Book Reviews

"The Neurologic Exam"
Review by Vincent Felitti, MD, Associate Editor

The Neurologic Exam is one of ten 90-minute videotapes made by Dr Martin Samuels, Professor of Neurology at Harvard University, who is a memorably fine teacher. The other titles in the series are *Dizziness*; *Headache*; *Movement Disorders*; *Stroke*; *Degenerative and Demyelinating Diseases*; *Coma and Other Abnormalities of Consciousness*; *Functional Neuroanatomy*; *Peripheral Neurology*; and *Seizures*. This particular tape is the most broadly useful in the series because it addresses a problem most of us have with neurology: we often do not effectively know how to obtain the history and basic neurological examination results we need. Consequently, neurology referrals and MRI requests proliferate while our self-development stagnates.

Dr Samuels' explanations help us to understand the relation between and underlying rationale for the parts of a neurologic evaluation, and the relationship between those parts. He is an effective mime and often illustrates by mimicry the conditions he describes. He divides the neurologic examination into six parts:
- Mental status (psychiatric, neurologic)
- Cranial nerves
- Motor
- Sensory
- Coordination
- Reflexes

Dr Samuels pays detailed attention to the mental status examination as the first part of the evaluation; more important, he illustrates why it is necessary and how it is done. We are not shown the rote, embarrassing, and even demeaning mental status examination that most of us learned and hardly ever use; instead, we are shown a sophisticated and interesting evaluation process that is highly focused while readily passing for conversation. Dr Samuels' presentation of the cranial nerve evaluation makes us realize that, despite the stresses of medical practice, we can find moments of peace and pleasure through properly understanding the logic of the neurologic evaluation process.

The presentation was videotaped in a re-created office in front of a live audience. Unfortunately, the sound quality of the tape is at times imperfect, especially given the substantial price charged. Nonetheless, the tape enables us to share a fine teaching experience provided by an extraordinarily capable and interesting teacher. Whether you purchase this videotape or borrow it from a KFH library, *The Neurologic Exam* is likely to provide far more practical value than can be obtained from attending many hours at conferences or from reading textbooks. This tape exemplifies video-based teaching at its best. ❖

Video Textbook of Neurology for the Practicing Physician, The Neurologic Exam [video recording]. Martin A. Samuels, MD. Oxford, UK: Butterworth Heinemann; [Los Angeles, CA: Mayer Media] 1996. $125. ISBN 0-7506-9763-6

"Business @ the Speed of Thought"
Review by Vincent Felitti, MD, Associate Editor

Many improvements to our practices have resulted from computerized information systems: E-Script, the wonderful pharmacy refill system; KPDS, the archaic but nonetheless valuable laboratory results system; and RTAZ, the radiology reports system. Electronic mail, too is improving the efficiency of consultation and patient communication for many of us as we learn to use it. Many physicians include e-mail addresses on their business cards.

These advances are important because the most troublesome of all problems we face in medical practice is not having patient information available when we need it. In our knowledge-based profession, who of us has not cringed at not having the medical chart when we see a complex patient, or at having to reorder recently done radiology or laboratory procedures because the results could not be located?

Business @ the Speed of Thought suggests the beneficial results that digitized information can bring to any complex human endeavor, including medical practice. The book gives clear examples of how successful companies use computers to integrate multiple activities. Many examples are applicable to Kaiser Permanente. For instance, why do we use lab slips instead of ordering tests directly from a computer screen, especially when test results are posted on a computer screen? Bill Gates frequently poses basic questions: "Do you have people moving information around, or do your computers handle routine process flow while people handle exceptions...?" (p 60). Translating these questions to our own clinical practice, we might ask: are our clinical guidelines still hand-delivered via interoffice mail when they could be placed in a digital library, where they would not be lost or discarded?

The book extensively discusses use of the Internet and leads me to wonder: How might *we* use the

Internet to enable patients themselves to make the most of their appointments? Do barriers to making appointments accomplish anything other than increased anxiety? Conversely, how often might patient-doctor-patient e-mail accomplish the work of an appointment in less time? How might individual physicians or modules use the Internet in their practices? Is everyone familiar with Internet Grateful Med, the remarkably rapid and simple access service of the National Library of Medicine? Should we develop a questionnaire for use on the Internet to collect a standardized medical history on each member nationwide? If so, how frequently should we collect this information? Current technology certainly provides the confidentiality to gather that information safely, but what additional skills would we need to use the information productively? And perhaps the most basic question of all is also posed by Gates: Does it make sense to invest huge sums in developing custom software, or should we build on the enormous R&D investments of the software industry and customize their applications to meet our needs? The promise of the electronic medi-

cal record has led to its own mystique. To date, its effect often has been to provide an excuse for deferring action on current problems because they'll disappear once we get the EMR.

The closing lines of *Business @ the Speed of Thought* resonate with the choice we have: "If we sit back and wait for the digital age to come to us on terms defined by others [we will lose] ... Digital tools magnify the abilities that make us unique in the world: the ability to think, the ability to articulate our thoughts, the ability to work together on those thoughts." (p 415)

This straightforward book is written by a man who identified the unmet needs of people who were trying to work collaboratively, and then built the world's largest fortune by successfully fulfilling many of those needs. The book will be useful reading for physicians who want to participate actively in making Kaiser Permanente the organization that it has the potential to be. ❖

"Dragon NaturallySpeaking, Medical Suite"
Separate reviews by Eric P. Daniels, MD; and Robert Hogan, MD

In 1993, Dragon Systems of Newton, Massachusetts received a $47,500 Phase I Small Business award from the US Army Space and Missile Defense Command to study automated speech transcription—technology that enables a computer to transcribe recorded speech into written text. This funding helped Dragon Systems to secure two other contracts from the Defense Advanced Research Projects Agency to continue its R&D efforts. In 1997, the company produced Dragon Systems NaturallySpeaking software, a commercial software package that accurately transcribes dictation into printed words. Various versions of this product are described on the Dragon Systems Web site (www.dragonsys.com).

Because of the unusual nature of this technology and its powerful implications for medical practice, two reviewers from different fields of practice assess the latest medical version of this product.

Dragon Systems NaturallySpeaking Software: Use in a Radiology Department

Is there a benefit in being an early user of voice-recognition technology? Clearly, voice recognition software has the potential to lower labor costs and

to remove a clerical aspect of the physician's job, transforming transcriptionists into editors and quality-control professionals. Voice recognition software also provides the benefit of immediacy: reports are available at the moment the x-ray films are read. But how well does the software currently do this?

The CEO of Applied Voice Recognition recently stated, "Voice recognition technology is not perfect and is unlikely to be that way for 10 to 15 years at best." Perhaps understandably, Claudier Tessier, Executive Director of the American Association for Medical Transcription, stated that he "would not hire a transcriptionist whose first pass looked like what is being produced as final from voice-recognition software." By contrast, my own findings are of 95% accuracy under ideal conditions, and better than 80% accuracy in actual practice, and are quite in line with findings of others. As a result, at least six radiologists in my department are eager to pilot the technology. After a more formal cost/benefit analysis, the idea may be worth a trial. The basis for my conclusions is as follows: two different versions of Dragon Systems NaturallySpeaking software, Professional Suite, were tested on two computers with