing their bodies and neglecting their own health. Doctors routinely subject themselves to stress, anxiety, insufficient rest, dangerous eating habits, and inadequate exercise.

I recall a conversation with my fellow physician Andy Weil. He was commenting on the almost universal weight gain of twenty to thirty pounds that occurs to residents during the three to six years of post-graduate training. In that

same period over half of our residents' marriages fail and end in divorce. In 1902 Osler wrote: "In no relationship is the physician more derelict than in his duty to himself."

Andy expressed concern that there was so little "administrative attention" being focused on this physical deterioration and emotional "downward spiraling". There was no concern about the deep-fried, fast food that residents were wolfing down between cases and the complete absence of any exercise facilities. Andy asked me: "Whatever happened to "Physician, heal thyself." What do patients think when they see their doctors breaking every precautionary advice they just received in the examination room?"

Andy then put forth one of his principles that blew me away: "Doctors," he said, "should be examples to their patients of how to live. They should embody the principles of wellness. They should eat properly. Exercise regularly. Work hard, even passionately. Sure. But also rest, sleep, and play—all in a healthful manner. They should practice what they preach."

I join in admonishing physicians to treat themselves well, to become healthful.

The practice of medicine must strive to embody one central, holy, and ethical principle; namely: *Love every perfect stranger perfectly*. Treat every patient as if he or she were your close, beloved family member. There is no higher standard by which we can measure the quality of the medical care we provide. That is not to say we will never commit any mistakes. Consider how many mistakes each of us has made with our own children whom we love dearly. But every mistake is understandable, forgivable because it was motivated by love. The same will hold true for patients.

Imagine how our children would react if we had to explain to them that we did not send them to a better school because it was just too expensive. Or we had abruptly delegated their care to someone else "who was on call for us," never wondering if they felt comfortable with that person.

Think about how it feels to patients or their family when, as a physician, you can look them right in the eyes and honestly say: "Here's what I would do if you were my own son or daughter." There's practically an audible sigh when those words emerge, a palpable bridge establishing itself from your heart to theirs. That's the real source of any special power physicians possess.

One of the biggest problems plaguing Medicine today is that government, industry, and insurance carriers all approach healthcare as if it were just another business. I've even had one healthcare executive at my own University inform me: "The principles of managing doctors and hospitals are no different than those General Motors uses to make cars or Sony to produce flat-screen televisions." Really? If my car or television stops functioning properly, I can get parts or get a replacement. Can the same be said about my spouse or children?

I'm aware our country faces enormous issues with healthcare, including its consumption of a significant percentage of the gross national product. Medicine is constrained by many of the same rules that apply in business, with one important exception: Medicine is the "business" of living and dying. As such it cannot be judged simply by balance sheets or rewarded with bonuses.

There's an old saying in business management: "The behaviors you incentivize the most are the ones you will see most frequently displayed." What incentive can be assigned to love—deep, abiding brotherly love?

An individual who decides on a career in Medicine is (hopefully) answering a calling. As such, physicians have to be judged the same way we look at someone answering a religious calling. We don't pay clergy based on how many sins they have forestalled or how their approval rating went up after last week's sermon. In fact, we actually support clergy with modest salaries compared with those professions requiring similarly long periods of education, training, and practice. But we also hold our clergy to a much higher standard than the vagaries of the marketplace. They have answered a calling. They are held accountable for their actions before God. As such, when a sin is committed knowingly, purposefully, it carries a taint deeper, darker than simple good or evil because it also represents a betrayal of God's love. This is perhaps one reason that the public is so dismayed by recent revelations about pedophile priests within the Catholic Church.

By the same token, the public finds it equally appalling when some physicians or healthcare institutions exhibit callous disregard for patients' welfare. The public feels betrayed when the medical profession cannot find a responsible method to "police" its own practitioners when they exhibit inadequate or negligent care. The public takes a dim view of how slow organized medicine has been to protect it from negligent, unqualified, even dangerous doctors.

Some of the stories in the book demonstrate I've no right to preach to anyone else. I've been guilty of misdeeds as a physician. I'm a mortal and I've "sinned." I shared these accounts of my own life because I never suspected so many spiritual pitfalls existed in my profession. It was only much later in my training (some might say too late) that I discovered it was my spirit that came into question at every turn as a surgeon. My own soul would be tested. It was my own heart I had to get familiar with, to learn to rely upon it repeatedly as my guide, my compass. I know I could have been better sooner than I was. I wish now someone, a teacher or mentor, had shared that wisdom with me. I hope this book may inspire others in that direction.

Rule No. 2: Never underestimate the role of luck.

It's the same approach that I recommend to patients. Physicians have an awkward relationship with luck. There's a general feeling that a good physician should never count on luck. Why? I suspect many would like to think that intellectual mastery puts our medical practices beyond the realm of coincidental, haphazard events. But since so many of the important discoveries in Science and Medicine have come about through serendipity, it strikes me that not relying on chance events smacks of a certain hypocrisy. We accept that Alexander Fleming "stumbled" on the discovery of natural "antibiotics"--penicillin excreted by moulds that accidentally grew on some unwashed culture dishes he left behind in his laboratory as he rushed off to vacation. So why not accept that luck may have a hand in the course many of our patients lives as well?

Woody Allen's movie *Match Point* opens with an insightful narrator saying:

"The man who said: "I'd rather be lucky than good," saw deeply into life. People are afraid to face how great a part of life is dependent on luck. It's scary to think so much is out of one's control. There are moments in a [tennis] match when the ball hits the top of the net, and for a split second it can either go forward or fall back. With a little luck, it goes forward and you win. Or maybe it doesn't, and you lose."

During a surgical case, there are a thousand, minute decisions where a surgeon must stop, consider, and hope. But then he or she has to take the plunge, to cut or dissect deeper. The breath is held. A tight lump of dread sinks into the chest. There's the mad hope it was the correct guess about where an artery or nerve might

lie. Then there's that inaudible sigh when the guess proved correct. Nothing's damaged. You win.

In such a situation it seems to me untenable that luck does not play a role. I think that's why surgeons use the saying: "Better lucky than smart." I've had cases where a brain tumor had perfect planes of dissection. I seemed to be able to see every blood vessel, to staunch any bleeding, and leave the adjacent tissues pristinely intact. To the casual observer, it may look like the operation's a reflection of my transcendent skill. It is not. Those planes, those vessels, are all matters of just getting lucky with that particular tumor. My major concern about physicians who cannot recognize the inherent value of luck is that they substitute a false sense of their own power in its place. That puts them in the category of a physician who's smart and dangerous--a potentially lethal combination.

Patients need to seek out surgeons who have done the same procedure so many times it becomes routine, like an assembly line. A surgeon needs to practice, just like a virtuoso musician does, endlessly playing the same piece of music until every subtlety can be appreciated. By the same token, serendipity may suddenly present a better sound to the musician's ear on a particular repetition of a musical piece. Then the instrumentalist incorporates that sound into his or her personal interpretation of the music. It is the appreciation, the watchful anticipation for surprises, coincidences, and chance that distinguish the masterful performance from one that's merely competent. It's the same in surgery. The best surgeons are also the luckiest and that's more than coincidental.

Rule No. 3: Let your premonition, intuition, and even superstition make you a better physician.

My own belief is that the best medicine is practiced from the gut and not from the brain. Frequently I see medical students or residents get a hunch about what might be wrong with the patient. But instead of going with their sixth sense, they've learned to squelch their instinctual impulse. Hours or days later—sometimes far too late—they discover their initial hunch had been correct. I believe we need to teach doctors to tune, sharpen, and harness these instincts. Play your hunch if there's nothing else to help guide your therapy.

Often we get a "gestalt," an overall inkling from a patient, that whatever is going on is worse than it might initially appear. Are you going to put that patient in the intensive care unit to be closely observed? Or are you going to shrug off that

impression and discharge the patient home because there are too few “facts” to keep him or her in the hospital? What would I do? I’d put the patient in the ICU. Why? Because nine times out of ten my intuition will prove correct. Of course, that can make folks believe you’re a great doctor because you anticipated what happened to your patient. You’ll know it was your intuition. But it may be true you were a better physician because you had the guts to play your hunch.

Occasionally, as physicians, we will get a visceral tug that something really bad is about to happen to one of our patients. A sense of fear comes over you as the treating doctor. A cold tingle travels over and down the scalp. The hairs on the back of your neck stand up. If they could, those little hairs would be screaming out: “Watch out! Danger!” I’ve had those feelings many times and have always been glad, in retrospect, that I heeded their warning. More than a handful of my patients are alive because of those little hairs. I’d ask you this: who do you think will be the better doc? The one who listens to his or her intuition or the one who doesn’t? So when the little hairs on the back of your neck stand up and start talking to you...listen!

Superstitions are a different matter. I don’t know why certain baseball players stop shaving or changing their socks when they’re on a winning streak. Some superstitions only make sense to the individual who honors them and seem idiotic to those who don’t. In Africa, I began to understand superstition in a new and different way. I saw superstitions as ways that nature might suggest certain paths or behaviors to prevent or forestall misfortune.

I’ll admit that if I spill salt on the table, I throw some over my back. I’m not fond of black cats. I believe lying about a family member being sick might bring illness to them. I believe you can jinx things by getting too cocky about them. I believe that if you go into the operating room and announce that this case will “be a piece of cake” then nature pays you back for your *hubris*. If a patient asks me to rub his lucky rabbit’s foot before the case starts, I’m there, rubbing away.

Many superstitions have a basis in some tangential or poorly understood connection. For example, there’s an old wives’ tale that dates back to the Middle Ages. It cautions mothers: “Beware the child whose brow tastes of salt.” Now that seems an odd admonition. But consider children who are born with disease cystic fibrosis (CF). Up until recently, CF was a relatively rare but lethal illness that claimed children in their infancy. The genes that cause cystic fibrosis also make a baby’s sweat glands excrete excessive amounts of salt—hence the salty brow. But it was once dismissed as silly superstition!

In Africa, I visited a village that was in the midst of celebrating five girls in the tribe who had come of age because of the onset of menarche. When I arrived, I was informed that I would have to stay and wait until the three-day long rites were completed. I was told that any attempt to supply medical care or administer drugs during the ritual celebration could be quite susceptible to being turned into evil by sorcery and witchcraft. Evil spirits, the villagers told me, hovered about the village at this special time when a woman was especially susceptible to the influence of evil magic. Okay, that might seem like a silly superstition.

The set up was that the five young women were secluded for three days in a hut especially erected for this ceremony. This hut was constructed entirely by the hands of women. No man was permitted to touch any part of it during its assembly. All males, even infants, were forbidden to set foot inside the hut. If a man disobeyed these rules, then, it was said, the women's magic would then destroy him.

Inside the special hut, the women elders of the village attended to the girls. I was told that during the three days, the older women would pass on their magical rites related to fertility, making men fall in love, having only boy children, and so on. At the end of the three days, the young women came out of the hut, adorned with wreaths of green leaves. They walked in a procession in front of all the eyes in the village, displaying their proud, new status as women.

I was content to have three days rest and to take in the colorful and obviously important rituals celebrated by the village. My companion for this trip was a rather cocky, young nurse technician. He had been raised in the capital city of Libreville and considered himself quite the cultivated and educated young man. He sat next to me, shaking his head in disbelief at the silly superstitions of these "backward natives."

After the ceremony was over, he started to become quite ill. He developed a scorching fever, shaking all over with chills, and perspiring profusely. I put an intravenous in his arm and started administering antibiotics on the presumption that he had become septic from some bacterial infection. With each passing day, he continued to worsen. He was so ill that I dared not attempt to transport him back to our hospital compound, which was more than two days travel from the village. On the fourth day, he was close to dying, and I was dumbfounded because I didn't have a clue what was killing him. He confessed to me that on the second night he had slipped out and just to prove a point had touched the outside wall of the hut

and then had sneaked his foot under the edge to prove that he could set foot in there with impunity. Well, he confessed he had been wrong about that. Dead wrong, I'm afraid. We buried him outside the village. When I returned to the hospital compound and was asked to fill out the cause of death on his death certificate, I wrote down "infection," But I really believe the cause of his death was from violating a taboo. Superstition or not, it killed him all the same.

Rule No. 4: Let the patient die at God's hands, not yours.

I put this rule in because it was something that Dr. Zervas, the Chairman of our Neurosurgery Department, tried to drill into me as a resident. We would look at x-rays together, and Dr. Zervas would ask what I would do for this problem or that one. Sometimes we'd come across a very extreme case and I'd start to concoct elaborate, lengthy surgical procedures to address the problem. He would chuckle and say: "Let's pass on this one, Allan. Better to die by the hand of God than the hand of man."

At the time, it struck me as sort of neatly packaged "old guy" wisdom. Maybe even an excuse for chickening out. But later, when I was an attending myself, I'd watch some of my younger neurosurgical colleagues attempt overly aggressive, elaborately complex surgeries in some really frail, elderly patients. They wanted to cut their teeth on what we refer to as "big, sexy, monster cases." Most of the time, the patient succumbed quickly to a series of predictable complications. I'd find myself remembering Dr. Zervas's sage advice. Many times it has helped stay my hand where I might have persuaded myself that I could pull a surgery off.

Rule No. 5: Become the antidote to pain and suffering.

Pain is one particular area where I find many colleagues woefully lacking in understanding, let alone empathy. There's something so terrible and so maddening about intolerable, unrelenting pain. It's interesting that we can remember *having* pain but we cannot recall *feeling* pain. The brain simply does not store the memory of pain as it would the taste of banana cream pie or the feel of silk. I believe that's because there's something so unbearable and forbidding about severe pain that the brain protects itself by abolishing any direct memory.

At the same time, pain is the one feature of illness that we have a huge armamentarium of narcotics and analgesics to help alleviate. So how come many patients are writhing and groaning in pain? Why do such large numbers of patients who are interviewed after discharge from the hospital report they were inadequately medicated for pain during their hospital stay?

Unless you have actually experienced surgical pain (which many younger physicians have not yet), there is no way you can relate to the profound distress of pain. As I go on rounds in my own Department to review the hospital charts and condition of our in-patient population, an observation I make is that many patients are inadequately medicated for pain. Physicians will give all sorts of excuses. Some of my favorites are: "I don't want to mask any symptoms the patient may be having." Another is: "Well, I want to gauge how well he's recovering from surgery." And the best: "I don't want my patient addicted to pain medicine."

A little background on narcotic medications. There are dozens of them and they come in every possible combination and strength. There are oral tablets, capsules, inhalants, intravenous forms, intramuscular injections, and skin patches to name the most frequently used modalities. Narcotics do an excellent job of reducing pain or somehow making our individual perception of pain less prominent in our consciousness. Of course, if you give a patient narcotics there's always a risk of making her or him too sleepy or even depressing respirations. Obviously the latter would be undesirable, and we want to avoid that from happening. There's something unique about narcotics, however. We have a magnificent antidote for narcotics called naloxone (it often goes by the trade name Narcan®). Naloxone has an affinity for the opiate receptor sites that is two hundred times stronger than morphine! Naloxone can rapidly and efficiently reverse the effect of any opiate. In a matter of minutes (sometimes even seconds), you can return any patient to a non-narcotized, baseline state. This means that if I'm ever concerned about whether I'm seeing the side-effects and manifestations of opiates versus, say, an actual decrease in the mental status, I have a fail-proof test: give some naloxone and note the response. If there is none, then it's not the effect of opiates.

Let me also add a note here about the widespread usage of non-steroidal anti-inflammatory drugs, so called NSAIDs. These drugs are derivatives of aspirin-like compounds such as Advil®, Motrin®, Naproxyn, Aleve®, and some more recently notorious ones such as Celebrex®. They affect pain perception by a completely different route than narcotics.

As their names suggests, NSAIDs were designed to reduce the body's inflammatory responses. Naturally, excessive inflammation can produce pain; so reducing it at a particular site can have a secondary effect of diminishing it. However, quite frequently patients are given NSAIDs as an alternative to pain medication, or as substitution for it, and that can often be a cruel trick. The reason for this is that doctors have become very leery about prescribing narcotics. The federal government has cracked down on abuse of prescription drugs. Government authorities can now track computerized requests for narcotics at almost any pharmacy in the country.

Doctors have gotten somewhat paranoid about this. Often for good reason. An acquaintance of mine who was a pain specialist was arrested at her home, hauled away in front of her children in handcuffs by Drug Enforcement Agency agents, and placed in jail. Why? Because the DEA's routine computer surveillance indicated that she was prescribing narcotics far more than the average physician in her region. Why was that? Because, in fact, her specialty was the treatment of chronic pain patients, many of whom have more prolonged and higher dose requirements than the average population! You can imagine how the treatment of a fellow physician under such pretexts sent shivers of worry through our medical community.

The net result is that, as doctors, we don't like prescribing narcotics. As soon as feasible—sometimes way too prematurely—we try to substitute NSAIDs. We want our orders and prescriptions for narcotic medications to be seen as extremely conservative and well within the bounds of usual and customary practice. I contend, however, that since almost all patients are under-medicated with analgesics (medicines that relieve pain), we have arbitrarily and erroneously set the bar too low. I suspect that this trend will continue as long as the government continues to indiscriminately frown on all narcotic usage. Federal authorities, such as DEA, are fixated on squashing drug abuse in all its forms. Naturally, physicians and pharmacies are the easiest targets, since most illicit drug dealers don't prescribe medicine through computerized records.

I believe that relief of pain and suffering is one of the fundamental responsibilities of a doctor, and especially a surgeon, who must knowingly inflict pain on patients through the performance of operative procedures. It's a pity political agendas have so befouled the waters that we cannot see our way clear, as doctors, to ensure that our patients are as pain-free as possible.

Let me close with a couple of comments about drug addiction. Yes, anyone can be addicted to narcotics. Exactly how and why some people become severe addicts and others do not is not completely understood at present. It appears that some individuals possess brains whose neuro-chemical structure makes them incredibly susceptible to addiction of all kinds, not just narcotics. Other people's brains are not prone to become addicted. Doctors don't want to turn folks (including themselves) into drug addicts. This means that narcotics need to be vigilantly administered and their use tightly controlled, but it does not mean that opiate medication should never be prescribed.

While addiction to narcotics is a big problem, there are patients who must use opiates on a regular basis to remain active. If they do not receive medication of some kind, they become restricted by severe pain. These are the toughest patients to treat because they have legitimate need of narcotics as well as a tendency to become dose-tolerant if they use the drug too long or too frequently.

As a neurosurgeon, I'm also well aware that there is now a plethora of surgical procedures to alleviate pain. These operations include intra-theal pumps, indwelling dorsal column stimulators, direct nerve stimulation and even outright destruction of nerve and brain tissues. Many of these operations, in my opinion, have dismal success rates. Of course, there are patients who benefit from such extreme interventions, but for most chronic pain sufferers, narcotics achieve better, reliable results. So we need to make sound judgments about offering surgical intervention as an alternative to administering and monitoring narcotics.

There is also a sinister side to surgical procedures for pain relief: unsuccessful procedures only increase the formation of scar tissue, increasing the sources of pain that need to be suppressed. One reason there is such a profusion of procedures to offer patients with chronic pain is that there is no consensus as to which ones are effective. New approaches, techniques, and hardware are incessantly appearing on the market, touted as the next panacea for pain. So far, it has not materialized.

There's one group where withholding opiate medication because of concerns about addiction makes no sense at all: terminal cancer patients. I see doctors, even oncologists, dole out doses of narcotics parsimoniously. Stingy notions about pain medication often leave the terminal patient in unrelenting agony because of irrelevant concerns over eventual addiction. If someone is dying of cancer, do we really care if they become addicted to pain medication? Isn't death going to bring an end to the requirement for opiates? The reason I harp on this is because so many

cancer patients are left in mind-numbing pain that destroys the quality of whatever time they have left. That's frankly unconscionable when we have so many narcotics with which we can alleviate suffering.

Rule No. 6: Remember: it's the patient's life, so you don't get to be in charge of it.

There's a line in Medicine that goes:

“What are the words every surgeon loves to hear from his patient?”

“Doctor, you just go ahead and do whatever you feel is right.”

Many doctors act as if patients turn their lives over to them to receive medical care. There was a real-life fiasco where a transplant surgeon got angry because he believed one of his patients was acting insolently towards him. As punishment, the doctor had the patient's name removed from the transplant recipient list. He told the family that the situation would not change until “a proper, heartfelt formal apology from the patient himself.”

Of course, such an abuse of control over a patient is unforgivable. The situation was reported to the authorities and the surgeon removed from the patient's care. He was formally reprimanded and denied any further say about what patients were scheduled to receive transplants. But it shows how some doctors' perceive patients to be passive objects, pawns under their command.

Patients have to be permitted to form a partnership with the doctor during their illness and recovery periods. The person who can help initiate that kind of relationship is the doctor. Each patient should remain the captain of his or her own ship. The physician is the navigator, making recommendations in course changes. The captain decides if they should be carried out.

I think that there has been a “sea change” in the public's attitude over the course of the last generation. Most people no longer simply trust doctors to take care of them *a priori*. Patients now take a more active, even challenging role in asking about the care they will receive. Patients rightfully see themselves as consumers, making a choice to see one practitioner over another. That said, many patients are still quite trusting and doctors must see one of their roles to become “coaches,” encouraging patients to tackle and understand the issues. Patients need

to gain insight into the decision-making process, and, finally, to give or withhold consent. A good doctor builds each patient into a partner.

Rule No. 7: Be courageous. Be compassionate.

Much of modern medicine has degenerated into an assembly-line approach. A patient gets an operation, spends x days in the ICU, then goes to the floor. We get the patient up by day two and ambulating, and discharge him or her on the morning of the fourth day.

It's a "cook book approach" that takes all the humanity out of medical care. I remember one of my patients was a Navajo woman who lived in a hogan seven hour's drive away on the Reservation. Her domicile had no electricity and no running water. How was she going to keep her incision washed and cleaned under such living conditions? Should I have sent her home on the same day as the person who had an extended family to take care of them in a plush house, in a neighborhood nearby in the foothills of Tucson?

The particular woman proved to be quite interesting. She was one of only three women in the Navajo tribe who had been entrusted with keeping and passing on the many secrets related to their legendary blanket weaving. As a tribal matriarch, she was considered, in the words of her own son, as "a scared vessel for our People." Whenever she came to see me in clinic, four or five Tribe members would accompany her, almost guarding her. At the end of a routine office visit, I told her casually: "You should come back in about three months." I assumed she would go out to the front desk receptionist to make an appointment.

She didn't. She waited through three full cycles of the moon before she had herself driven back down to Tucson--more than seven hours' travel from her home near the Canyon de Chelly (pronounced *de Shay*) region. She arrived in clinic with her "posse" of attendants, walked up to the desk, and asked to see me in clinic.

"Well, Dr. Hamilton doesn't have clinics on Tuesdays," the front desk informed her

"He told me to see him in three months so I did."

"When exactly is your appointment, Ma'am?"

"He said three months."

"Exactly when in three months?"

"No time. Just come back in three months."

This went on for a while until finally one of the nurses called me in the Operating Room to tell me that this Navajo woman had just driven down hundreds of miles to see me without an appointment. The nursing staff in the clinic was of the opinion that the woman should simply be turned away and told to call back for a proper appointment to be seen in clinic.

Call with what? I remembered she had no phone. Besides, I thought to myself, she did what I had asked her to do: Come back and see me in three months. I explained that I would come up and see the woman as soon as I was finished with surgery.

As I finally arrived upstairs, the clerk at the front desk pulled me aside to inform me there was no appointment for this woman. There was no paperwork from the Indian Health Service authorizing a clinic visit. And I wasn't going to get paid for seeing her today. Maybe she thought this elderly Navajo woman was trying to pull something over on us. She seemed filled with suspicion.

I thought to myself: Doesn't anyone want to cut this woman a little slack for driving *seven* hours to see me in clinic? I imagined the old woman sitting stoically in an over-loaded pick-up truck, lurching over hot, dusty dirt roads leading off the reservation. She had *earned* the right to be seen by me. Right now. Reimbursement or not.

She passed away about three years later. Shortly thereafter, her son and another family member drove down again to Tucson to see me. Again no appointment. No warning. This time they came to give me a wonderful, red wool Navajo horse blanket the old woman had woven just before she died.

I protested that it was too much, too big a gift. But the family pushed it back into my hands. Her son said: "She was glad that you could see her when you could see her." That summed it up.

I believe Medicine is in danger of being suffocated by cynicism. Pessimism and sarcasm are becoming toxic to medical care. I have not yet figured out exactly where these poisonous influences come from. What I do know is almost every medical student I've met and interacted with was a compassionate and caring individual upon entering into medical school. I'm certain about that. What I've also observed is that, by the time students have finished their residency training periods, very few of them have not succumbed to being cynical.

So who takes responsibility for that? Well, I suppose I have to. So do the other attending medical and surgical faculty at all the university hospitals around the country. I have to blame myself if the programs in my own department turn out disheartened senior residents. We're the ones responsible for the effects of the training systems we have put into place and supervise. I'm partly to blame if a resident in my own program commits suicide (see earlier chapter).

So how do we stamp out this dark, sarcastic force that's invading medicine. How do you repulse that kind of enemy? By defending yourself, by standing up, by showing enough courage in your medical care that it inspires rather than undermines the compassion and tenderness that medical students bring with them when they first pass through our doors. Without the courage to be compassionate, physicians become enslaved.

William Faulkner wrote:

“He [man] is immortal, not because he alone among creatures has an inexhaustible voice, but because he has a soul, a spirit capable of compassion and sacrifice and endurance.”

Nobel Prize Acceptance Speech Dec. 10, 1950

Rule No. 8: Never allow the death of any patient to become routine.

One of my favorite poets John Donne wrote:

No man is an island, entire of itself; every man is a piece of the continent, a part of the main...any man's death diminishes me, because I am involved in mankind; and therefore never send to know for whom the bell tolls, it tolls for thee.

John Donne, *Devotions upon Emergent Occasions*, 1624, No. 17

If we cannot feel the loss of each human being, in some fundamental way we surrender the most sacred parts of ourselves. How far should we go with opening our hearts up to the tragic tug of death? As far as we can! Push it to the limit. I would urge each of us to fully integrate death, mortality, into the core of our being, the fabric of our daily lives. Ironically, we learn to live better when death becomes our routine guide. Making ourselves more vulnerable to the loss of others makes us more charitable. Understanding life's evanescence brings each moment and breath into focus.

In both Eastern and Western civilizations, we find similar encouragement to confront our true selves through the conduit of mortality. Much has been made of the samurai admonition to “be prepared to die at every moment.” This has been misinterpreted by some who see the Japanese culture as “fixated” with death, as illustrated by *seppuku* (ritualized suicide), and the *kamikaze* pilots of the Pacific campaign. However, the ability to lose our attachments to life--to finish abruptly, completely with living--is very much admired in the Eastern cultures, especially those where the Buddhist influences are strong. The proponents of Zen teachings believed that only by accepting death in an instant, with no trace of hesitation or regret, could a person actually achieve the highest goal of living; namely, understanding the haunting beauty of life’s transience.

By the same token, Christian doctrines admonish us to “find ourselves in Christ.” In many ways, we are encouraged to see that our mortal life is little more than a veiled curtain that must be brushed aside to see the larger issue of our eternal souls. We are taught not to seek our rewards in the finite span of our lives here on earth, but instead to focus how God will judge us. Our acts will not be weighed by mortal measure but against the backdrop of our eternal souls. Again, the lesson in such teachings: Don’t become distracted by the reflection of mortal existence. It is just a mirage. Again, focusing on death, the passage to eternity, teaches us correct behavior, to live with honor—a lesson that any samurai would agree was one of the central tenets of the code of *bushido*.

I also want to distinguish *knowing* death from simply seeing it. Our entertainment industry, from our video games and movies to our popular music, has a gothic love affair with death, especially when it’s violent. On a simple, almost vulgar, level, our inherent interest in death ensures that it is a consistent “best seller.” It is this same fascination with death that makes passers-by slow down to take a closer look at a traffic accident. There is, however, a danger in the constant bombardment with violent deaths; that is to desensitize us to what death really means. To understand death, we need to see our own death in every death. The end of every life must be personally meaningful to us.

I no longer watch the evening news on television anymore. Partly, because I find the sensationalistic nature of most news on TV has become insulting to my intelligence—again, it’s aimed at appealing to the consumer’s fascination with death. But it’s also because I feel overwhelmed by so many images of death. It’s mind numbing. How can I grasp the death toll from Tsunami in Christmas 2004? How do I comprehend the devastation of a natural disaster, like Hurricane Katrina? How can I just listen passively when yet another child’s reported missing? One

more woman raped? Another innocent by-stander killed by guns? Our salvation lies in our compassion, and our understanding that unless we permit ourselves to be moved by the losses of others, we will lose our selves.

It's estimated the average child in America goes into the sixth grade having witnessed more than 10,000 deaths on television. In the age of the computer game, this number is rising exponentially higher. Now these are not the deep, profound experiences of death that I referred to earlier. At some level, we need our children to distinguish the "empty, gratuitous death" in a game, for example, from the private, significant one. The latter is an essential building block of experience, wisdom, and pathos. We are hurt and feel pangs of loss when someone we love passes away—*that's real death*. The deaths kids experience on television or in video games are purposefully displaced from the context of a child's life. Ask yourself this: how much fun would a game like "Doom" or "World of War" be if the only figures that you annihilated were recognizable images of your friends and family? I doubt such a game would sell.

In one of my favorite plays, *Henry V*, Shakespeare wrote:

"We would not die in that man's company
That fears his fellowship to die with us."
(*Act IV, scene iii*)

As I said, keen awareness of mortality brings humanity closer to each other. As a public elementary school student during the "Cold War" of the 1950's, I had to participate in school-supervised "air-raid drills." Undoubtedly, there remained a psychic connection and vivid memories of the "Blitz" over London, only a decade and a half earlier in World War II. British children were drilled to get into the subway stations during bombardments. But when I practiced scurrying under my school desk, covering my head with my folded arms, it was meant to prepare me for a nuclear attack—one that would come inevitably from Russia.

One evening, I stayed over at a school friend's house for dinner. The father of the household came home from work and we all settled around the dining room table to eat. The father asked us about school and we told him how we all had dived under our desks and Mrs. Cunningham had drawn all the blinds down to shield us from what would be a blinding explosion when the atom bomb was dropped on our neighborhood. The father just chuckled knowingly and shook his head in disbelief.

I was dumbfounded to hear him exclaim: “Oh, Christ! What nonsense! The Russians aren’t going to drop the bomb on us any more than we would drop it on them. If we did, we’ll be annihilated. You don’t think that Russian parents love their children as much as we do? They want just as much for their children to live as we do.”

This was a revelation to me: the Russians love their children! I somehow knew that what the father was spoken was the absolute truth. A Russian family would be no more willing to sacrifice its children than my own. Suddenly, I had discovered an element of the world that felt as warm and comforting as a freshly baked apple pie. It was the first time I saw the heart of humanity might simply be a more universal reflection of my own. I was stirred by the knowledge that what *we* felt was the same as what *they* felt. I began to comprehend there were more reasons to save our enemies than kill them, more to bind us close to each other than push us apart. And more security could be found in the love of parents than under a desk.

Death can do a lot.

Rule No. 9: Never let a day pass without seeing every one of your patients in the hospital.

I talked about this one in an earlier chapter in the book. I again feel a need to apologize because I was one of the offending doctors who did not compulsively swing by to see every patient, every day. It was only when, as patient, waiting desperately in the hospital to see my own doctor, I realized how neglectful I had been to some of the patients under my own care.

I want to add: if you’re going out of town, tell your patients in the hospital well in advance. Give them time to get prepared. Notify the family. Make the time to bring your physician partner down and introduce him or her personally to the patient. Last but not least, make sure your partner visits every single one of your patients every day while you’re out of town (and jots a note in the medical chart too).

Rule No. 10: Always round after 5 pm.

The only group more desperate to talk with the treating physician or surgeon than the patient is the patient's family. If it were possible, every physician would strive to round and see his or her patients three times a day. Except for patients in the most desperate of situations, this is simply not feasible. So let's assume you can only round once a day. When should that be? In the evening (except on weekends and holidays, of course), because that's when most patients have visitors there and when there will be the highest likelihood of seeing the patient's family at the same time.

Whenever I've been a patient myself, I immediately call my wife and other family members to relay anything the doctors have said to me. I know that I'm no different from any other patient. The family loves to hear directly from the physician. They wait and live for it. They have questions and concerns. They may actually be asking questions that the patient feels uncomfortable asking the doctor. Many patients are genuinely concerned their doctor might become angry or upset with them if they ask too many questions or appear to question a judgment. So often it will be a family member at the bedside that sticks up for the patient and asks the important, tough questions.

Rule No. 11: Bring “homemade cookies” for the nursing staff.

Every doctor depends upon the nursing staff. It serves as a widely dispersed “sensory network,” extending the doctor's eyes, ears, and fingers into every room of the hospital. The nurse is, de facto, the “face” of medicine the patient most often sees. An experienced, competent nurse is worth more than all the digital monitoring equipment in the world. Conversely, if a nurse really has it in for you as a doctor, they can make your life (and that of your patients) an absolute misery. Sometimes this may seem the only way a nurse can get a doctor to change behavior.

I've seen plenty of abusive behavior towards nurses by physicians that would make anyone blush with embarrassment. Surgeons flinging stainless steel instruments—even scalpels--around the operating room in fits of rage. A doctor cupping a nurse's rear end or breasts as casually as if he were fondling fruit in the produce section. Physicians ruthlessly tormenting nurses with guilt, leading the nurse to believe that he or she was entirely responsible for whatever calamity befell the patient. Too many male physicians take advantage of vulnerable women in the nursing profession for mere sexual conquest. Some doctors publicly humiliate nurses till they have brought them to the edge of emotional collapse. Heck, I heard

about one attending who started demonstrating his judo moves to his residents by flipping one of the nurses down onto the linoleum floor! I am not exaggerating when I say that there's virtually no form of abuse that has not been perpetrated on nurses by physicians.

Now please don't start sending me e-mails about how could I think bringing cookies could in any way make up for such inappropriate and abusive behavior! It doesn't. The way we stop physicians from behaving like brats, bullies, and criminals is to bring 'em up on charges. Make them accountable for their behavior. Bring them up in front of the hospital executive committee. Discrimination, harassment, and abuse are not just bad, they're crimes! I've brought my own faculty members up on sexual abuse or discrimination charges in front of our University Office of Equal Opportunity. There is simply no other way to stop such behavior than to call each and every individual out into the open and hold them responsible for how they behave at all times, under all circumstances, and with every type or group of individuals.

Edmund Burke wrote: "The only thing necessary for the triumph of evil is for good men to do nothing." The last thing any of us in the medical profession can afford to do is stand by while the evils of harassment and abuse go unchecked. I would want to severely punish anyone who harassed or abused my own daughter or wife. Why should I feel different about anyone else's daughter or wife?

A basket of cookies does not undo evil. I mean "bringing cookies" in the sense of doing something personal to show the nursing staff how much they mean to us, as physicians. I was present when a disturbed male nursing student went on a shooting rampage in our own College of Nursing at the University of Arizona, leaving three of our best and brightest nursing school faculty members dead. The killer stormed into the building, shooting his teachers as he moved through the hallways. He left some final notes behind to be read after his suicide. Much of his muddled ravings were dedicated to expressing his seething resentment of these "women teachers" who were in a position to judge and grade his performance during class. It drove home some of the quandaries that exist for the nursing profession: the hesitation so many nurses feel between possessing power and exercising it. No such restraint is expressed to physicians. On the contrary, we tend to excessively groom doctors for command. Hesitation is discouraged as we're inclined to see it as weakness, indecision. Our motto: "Seldom wrong. But never in doubt."

I'm concerned about the future of nursing being sucked into "downward spiral" of twenty-first century Medicine. For so long, the sphere of the nurse was distinct and different from that of the physician. As pressures built to garnish higher salaries for physicians in a market place that's been ratcheting down reimbursement for more than a decade, we find ourselves at risk for substituting the nurse to fulfill the doctor's duties. In turn, the nurse's real responsibilities are being "dumbed down" so that direct patient care jobs can be handed out to individuals with no other qualifications than a high school diploma. It strikes me that this essential ingredient of human touch and contact cannot be delegated to the unprepared, the unaware, and the uneducated. All of this has to also be depicted against the largest shortage of nursing personnel and the highest level of unfilled nursing positions ever experienced in America. For the first time, modern medical institutions must wrestle with acquiring nurses or being forced to close their doors.

Rule No. 12: Bring order out of chaos.

This is a gift that every good physician needs to cultivate. Whenever human beings find themselves under duress (and what can be more stressful than serious illness?), they begin to lose control. It is understandable. This is where a doctor needs to lend quiet confidence and balance to the family to help them through a crisis. It is a magical thing to experience: whenever a competent, confident physician steps into the room, the volume just gets turned down on everything. The team pulls itself together. Things start to turn around.

Rule No. 13: Never betray a patient's trust.

As physicians, we have a privileged entry into patients' lives. It's like a diplomatic passport. We cross borders into the intimate details of an individual's existence. Often we are asked to see and hear things that almost no one else is privy to know. I believe there's something shamanistic about the role we have to play for patients. We need to create a sacred space for healing. We're trying to reach a balance between a priest confessor, who hears the most intimate secrets, and a medicine man, calling upon the forces of nature to intercede on someone's behalf. This is where entry into a person's life becomes so critical.

As a physician, you've got to be patient. You must listen deeply, profoundly—what I call "active listening." You're listening energetically, with

focus. Hang on every word. Plumb deep into the words being spoken. Drink in what's being shared with you.

An exercise I have found helpful is I set myself a goal before I enter the examination room. I tell myself that I will speak as little as possible. I will only ask open-ended questions that cannot be answered with a simple "yes" or "no." Finally, the patient should carry more than ninety percent of the conversation while I am taking down the medical history. By setting these guidelines, I ensure that I am in active listening mode rather than talking too much. The truth is that if two people are in a dialogue and one does not talk, the other usually will end up speaking to fill in the silence. I want the patient to be that person who does the talking. This is why it is so critical to give each patient enough time to tell you their story. You can guide them with a question here or there but the goal is to listen with all your heart and intellect. Native Americans have a wonderful expression: "Stop your tongue from talking before you become deaf."

Let me give you a seemingly innocent scenario. This is a real one in which I was the culprit. I was in a mall in Tucson, strolling and shopping with my family on a Sunday afternoon. As I'm walking, I see a patient of mine, a young woman whom I had evaluated for a brain tumor, coming towards me in the other direction. She's with two or three other people her own age. I couldn't tell what her relationship to them might be. As we get closer, trying to be a nice, warm guy, I wave to her and say: "Hi, Mary (not her real name). How'ya doing?"

It seems innocent enough, doesn't it? But it wasn't.

Mary responds: "Hey, Dr. Hamilton. I'm doing fine. I'll see you around."

A second later, as Mary passes behind me, I hear one of her friends ask: "Is he your doctor? What'd you go see him for? Wait, isn't he that brain surgeon I've seen on TV?"

There it is: betrayal. I should have walked by without acknowledging Mary unless she greeted me first. Maybe she didn't want to share with her friends that she had a brain tumor. Maybe one of her companions works with her on the job, and now Mary has to be concerned that her employer might inadvertently discover she has some kind of medical problem.

Obviously there is patient-physician confidentiality, one of the ethical cornerstones of Medicine.

As is laid out so beautifully in the Hippocratic Oath:

“And whosoever I shall see or hear in the course of my profession in my intercourse with men, if it be what should not be published abroad, I will never divulge, holding such things to be holy secrets.”

It's not overt betrayal we need guard ourselves against. Such acts are punishable by law. It is the accidental slip, the covert treachery, that's hardest to catch.

Rule No. 14: Time is more valuable than money.

The sacrifice of time is the critical issue for any physician, in my mind. I'm more guilty than most of surrendering my own time, as well as the time of my family. First, I sacrificed seventeen years of cumulative training to become a brain surgeon. Fair enough. It was my choice. But the sacrifices my wife and my children were asked to make were just as significant. I must remind myself that their sacrifices were not consensual. I chose that path for them because of my career.

I remember a particular morning I spent with my oldest son Josh. It is a terrible memory for me. My son was only seven years old at the time. He came up to me in the kitchen, as he was getting ready for school, and said: “Daddy, I wish I had a brain tumor.”

I knelt down. “Oh, Josh, don't ever wish anything like that. Why would you say such a thing?”

“Because if I had a brain tumor,” he said, “you would have to come and see me every day. You'd have to, wouldn't you?”

I could only nod. I could not speak. Tears welled up in my eyes.

To this day, I am ashamed by the longing that my son expressed for me, his father. Where was I? True enough I was attending to patients stricken with brain tumors. But some of that time I wasn't there for my son. Not for his mother. Not for his younger brother and sister either. These were not wounds that I fully appreciated at the time. Nor can I undo them now. Time is not renewable, remember? Now, I can only ask to be forgiven...and I can repent.

I've explained, in one of earliest chapters, that in hindsight I suspect a strong part of my motivation to endure such lengthy and arduous training may have stemmed from a deep-seated sense of my own inadequacy. This, no doubt, relates directly back to a father who abandoned me-- deserted me and my mother and

brother at such an early age. As John Eldredge points out so astutely in his book, *Wild at Heart*:

Every boy, in his journey to become a man, takes an arrow in the center of his heart, in the place of his strength. Because the wound is so rarely discussed and even more rarely healed, every man carries a wound. And the wound is nearly always given by his father.

Eldredge's words have brought me some comfort. I've begun to take ownership of my own heart's wound—and the ones I've inflicted. I'll admit that I spent too much energy trying to convince everyone about my "worth." But especially my father who would die without ever seeing me after he left more than fifty years earlier. I've begun to see that I deserved better. Okay, so maybe that is part of rationale for a lot of what I have done.

The decision to dedicate myself to becoming a neurosurgeon wasn't in vain, however. In retrospect, I chose a difficult, demanding sub-specialty in Surgery because I needed to prove something to myself too. Neurosurgery was like a lofty summit. I wanted to climb to the top because it was a worthy trial of my mettle. That's goal enough. But I also wished to go deeper than that. I wanted to delve into the substance, the mystery of the mind. In a way, I wanted to find out *where* does a person go to *be*? We find ourselves chasing our own reflections. Where does the I—the consciousness that perceives the Universe—live? We follow the tracks wherever they lead, even when it may bring us face to face with our demons, snarling in their den. That has proved a more fulfilling search than I ever imagined.

It may be every person's destiny to question until that inquiry gets down to three ultimate questions: First, why am I here? Secondly, why do I have to die? And lastly, is this world truly all there is or it a reflection of the Creator's mind behind it? As Timothy Johnson (both a physician and a minister) writes in his remarkable tome, *Finding God In the Questions*:

...the more we learn, the less likely it seems that it could all have "just happened." And for me the most convincing argument that the universe has been "designed" is the extraordinary way it is calibrated to allow for the genesis and continuation of life itself.

I believe that God is in love with life—all of it. The creation of *Homo sapiens* is a skillful, masterful creation, uncanny for the clues it carries about its originator. If God created us, then where else could we turn—as conscious life--but

inward to find the truth? The statistical likelihood that God exists seems to me overwhelming. It is the inescapable conclusion I reach as I look at myself, my fellow men and women, and the Universe around me. So my personal search has occurred as a result of God's direct inspiration. It has been the path that the God created for me to follow. So many doors have sprung wide, so many opportunities held open to me that never would have been had I not been a neurosurgeon. Every step of the journey occurred as it was meant to happen.

Rule No. 15: Pray before surgery.

This is my own ritual. I commend it to you. There's a great freedom and relief that comes into the heart when you realize that you are not alone. God is always with you. God stands alongside me whenever I step up to the operating table. His hands guide mine. I make every cut, every move deeper into a human's body but only with His blessing. Obviously, this does not make me infallible. This doesn't mean that my mistakes are God's fault. No, it just means that if I make them (and I will), I have the freedom to turn to God and ask Him to help me make it right, to grant me His pardon, to see into my heart and make me wiser so that I will never make such a mistake again. I promise to share the wisdom I acquired from my error so that others do not need to repeat unwittingly; that is how I prove to God that I wish to be worthy of His forgiveness.

Rule No. 16: Never doctor your own family.

Nobody is more aware of how things go wrong in healthcare than doctors. No one knows the extent to which neglect, inattention, and mistake run rampant in the corridors of our medical centers. Finally no group is as keenly aware of just how tentatively any life, in the words of sixteenth century English playwright Robert Greene, "hangs in the uncertain balance of proud time."

I described earlier how doctors could become disoriented when someone they love is in the grips of a dangerous illness or circumstances where their life may be forfeit. As physicians, we believe—we pray--that we will be spared such agonies. Haven't we had to bear witness to them among in so many of our patients already? Francis Bacon wrote: "Men fear death as children fear to go into the dark; and as this natural fear is increased with tales, so does the other." [Essays, 1625, Of Death] Physicians hear the tales all day long.

I remember watching a tour of children while I was doing my pediatric neurosurgical training at Boston Children's Hospital. The group--a dozen kids, little more than toddlers—were all holding hands, adorably. They snaked their way through the hospital halls. Turned out all of them were scheduled to have their tonsils removed during the course of the next week and they were get a “pre-op orientation.” The nurses had them all turned out in surgical caps, masks, and gloves. Led first into the anesthesia induction area, they all got to try on oxygen masks, sniffing, snorting, and wiggling the spring-green tubing like elephants with crazed trunks.

Following the logical progression of a surgical case, the children were next escorted into an empty operating room. Hushed, herded together into the room, their eyes collectively looked upward, like a twenty-four eyed creature--half child and half disposable surgical supplies. The beast now displayed a distinct twinge of antiseptic fear, transmitted like a venomous bite. Then, finally, they spilled back out into the light and relief of the recovery room, giddy, tearing their surgical masks off.

There, in one gurney, was a single teddy bear, propped up on two pillows. He had a small bandage applied to his throat and an IV taped to his furry forearm. A nurse's hand sneaked behind the bear's neck and started its head bobbing in time with the words. The bear started asking for sips of water politely. Then, in an eerily falsetto, husky voice, asked: “When am I going to get some ice cream?”

That must have been the signal. Another nurse just popped out of the “break room”, its heavy door no challenge to the beam of her hips. Pirouetting around, she swung a plastic tray into view, loaded with one dozen small paper cups of ice cream. Six chocolate. Six vanillas. Right on cue. Next to the cups of ice cream ran a continuous strip of small wooden spoons, no more than two or three inches long, each tucked like a sausage into its own sealed paper compartment. A cheer broke out from the children.

I wonder why we hadn't developed similar tours for grown-ups, folks who's might be headed to the cath lab for placement of an endovascular stent, or old men slated for their radical prostatectomies. Grown-ups could even hold hands and get cups of half-melted chocolate and vanilla ice cream too. Adults probably need as much motherly cooing and coddling as any three year old. In the end, we all want to be held close, safely holding hands with a friend.

Rule No. 17: Never take away a patient's hope.

As I pointed out in my own experience in the chapter about the fly fisherman, Donald, no one has the right to destroy another's hope. Hope belongs to each person's heart alone. I cannot count the times I personally witnessed or heard later from patients or their family how another fellow physician carelessly trampled and dashed their hopes. Why? I absolutely can't see any justification for such a cruel act. It is wanton, emotional murder. I've been guilty of it, but not since I learned better. Hope is a delicate, fragile thing.

Emily Dickinson wrote:

“Hope is the thing with feathers
That perches in the soul.”

There is a fascinating phenomenon I have observed consistently with terminally ill patients. No physician need ever worry that a patient will not eventually comprehend that the end of life approaches. When the time is right, they always know and they'll always tell you, their doctor. I am not advocating that any doctor lie to his patient at such a moment. However, patients will give you subtle cues as to how much they want to hear from you.

Some will ask you to escort them right to the edge, and hold them, so they can stare steadfastly into the abyss. They're demanding to see squarely what lies ahead. Others will only ask you to take them a couple more steps. It is a most delicate balance. Again, a doctor needs to hear how much the patient is really asking to know. That's why listening actively, passionately, is so important. If you're in doubt about how much to tell a patient, then it is better to err on the side of leaving too much hope rather than cutting it down too hastily. There will always be time enough for hope to die. Lastly, there is no such thing as false hope; there's only hope, plain and simple.

Rule No. 18: If you can't figure out the diagnosis in two minutes, you won't figure it out for at least two days.

The culmination of the art of the practice of Medicine is to arrive at the correct diagnosis with the least amount of data. There comes a point in each medical career where the best physicians develop a feel, a sixth sense, for where the disease really lies. Once you know how and where to look, you don't really need a lot of “signs” to successfully track it down. That's not to say that there are

not diagnoses that are bizarre and rare. My impression has been that such diagnoses take a lot of time to nail down. So, by and large, most diagnoses will just jump right into your head. When they don't, there's a temptation to start calling specialists to help divine what is going on. I choose consultations carefully. I want physicians who will complement my strengths, who'll think differently from me. Also it's been said: "The more doctors, the sadder the prognosis," so keep the consultants few.

I once had a fellow faculty member in the Psychology Department who had performed detailed studies about how quickly physicians arrived at clinical diagnoses. He told me his original research hypothesis was that successful physicians sifted through data, as if they were running along a computer algorithm, logically narrowing the data down into a final diagnosis--precisely how computer software attempts to arrive at a diagnosis is simulation exercises.

Contrary to everything he initially expected, he found that master clinicians leap intuitively, virtually instantaneously, to a provisional diagnosis. They then see what bits of data will support it—not eliminate it. Only when there are data points that are too significant, or too many data points of lesser value stacking up against the first guess, will the doctor go to a new diagnosis and subject it rapidly to the same assessment.

At first glance, the differences between these two "thought processes" may seem to be splitting hairs but it isn't. A computer starts with all the data available in order to be able to narrow down to all the possible diagnoses. It conserves multiple diagnoses until the data eliminates them, one by one. The master clinician jumps to a single diagnosis and then picks data that will support it. This sounds to me to be precisely how the internal process works. So if, as the doctor, your brain does not jump real quickly to a provisional diagnosis, you're probably not going to narrow anything down until you and your co-workers have spent a lot of time collecting more data.

Rule No. 19: A surgical case can't go "beautifully," if the patient dies.

It's a dark, surgical joke that you hear: the operation went beautifully but the patient didn't make it. This is sort of the pinnacle of surgical psychopathology: there simply is no good surgery unless the patient does well.

Rule No. 20: Don't get data unless you plan to act on it.

Doctors order tests. Lots of them. Lab tests are to medical centers what the liquor concession is to a restaurant: it's where the real bucks are made. Hospitals lose a lot of money but they can thrive on profits generated from laboratory studies. Hospitals are often very solicitous of doctors who can decide be capricious about where they admit their patients. Obviously, any patient that "comes in the house" can generate lots of ancillary lab tests and therefore dollars for that hospital.

Unfortunately, a great many lab tests that are ordered yield little or no significant information. As a Department Chairman, I would find reams and reams of test results or radiographic studies in the patient's hospital records that no one—not a soul--had even looked at. So I created a litmus test for requesting any lab work. I ask myself: What do I expect to learn from ordering this test? How is it going to change the way I'm treating this patient currently? How do I plan to act on these data? When I have determined that the results of a test will alter my thinking or therapy, then I get it. It's amazing how many unnecessary blood draws, laboratory results, and senseless, expensive tests can be avoided if we subject them to that preliminary assessment. Be discriminate in your ordering of lab tests.
