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# Practical Clinical Guidelines: Concepts

### CHAPTER



## The Impact of Health Care Reform on Providers (Doctors)

#### K. J. Lee, MD, FACS

In 2004, the United States spent \$1.7 trillion on health care. In 2008, it had escalated to \$2.3 trillion. If unchecked, in another 4 years we will be spending over 30% of our gross domestic product (GDP) on health care. This is unsustainable. It will bankrupt our country. If health care reform does not lower the total cost, those of us with insurance coverage will not be able to afford it in the future, regardless of whether we are employers, employees, self-employed, or unemployed. As doctors/providers, it is our calling to contribute toward the solution, regardless of what Washington is doing.

The wisdom of the task is to reduce cost without lowering quality or limiting services. All stakeholders have to pitch in to eliminate the waste and inefficiency. Lee described 20 steps to reduce health care costs without hurting the patients.<sup>1</sup> The insurance industry can help by reducing unnecessary paperwork or red tape, as well as by not maximizing profits as its sole modus operandi. The following steps: (1) increasing the availability of safe generic drugs; (2) allowing safe reimportation of drugs made in the United States and sold at lower prices in other countries; (3) working with the World Trade Organization (WTO) so that other developed countries help shoulder the cost of research and development by paying the same price for drugs as in the United States; (4) allowing Medicare to negotiate with pharmaceutical companies; (5) reducing media advertisements to consumers; (6) reducing the marketing costs of gifts and perks to providers; and (7) increasing translational research, thus bringing new drugs more quickly from the laboratories to the bedside, can help reduce the cost of medications. We doctors can help by producing practical clinical guidelines without mandating cookbook medicine.

The administration, the public, and the payers have had faith in doctors for decades for doing the right thing for the patient, not for doing the right thing for themselves or for business purposes. However, the recent environment in the United States has polarized all those involved: government, insurance companies, hospitals, doctors, and patients. There is now doubt in the value of what is prescribed by doctors. This book is not portraying the definitive and only method of diagnosing and treating the common ailments—it is a book portraying what the doctors have known for years: how to diagnose and treat a patient as if that patient is his or her loved one with no other conflict of interest. I have selected doctors whom we can trust for clinical expertise, judgment, and ethical standing to contribute to this book. These are not "guidelines" with a capital "G" agreed upon by a large panel of doctors. To do that would take months to years, and add to the escalating health care costs. We will leave doing it with a capital "G" for organized medicine. It costs more than \$100,000 and takes more than a year for organized medicine to convene a panel of "experts" to deliberate and debate to reach a consensus on how to diagnose and treat a symptom. In ENT, it will take over 30 years to come to a consensus for over 30 ENT common symptoms.

Our approach is to create good practical guidelines written by competent, upright citizens. We have chosen this elite group of contributors as we are the experts in the diagnosing and treatment of patients. It is our calling to do this and do it right before others less informed or with a conflict of interest (government or business organizations) impose the wrong guidelines and we then complain. If done as I envision with good, honest, seasoned clinicians, this series of practical guidelines will be the cornerstone of clinical medicine, giving a basis for practices like the Flexner Report of 1910 which gave the foundation for medical school curriculum and training of medical students. The Google definition of guidelines is, "A general rule, principle, or piece of advice." The Webster Dictionary definition of guidelines is, "A standard or principle by which to make a judgment or determine a policy or a course of action."

Hence, Plural Publishing and I came together to work on a practical idea: soliciting ethical, experienced, logical clinicians to describe how he or she would approach to diagnose and treat each symptom presented to the practice of an otolaryngologist or any provider treating these symptoms.

Michael Stewart and David Nielsen have written their respective chapters outlining their concepts of evidencebased medicine. If we have the luxury of time and money, that is the ideal approach. As we have neither, the practical approach taken is the beginning step for the diagnosticians and healers: to play a role in this health care crisis, to decrease unnecessary tests and unnecessary treatments, and yet not miss a diagnosis or deny patient quality care. It is not an easy task. Doctors are by nature and training a very individualistic group with strong independent likes and dislikes. I am one in this group. However, if we do not start this process, in this climate, such guidelines will be crafted by actuarial accountants, insurance industries, health care economists, or public policy administrators. Such guidelines may inadvertently turn out to be some form of rationing. Hence, it is in the country's and patients' interest, that those

who are trained to diagnose and treat, step forward to craft a series of "Practical Clinical Guidelines" thinking of what is best for the patient, that is, to be treated in the most economical way, with the best possible outcome, getting value, and the "most bang for the buck." What a doctor, his or her family, actuarial accountants, insurance executives, health care economists, public policy administrators, and everyone else want is the same when they are sick and have to pay for the diagnostic tests and treatments. "Let's do unto others what we want others to do unto us."

This book is not about writing a book to justify or sanction reimbursements by third-party payers, private insurances, or government plans. The contributors of this book were instructed to formulate practical practice guidelines that render the most appropriate and best care assuming the patient happens to be a doctor and is paying for it and the caregiver can look into the eyes of that patient and ethically explain why that test or treatment is recommended. It also is not the intent of the book to state that any practice that deviates from the guidelines is improper. Human conditions cannot fit into a regimented mold all the time. Rationale for deviations in a particular case is not only appropriate but expected from time to time. Such deviation can be documented in the EMR.

This book was conceived after President Obama became President and put health care reform front and center. Hence, we have put this project on a fast track. However, this book is needed and has bipartisan support, from both conservatives and liberals. It is needed regardless of the actual outcome of "health care reform." We anticipate suggestions, criticism (we hope constructive) to help the profession revise this book and concept with more specifics and following "evidence-based" protocol described by Stewart in Chapter 2 and to a point to be fully embraced by the doctors and more importantly by the patients. A corollary benefit of such accepted Practical Clinical Guidelines is the decrease of frivolous lawsuits. Not having to practice defensive medicine saves health care dollars.

To the public, what we are attempting to do is common sense. To the lay people, they assume that doctors always agree what is the best way of diagnosing and treating. They assume that doctors do not order an imaging study or a test or prescribe a procedure to fulfill the adage of "return on investment." Some of the tests not only are not necessary but may cause some harm.<sup>2–4</sup> Baicker and Chandra as well as Fisher et al reported interesting observations about cost and utilization.<sup>5,6</sup>

This is a Herculean task. We hope to call on all specialties of medicine to formulate such a Practical Practice Guideline book before nonclinicians craft one from purely a dollar and cents standpoint and are willing to overlook the individual patient for the sake of the broader public policy picture. To us, each patient is important, and it is our oath to take the best and most cost-effective route to care for each patient, one at a time.

Part of Health Care Reform as discussed in the Preface will directly impact the doctor-patient encounter. Doctors' compensation may evolve from purely "volume based" to one that has a component of "pay for performance." One aspect of "pay for performance" is measuring "outcome." Such a metric is not accurate, as a great part of "outcome" depends on patient compliance and lifestyle. The wisdom of Solomon is needed to create a formula to measure doctors' performance based on practicing ethical high quality medicine, always putting the patient's interest above all else. The last chapter of this book explores methodologies to measure this metric without interfering with the patient-doctor encounter and without making the health care provider into a data entry clerk or a "bean counter." It is imperative that any system to evaluate a doctor's "pay for performance" does not take the doctor's concentration away from the patient's illness and does not prevent the doctor's ability to maintain

eye contact with the patients. We will harness today's and tomorrow's technology to develop a new generation of electronic medical/health record system emphasizing usability and functionality.

- 1. Which is your modus operandi?
  - A. Doctors practice medicine and have to run a business
  - B. Doctors run a business through the practice of medicine

#### REFERENCES

- 1. Lee KJ. Healthcare: affordable quality coverage for all. *Otolar-yngol Head Neck Surg.* 2009;140(6):775-781.
- Redberg RF. Cancer risks and radiation exposure from computed tomographic scans: how can we be sure that the benefits outweigh the risks? *Arch Intern Med*. 2009;169(22):2049–2050.
- Berrington de González A, Mahesh M, Kim KP, et al. Projected cancer risks from computed tomographic scans performed in the United States in 2007. *Arch Intern Med.* 2009;169(22): 2071-2077.
- Bindman R, Lipson J, Marcus R, et al. Dose associated with common computed tomography examinations and the associated lifetime attributable risk of cancer. *Arch Intern Med.* 2009; 169(22):2078–2086.
- Baicker K, Chandra A. Medicare spending, the physician workforce, and beneficiaries' quality of care. *Health Affairs* (serial online). 04/07/2004. Retrieved January 21, 2010, from http:// content.healthaffairs.org/cgi/reprint/hlthaff.w4.184v1
- Fisher ES, Wennberg DE, Stukel TA, et al. The implications of regional variations in Medicare spending. Part 2: health outcomes and satisfaction with care. *Ann Intern Med.* 2003;138(4): 288–298.

## CHAPTER



## Practical Clinical Guidelines Go Digital and "Meaningful Use"

### K. J. Lee, MD, FACS Yvonne Chan, MD, FRCSC, MSc, HBSc

The senior author of this epilogue has designed a digital format using the "tree view control" decision tree technology to be in compliance with CMS's current definition of "meaningful use." The software allows the caregiver to perform the required tasks as painlessly as possible and without disrupting the patient-doctor encounter. For example, it allows a provider or patient to complete a detailed review of systems very efficiently. This technology further enables the provider to document elements to provide quality care in preparation for "pay for performance." Each symptom is automatically linked to the practical clinical guideline algorithm, and the caregiver can indicate whether the guideline is followed or not. If there is deviation from the guideline, an explanation and an appropriate literature reference can easily be entered.

Such documentation of following accepted guidelines may help to staunch the onslaught of frivolous lawsuits. Practicing defensive medicine by ordering unnecessary tests and obtaining multiple opinions costs the country hundreds of billions of dollars per year. Eliminating this style of practice will decrease health care costs tremendously without compromising quality. The caregiver can efficiently document the practice of preventive medicine and public health without interrupting his or her eye contact with the patient or his or her concentration on the patient's illness. A patient's colonoscopy/mammography schedule can be easily monitored. Test results such as the lipid profile, HgA1c, and glucose can be tracked. The software further documents patient outcome and whether the patient is compliant or not. It also documents whether the patient receives educational material and in what format. All these functionalities lead to improved quality of care. The caregiver has the choice to use the above modules to any extent he or she prefers. Alternatively, he or she can bypass them within seconds and proceed with the traditional documentation of "present illness" and "physical" by writing, typing, using the handwriting recognition, or using the digital technology. A referral letter to the referring doctor can be generated automatically if the history and physical is documented digitally. The letter can be faxed, e-mailed, or printed and sent via the U.S. Postal Service. The automatically typed prescription can be printed, faxed, or e-mailed to the pharmacist. An efficient "test tracking" system to avoid test results being misplaced is part of the module. The program is affordable, web-based, and contains multiple levels of security. It also can interface with billing or scheduling software. The metrics shown in Table 35-1 illustrate the extremely user friendliness of this software.

Whether doctors like it or not, medical record-keeping will go electronic in the near future. It is paramount that the transition be as easy as possible without loss of pro-

#### Table 35–1. Metrics for Usability With Benchmarks

1.	To get to Patient Queue to identify the location of patient within 2 seconds	
2.	Able to identify insurance, co-pay within 2 seconds	
3.	To get to Progress Note within 9 seconds	
4.	Identify the correct patient, check allergy to medication, and current medication within 9 seconds	
5.	Check Review of Systems (ROS) within 5 seconds	
6.	Do Test Tracking edit within 6 seconds	
7.	Find Test Result within 3 seconds,	
8.	and print within 1 seconds	
9.	To get to History & Physical (H&P) page, to enter H&P within 9 seconds	
10.	Can write on H&P ⊠ Yes □ No	
11.	Handwriting recognition 🛛 Yes 🗌 No	
12.	Get to Digital Progress Note within 4 seconds	
13.	Open Filing Cabinet to get Test Result within 3 seconds	
14.	Ink storage retrieval within 10 seconds	
15.	Locate Prescription pad within 2 seconds	
16.	Select Medication within 2 seconds	
17.	Print Prescription legibly to print, fax, or e-mail within 2 seconds, find old prescription within 3 seconds	
18.	To do CPT-ICD Coding using the Guide within 16 seconds	
19.	To do CPT-ICD Coding without using the Guide within 9 seconds	
20.	Schedule a test in Test Tracking within 1 seconds	
21.	Schedule Next Appointment within 11 seconds	
22.	Compose Referral letter within 5 seconds	

#### Table 35–1. continued

23.	Import CT scan from radiology facilities to Medical Records for viewing within 41 seconds to 2 minutes, depending on the radiology facility	
24.	With patient's permission, obtain medical record from another doctor within 10 seconds	
25.	Can Test Tracking be a tool to keep track of the different stages of a scheduled test such as a CT scan to prevent error Yes INO	
26.	within 6 seconds	
27.	Enter Demographics into electronic medical record within 10 seconds	
28.	Put patient in Patient Queue within 10 seconds	
29.	File a test result into the EMR within 8 seconds	
30.	Locate a checked out patient and open the Medical Chart within 15 seconds	
31.	Locate a patient's chart by name $\square$ Yes $\square$ No	
32.	Locate a patient's chart by number $\boxtimes$ Yes $\square$ No	
33.	Locate a patient's chart by DOB $\boxtimes$ Yes $\square$ No	
34.	Locate such patient's chart within 7 seconds	
35.	Take patient's message, send message to doctor within 45 seconds	
36.	Doctor to read message and answer message and send back to secretary within 20 seconds	
37.	Secretary to execute message within 5 seconds	

ductivity. An EMR/EHR system should require no previous computer knowledge and the caregiver should be able to learn it in an hour. Caregivers should be able to practice as they always did—being helped and not hindered by technology. The EMR should follow the caregiver's workflow, and "think" and work like the caregiver.

The best "stimulus plan" or financial incentive for a caregiver to adopt EMR/EHR is to deploy one that does not decrease productivity and yet at the same time decreases overhead. It reduces the labor cost by 15% to 20% by not having to locate and refile the paper charts. It reduces the required floor space by 8% to 10% by not having filing cabinets to store the paper charts. It streamlines transcription, again saving costs. These savings will exceed the "government stimulus plan" of \$44,000 payable to a provider in four years. If the caregiver wants to take the time to comply with "meaningful use," as an added bonus, the correct EMR will enable the caregiver to comply with "meaningful use" without much interruption of workflow. This will help the caregiver to collect the \$44,000.A perfect EMR needs to serve both masters: to not distract the caregiver and at the same time document data for analysis by the powers that be. Such technology is available.\*

<sup>\*</sup>If you need help, contact ENTRI, a subsidiary of AAO-HNS at 703-637-6600, 1650 Diagonal Road, Alexandria, VA 22314; or the author at 203-645-4758, kjleemd@aol.com