

Good afternoon, Dr. Plews-Ogan, Dr. Voss, ladies and gentlemen. It is a pleasure and a privilege to address you today. When Dr. Eugene Corbett invited me to give “The Last Lecture,” my first thought was that I was not old enough. But I spoke to my younger brother, Jim, who assured me that I was indeed of sufficient age. So I stopped worrying about that. Having heard several “Last Lectures” my next thought was that I was not dignified enough. My wife, Margie, however assured me that if I showered and shaved and wore a clean shirt and didn’t fool around too much that I could possibly pass for dignified. So I stopped worrying about that. I think Margie is still worried. My final fear was that I could never say anything with enough portent. Nobody has reassured me on that score, so I am still quite worried. My letter of invitation suggested that, this being my last lecture, I could say what I wanted without fear of disagreement or retribution.

What I would have chosen to say on my last lecture has changed over time. My choices five years ago would not have been the same as I have chosen today. So with what do I want to leave you now? Two things. First, I would like to leave you with a few very general teachings, some might rightly call them clichés, that I have found useful over the past 30 years of practicing academic Internal Medicine. I know that these have been useful to me, because of the frequency with which they enter my mind in the clinical setting. I have seven of them.

Number one: First think drugs! When a patient is suffering in ways that you cannot understand, first consider an adverse reaction to one of our powerful medications. The range of potential adverse reactions is staggering. By the way, also consider the adverse consequences of stopping drugs. A corollary, students, is that you must always, always know each of the medications your patients is taking or have recently taken. You

must always know how long the patient has taken the medication. You must know the reasons for each medication. You must know its dose range, and its side effects. Please remember that many patients take over-the-counter or so-called alternative medications. You must provide a supportive and sympathetic relationship in which your patients can inform you of these other therapies. Furthermore, many patients do not follow our complex prescriptions. Your relationship with the patient must permit him or her to discuss with you these variances.

My second precept is that: being crazy doesn't protect one against being sick. Neither, by the way, does being mean or being stupid. And, alas, being obviously litigious does not prevent disease. It is your responsibility to see through the behavioral camouflage and to find the lurking illness. Success here is also highly dependent on an effective doctor-patient relationship.

Third: being only halfway sure that a patient has a disease does not permit you to give only half the treatment. I will not allow myself to think, "Well, I don't think he has endocarditis, but anyway, my two weeks of oral amoxicillin/clavulanate will probably cover it." I must either fully treat a condition or, given a change in diagnosis, decide that I never needed to treat it at all and stop therapy. This must always be an active decision.

Fourth, as a speaker said at graduation exercises some years before I finished medical school, "2000 years of medical progress, and the death rate is still one per person." I would therefore remind you that although you cannot cure everybody, you can help everybody. Do so!

Fifth: the average polymorphonuclear neutrophil is smarter than the average Infectious Disease Consultant. I doubt that this concept leads to any specific course of

action except a delightful sense of humility when confronted with the wondrous healing mechanisms of the body.

Sixth: Continuing on the theme of humility, remember that the position of God is already filled.

And finally: many, many years ago I encountered a cartoon by Steinberg on the cover of The New Yorker magazine. I do not remember the entire cartoon, but it showed a ship afloat on the high seas. Beneath the waves were many fish made out of words. The ones that have stuck most in my mind were a large and ferocious fish made out of the word “HOW” about to swallow a smaller but more beautiful fish made from the word “WHY.” How swallowing why. It is easy in our highly technological age to focus so heavily on the means by which we will accomplish something that we fail to consider carefully the reason that we need to do it in the first place. When confronted by a large pile of...HOW, never forget to ask yourself “why.” Ask it frequently..

Expanding on the theme of the loss of WHY, I would like to spend the remainder of my allotted time discussing with you the grave illness of an honored colleague. I do this believing that the illness is not terminal. I bring it up now in the hope and with the expectation that we can improve this colleague’s prognosis. I have known and worked with this colleague for 37 years, and I became clearly aware of the illness about 5 years ago. At that time, I joined a group at UVA called the Antimicrobial Surveillance Team. Our group was charged with monitoring and, we hoped, thereby improving the use of antiinfective agents throughout the hospital. We hoped to reduce the selective pressure fostering bacterial resistance and therefore the risk eventually of losing these drugs. We hoped to reduce the frequency of adverse effects such as *Clostridium difficile* colitis.

And, yes, we hoped to reduce Pharmacy costs. This we attempted largely by reviewing the charts of inpatients shown by pharmacy records to be receiving certain targeted drugs such as gorillacillin or panaceamycin. This has been an interesting experience for several reasons, including the fact that we have been cast in an adversarial relationship by many physicians. Anyway, my colleagues or I would spend an hour and a half each day reviewing and attempting to extract information from charts throughout the hospital in order to understand the reasons underlying the use and choice of antibiotics. Over 5 years I have examined a great many charts. The honored colleague of whom I will speak is the medical record. I have concluded that the Medical Record, is indeed critically ill. Things appear to have changed drastically.

First, I must provide you with a cautionary note. It is a hobby of clinicians of a certain age to reminisce happily if vaguely about the old days, when things were harder but better; when rounds were made barefoot in the snow, and it was uphill both ways. Perhaps I misremember what things were really like, and perhaps the medical record has not really changed that much. Of course I do remember one of my residents, whom I shall call Fred, principally because that was his name. Fred would go down to the Emergency Room in search of admissions. There were no caps on admissions in those days, and Fred the Resident would gleefully announce to us, his two sad little interns, that he was going to set a record for admissions to a medical service. But Fred himself would do one-word write-ups. His admission notes would consist in their entirety of, for example, "Sepsis. Fred." This approach is extremely efficient but totally uninformative. Fred to the contrary notwithstanding, I would suggest to you that the medical record is now in much worse health because its primary purpose has *de facto* changed from a

method of communication among health care professionals to a billing document. This is bad! What is unnecessary for billing has atrophied and what is important for billing has hypertrophied.

We do talk as if we still believe that the traditional medical record is important, at least when we select our medical students. JA Koenig, author of the *MCAT Interpretive Manual*, notes that the writing sample is said to test skills that are “critical to the preparation of useful medical records and to effective communication with patients and other health professionals.” I fear that although we talk the talk of effective communication in the medical record, we may not be walking the walk during clinical training, where we teach by example. The so-called hidden curriculum includes the concept of role modeling, of teaching by how we act. Students rapidly learn that legally, their notes have no standing as billing documents, and these notes therefore appear to have no importance at all. I can refer to my residents’ notes when I write my own, but for purposes of billing, neither the residents nor I can now refer to the students’ notes as a source of some types of clinical information, such as, for example, a diagnosis,. Thus, either I or the resident must write another note containing exactly the same information as that included in the student note. Only thus can I bill at the highest possible level. As director of our Clerkship in internal Medicine, I conduct exit interviews with the students. I have come to realize that the students feel that their notes are rarely read and even more rarely the subject of commentary or feedback. I must tell you that present in this room today are some wonderful faculty who are notable exceptions to that neglect. However, in most cases, the student quickly learns that the progress note is an unimportant and therefore distasteful obligation to be dispensed with as quickly as possible.

It is an important truth that we get what we incentivise. Unfortunately, this is not always what we think that we are incentivising. Anyone here in full time academic medicine appreciates that the move of the financial bottom line to the very top of the chart has resulted in deemphasizing our educational activities, which do not pay well, in favor of those research and clinical activities, which do. Those of you who take students into your practices face the same challenges.

We all recognize that positive feedback or even constructive negative feedback is a powerful motivator. We are providing most of our feedback on the wrong issues. As an attending physician, I receive frequent, in fact, almost daily feedback on my admission and progress notes, but only regarding their success from the standpoint of billing. It is rare that someone comments to me on the clinical value of a note that I have written, and this is not, I would like to believe, because I write crappy notes. But every day on the wards, I confront a review of my previous notes indicating whether or not they met the requirements for billing at a given level because I have included all of the elements considered important for billing. Have I included enough delightfully fractionated diagnoses, such as shortness of breath as being different from pneumonia? I have on several occasions undergone formal reviews of my billing prowess by meeting with earnest and quasi-apologetic young people who spend an hour with me looking in detail at a sample of five randomly selected charts. Here again, they count up the number of organs examined or symptoms listed. This is their only goal. Although the degree of complexity of medical decision making does count as a point somewhere in the billing universe, the clarity of clinical reasoning does not. It matters not to the coders if a problem list is presented in the order of importance to the health of the patient, or if

diagnoses are well or poorly supported with clinical evidence. What matters is only if they have been listed at all. I do not remember if the cartoonist, Steinberg, had a QUANTITY fish gleefully eating a smaller QUALITY fish, but that would have been appropriate to our discussion. And a FORM fish could have been eating a SUBSTANCE fish. I have unfortunately repeatedly been taught that I should never diagnose “urosepsis” but rather “sepsis of urinary origin,” not because this adds clarity, which it does not, but because it adds to the reimbursement obtained. Whole CME courses are devoted to teaching us how to bill better.

Even though I am apparently very old, I am not immune to this barrage of incentivization, and my own medical records have I fear deteriorated. How much worse then, for our younger colleagues, who are coming of age in this environment.

The very layout of the current admission note reinforces this pattern of thought. In order that we do not omit anything of pecuniary value, we have gone to a standardized form, rather than continuing to use a free form page. The entire surface area for our admission workup, excluding the attending physician’s comments, is 1467 square centimeters. The amount devoted to the History of the Present Illness is 126 square centimeters. This is inadequate space for a complete and well-reasoned History of The Present Illness, especially for the complex patients with whom we deal on the Internal Medicine inpatient services. These folks often have multiple medical problems which interact to form the present illness. There is no question that the History of the Present Illness is the most important part of the admission workup, and yet by assigning to it only 8.6 percent of the total space, we encourage our students and residents to give it short shrift. Of course, from the standpoint of billing, the quality of the History of the Present

Illness is irrelevant. It is completely superceded by the list of diagnoses in the Assessment section. A tiny History of the Present Illness would possibly be acceptable to those with facultative micrographia although not to those who subsequently must attempt to read it. A tiny History of the Present Illness would, of course, have delighted Fred the Resident. A tiny History of the Present Illness encourages many physicians to provide only a superficial accounting of what may be a complex medical situation. I will make a bit of a leap here and suggest that such superficial accounting of the history engenders superficial thinking about the patient. Since the History of the Present Illness has been devalued, it makes little sense to devote much thought to it. I have seen residents fill out the History of the Present Illness while interviewing the patient. This saves time but is intellectually sloppy, as it means that the History of the Present Illness has been composed without being informed by the entire work-up of the patient. Relatively more of one's opinion is then based on the old medical record, and more of one's clinical opinion depends on previous diagnoses. One is then more likely to squeeze the patient into an old pigeonhole and less likely to recognize a new clinical paradigm that would benefit the patient. The very act of preparing a carefully written History of The Present Illness is itself an opportunity to reflect on the patient and the illness. This opportunity adds much to one's true clinical understanding.

The enforced brevity of the History of the Present Illness has led to a further distortion. The History of the Present Illness is often now only an account of the current episode, with the remainder of the present illness relegated to the Past Medical History. A 22-year-old woman with diabetes was found confused, with low blood pressure, dry skin and mucous membranes, deep respirations, and sweet-smelling breath. She was, not

surprisingly, shown to have a blood glucose of 450 and bicarbonate of 9. Unfortunately, it is only when we get to the so-called Past Medical History that we learn that she has had diabetes for eight years and perhaps that her frequency of diabetic ketoacidosis has increased dramatically and alarmingly during the past two years. This leads only at last to consideration of possible psychosocial causes of noncompliance with her complex insulin regimen, which must be addressed if further episodes are to be prevented. The time course of her illness is both disguised by its dispersal over several sections of the work-up. Diabetes, in all its manifestations over time is, in fact, the present illness, and the current episode must not be taken out of that context.

Or consider the case of the elderly man admitted with community-acquired pneumonia. His three previous episodes may perhaps be briefly mentioned but certainly not well described in the current History of the Present Illness. The Past Medical History is traditionally presented in telegraphic form. Thus, the fact that the previous pneumonias all occurred in the right middle lobe might well be missed and fail to lead to consideration of extrinsic compression of the right middle lobe bronchus by hilar adenopathy.

The Past Medical History should indeed contain only brief mention of those conditions which, although of considerable significance to the patient, are independent of and irrelevant to an understanding and management of the current problem. This can be accomplished only if enough space, and therefore time and thought can be devoted to the History of The Present Illness. The current structure of the medical record makes this almost impossible.

I would next like to consider the Review of Systems, which has hypertrophied and acquired an unwarranted, independent existence. The Review of Systems, although important, is but a gimmick. It is a tool to get me to ask those questions that I forgot to ask while obtaining the History of The Present Illness or perhaps to lead me into new clinical areas previously not mentioned by the patient. In our admission form, however, the Review of Systems extends across 387 square centimeters or 26.4% of the total space. If you have been paying attention, you will note that this is 3.1 times as big as the History of the Present Illness.

Although during our second year physical diagnosis course we expect students to report a complete Review of Systems, a student attempting to do this during rounds on the wards or in a busy clinic is appropriately likely to be stoned with stale bagels and doused with cold coffee. Information collected in the Review of Systems and then carefully considered would meet one of two fates. It is either thereby deemed relevant to the History of The Present Illness as a pertinent positive or negative and then described and presented in the History of The Present Illness (oh, if only there were room). Alternatively, it may be deemed irrelevant to current management and omitted completely. The well-reasoned Review of Systems is thus fittingly and briefly presented as “noncontributory except for ...” after which the presenter lists one or two elements from the ROS which are not felt to be relevant to our understanding or management of the case but are so interesting that the presenter wishes to allow other members of the team to think about them. For example, “the patient complains of pain between his eyes when he urinates.” Now one’s initial response is likely to be, “Why in God’s name did you ask that question?” But in fact a history of the dreaded intranuclear micturalgia

raises concerns of a highly suggestible patient whose entire self-reported medical history may then be put into a slightly different context. But remember that being crazy doesn't prevent one from being sick.

But this is not the case when the medical record serves as a billing document. In this role, the number of organ systems actually listed in the Review of Systems is carefully tallied, and this number serves as an important basis for defining the level of billing. In order to bill at the highest level, I must fill in the largest number of blanks and must therefore ask my patient with an MI each day if he has joint pains or has considered suicide. Indeed the nice lady who reviews my billing has told me that an inadequate Review of Systems is by far the most frequent cause of a need to downgrade billing level and to torture clinicians. I remind you that the quality of content of the Review of Systems is not being reviewed but only its quantity. And so we are teaching our students that a fat Review of Systems is a good Review of Systems. At Student Morning Report, the Review of Systems is given far more thought-free, rote regurgitation than it deserves, and material that should have been transferred to the History of The Present Illness or dropped remains *in situ*.

Billing affects timing as well. Since in order to maximize charge capture my admission note must appear in the chart within 24 hours, I am now expected to make tuck-in rounds after five P.M. every day and to leave a note in the chart of each patient who arrived on my service earlier that day. Although I would like to believe that early discussion between me and the house staff improves patient care, I am quite certain that I am having such discussions with people who have not been accorded enough time to think through the case thoroughly, let alone to consult the relevant medical literature. I

have certainly undercut their autonomy and ownership of the case. In order to pick up an extra subsequent day of billing, we are teaching our house staff and students to be less independent thinkers and more passively dependent on attending opinion. This unfortunately approximates the surgical model of medical education, in which one is expected to base one's approach on the teachings of senior residents and attendings and probably not think for oneself, but this is not the way things are done in Internal Medicine.

Furthermore, since a note need not, for purposes of billing, appear in the chart until 24 hours has almost elapsed, then, often, it does not. On many occasions I have made antibiotic rounds at 0900 on patients admitted the previous day and found nothing, and I do mean nothing, in the progress note portion of the chart.

Of course, to satisfy the needs of billing, one need only write one note every 24 hours. And so, very rarely do I encounter two student or resident notes on an individual patient written on a single day, even when discussion with the team subsequently reveals clinical changes that deserved independent notation. If it isn't necessary for billing, it doesn't happen; we have obtained what we have incentivized. Congratulations to us!

The results of these changes are actually moderately malignant. At a time when we are appropriately aware of the need to teach and model professionalism and humanism, we are actually in the matter of the medical record moving by example in the opposite direction.

Dr. Wheby recently defined professionalism as "the pursuit and value of performance above reward." How well are we teaching and modeling professionalism when we operationally emphasize performance at the lowest level necessary to obtain the

maximal reimbursement? My billing instructions have several columns entitled “minimum requirements.” As AJ Ayer and the Logical Positivists espouse, the way we speak or in the case, write about things profoundly influences the way we think about things. If we write very briefly and quickly about a patient, we are likely to have thought very briefly and superficially about that patient. Box-checking encourages sloppy thinking.

Humanism includes the concept of appreciating patients as unique individuals, which is in part why we differentiate “illness,” which includes the consideration of the patient’s concept of the process, from “disease” which does not. Almost all of our medical education focuses on the uniformity of the disease process across patients. Indeed evidence-based medicine is firmly rooted in the principle that patient 275 with disease A will present and respond to therapy very much like patients 1 through 274. A concept, by the way, which, by the way, is often untrue. When dealing with the individual patient, however, we must emphasize the “individual” part of the equation. Reducing a patient record to a series of check boxes or fill-in-the-blanks severely hampers our ability to do this. The more we make use of standardized forms, the more we are thinking that one patient is pretty much like another. This is contrary to a humanistic approach, which emphasizes the uniqueness of the individual. Our method of speaking and writing influences our pattern of thinking.

Furthermore, the rather abbreviated History of the Present Illness leaves no room for actually documenting clinical reasoning. Little space is now devoted to the reason that one has concluded that one’s patient has a pulmonary embolism rather than pneumonia, principally I would argue because the quality of medical reasoning has no

value for billing, although the number of different diagnoses does. This trend is perhaps most dramatically manifest in a large number of surgical followup notes. Here, for example, the section labeled “infections disease,” which, by the way, is limited to four square centimeters, is completely filled in with the words “Zosyn” or “Avelox/Flagyl,” and the diagnosis is entirely omitted. Needless to say, my ability to define the rationale for antibiotic choice in these cases requires that I spend a good deal of time on detective work or sometimes just guesswork. A medical record which documents clinical reasoning and thus the justification for diagnoses and plans of management is very helpful in dealing with health insurance companies that would try to deny claims and payment, or with malpractice attorneys who would like to increase claims and payment. Indeed, one might also consider the effect of a sketchy medical record on the lay public’s impression of the profession; I would argue that a sketchy medical records erode the community’s trust in our profession.

The Physical Examination has suffered the same fate. Only 261 square centimeters or 17.8% of the admission form is devoted to recording the physical exam. This section is appropriately left blank, so that the clinician could devote as much or as little space to any organ system as seems appropriate. For billing purposes, a listing of all the systems must appear, and if at least something, anything, is listed for each organ system, we can bill at the highest level. Of course, that something may be no more than: normocephalic, atraumatic, RRR, no cyanosis or edema, or the ever-popular PERRLA. These minimalist statements are usually unhelpful and may be frankly misleading. For example, if a murmur is not mentioned, does that indicate that the heart was carefully evaluated, and no murmurs were heard, or, more likely, that having satisfied the bean-

conters by having filled in the blank with RRR, did no one care to take the time to examine and record a murmur? One important role of the medical record is the establishment of the clinical baseline, so that new physical findings can be recognized and documented. Many times, I have been unable to trust a medical record which did not mention a murmur to be sufficiently precise so that I could assume that a murmur now heard was indeed new and increased my concern that I was dealing with endocarditis. Fortunately, the patient is often able to state that he or she has had a murmur since childhood.

On the followup note, the physical examination is compressed into 99 square centimeters and includes a list of clinical systems with blanks to be filled in. Each is given the same space, a mere 4.1 square centimeters. Thus independent of the patient's actual clinical condition, the same small space is devoted to each of HEENT, neck, lungs, heart, abdomen, et cetera. I would argue that for most patients, one of these systems is likely to be more important and deserving of more detailed examination and comment than other systems. For billing, however, this is not the case. All are equal, and as long as something is written in each of the boxes, all is financially well.

On some services in my hospital, fortunately not Internal Medicine, this process is also applied to the assessment and plan. This sort of table is the way that diagnoses are to be listed and management described. Indeed this is the only way that these can be listed. Unfortunately, they cannot be listed in order of priority, and they must be listed by system rather than by problem. So if respiratory failure is actually the patient's most pressing problem, it is still listed further down the page than is the question of whether or not the patient has a rash. And if the problem were dyspnea, which might be of cardiac,

pulmonary, hematologic, rheumatologic, or infectious etiology, there is no place to list it at all. This is fine if each system-oriented diagnosis described counts the same, as indeed it does for purposes of billing — just count ‘em up. But the approach quickly stifles analytical and creative thought about the problems suffered by the individual patient and thus hinders our ability to analyze and prioritize components of the illness. Alas, we have gotten what we have incentivized. The progress note should be an exercise in mindfulness about the patient, a time to reflect carefully on the patient’s status, progress and prognosis. It is an opportunity to consider the patient one more time. If this is done conscientiously, new ideas about the patient may actually occur. We have, as one of our former chief residents noted, converted attentive behavior to schematic behavior. Form, or, if you like, forms have swallowed substance.

This deterioration of the medical record has occurred, I believe, at the worst possible time in medical history. Never has effective communication among health care professionals been more critical. Health care has become fragmented vertically and horizontally. Vertical fragmentation is a manifestation of increasingly frequent handoffs within the same service. The 80-hour/30 hour requirements of the Residency Review Committee have caused teams to cross-cover a larger number of patients for a larger percentage of the time. In a Medical Grand Rounds in May of 2004, one former Chief Resident presented published data indicating that the second most common cause of medical error was failure of communication among teams. Oral handoffs are usually abbreviated, and the on-call team should have access to an accurate, complete, informative, and even instructive written record. The RRC, in a self-promoting and

highly defensive teleconference, simply challenged the profession to improve its handing off and cross-coverage procedures. Thanks, guys.

Horizontal fragmentation is also a challenge. Inpatients today are cared for by a diverse group of clinicians. It has been documented that diverse teams frequently outperform homogeneous teams. The use of subspecialties and consultants often benefit the management of complex inpatients. This is a major impetus for the development of Centers, clinical structures that are staffed by specialists from diverse disciplines and serve as a sometimes controversial alternative or complement to the traditional departmental stricture. Centers often increase the number and diversity of clinicians caring for an individual patient, and thereby provide an increased opportunity for miscommunication, misunderstanding, and missed data. Thus communication among physicians has become increasingly important but increasingly challenging. An appropriate medical record is the most effective antidote for the fragmentation of health care.

The grave condition of the medical record is, I believe, reversible. As so often before in medicine, technology has once again come to the rescue of the critically ill patient. The electronic medical record is likely to be of great assistance. By permitting a History of the Present Illness of any length, it encourages the inclusion and rational ordering of clinical detail. Thus, it supports and then documents clinical thinking. By permitting the writer to move backward and forward through the write-up, it enables one to move pertinent information obtained in the Review of Systems to its rightful position in the History of the Present Illness. This also applies to information initially obtained as part of the Social and Family Histories. Incidentally, the Family History will become

more relevant to the History of the Present Illness as the genetics of disease are increasingly revealed. And this will also support our understanding of our patients as individuals. By permitting keyboarding and dictation, the Electronic Medical Record will also speed the process of documentation, allowing, one hopes, more time for actually thinking about the patient.

The increase in effective communication resulting from the substitution of an attractive, computer-generated typographical font for the archetypical physician's illegible handwriting needs no further discussion.

There are potential dark sides to the Electronic Medical Record. There is the potential threat to confidentiality from hackers and the problem of the occasional power failure. The cut and paste function might enable some profoundly stressed or lazy individuals to lift whole sections of old records into the current document, entirely eliminating the thought process. More insidiously, some Electronic Medical Records and so called Expert Systems have an extensive system of prompts, allowing physicians to substitute check marks for words. Thus if one checks off the symptom "cough," one is immediately asked by the computer about sputum – yes or no, but there is no longer an indication of the patient's description, e.g. "horrible." If one checks "yes," to sputum one is immediately offered the check box options of colors: yellow, green, white; character: thick, frothy, stringy; odor/taste: none, feculent; blood: yes, no, streaks, lots, *et cetera*. Although this process encourages completeness, its chronic use may will probably foster dependence on prompts and atrophy of the approach to clinical reasoning which consists of continuously generating hypotheses and asking pointed questions to support or refute them. I am pleased with the thought that at least for the present, one must actually leave

the patient's bedside to complete the Electronic Medical Record. This forces at least momentary global consideration of the workup.

Well, in fact, most solutions to complex problems are to some extent compromises, and the pluses of the Electronic Medical record certainly appear to outweigh its minuses.

All human institutions are subject to change, and Medicine is by no means exempt. Changes in Medicine should, of course, serve the needs of the patient. When patients' needs are not the same as those of the physicians or third party payors, the needs of the patients clearly take precedence. Happily, the excellent medical record well serves the needs of all of these groups. If, however, we retreat to the minimum requirements set by the bean counters, we sacrifice patient needs and medical education, and, I expect, we erode physician satisfaction.

I am, at least according to our Program Committee, very old. Probably too old to effect change. So I am left to charge you younger folk with a task. If not you, then who? As you write admission workups or progress notes, use these as an active excuse to think once more about your patient. Consider what you would like to be able to learn from the note were the patient new to you and you were assuming care. Remember that the most important role of the medical record is service to the patient. Taking the time to make the medical record excellent is indeed a high form of altruism.

Okay, maybe things haven't really deteriorated. I know that some of you some of you are thinking that we old guys love to talk about how good things were in the old days, which we frequently call "the days of the giants." This is a time-honored tradition in medical training based on Sir Isaac Newton's reference to Galileo and Kepler when he

said, “if I have seen farther, it is by standing upon the shoulders of giants.” In what is no doubt a *reductio ad absurdum*, this brings us from Newton back to Fred the Resident. Whenever we would complain to him, or really about him, he would reply that such behavior would not have been tolerated or not even occurred in the Days of the Giants, and therefore we should just suck it up.

One day, we admitted Burrill B. Crohn, of Crohn’s Disease as a patient. He had fallen and broken his leg, and we were told that there were “no beds on Orthopedics.” I don’t know whether that was really the case or whether Fred the Resident had been out scouting transfers in order to set yet another record for admissions. In any case, Dr. Crohn came to us so that we could check his toes throughout the night and assure ourselves that his cast had not become too tight. Dr. Crohn was 85 years old, but the next morning he was feeling pretty chipper, and we put him in a wheelchair and took him on rounds with us. We were all impressed with his insight into our patients, his wisdom, and his sense of humor. At the conclusion of rounds, Fred the Resident dropped to his knees in front of our honored guest and asked, Dr. Crohn, “Sir, what was it like in the days of the giants?” Without missing a beat, Dr. Crohn replied, “Oh Fred, my resident always told me that was before my time.” Applause ensued.

So, colleagues, place what I have told you in the context of the fact that you accomplish more medically than I as a resident ever imagined. The nature of the inpatient population has changed dramatically since Fred and I prowled the wards at Mt. Sinai in New York. In those days, we routinely admitted patients that you now manage in the clinic, thanks in part to loop diuretics, ACE inhibitors, CT scanners, and fluoroquinolones. And many patients that you admit we never saw, because they, given

the more limited technology and understanding of the time, were already dead. So medical care has improved greatly, but as a consequence, the medical complexity of our inpatients has also increased dramatically, as has the power for good or ill of our drugs and procedures. Effective use of these wonderful tools makes effective communication ever more critical.

Thanks for listening to me. It has been an honor to address you.