

## Doctors delve into new specialty: information systems

BY CATHERINE DEE

### IF YOU NEEDED TO DESIGN AN INFORMATION SYSTEM

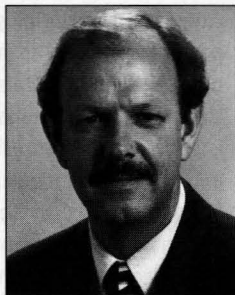
or a computer software program for your office, group practice, or physician network, whom would you hire? The best bet would not be a high-tech wizard but a physician who knows computers—the best of both worlds—say those with experience. Not surprisingly, a new type of professional is emerging: doctor/information-systems pioneer.

Jon Tveten, M.D., practiced internal medicine for 12 years in Redlands before taking a management post as medical director at Pacifi-Care in Cypress. He wanted to be able to help physicians drive the future of the profession instead of just being subjected to market forces. After working with various technical people at Pacifi-Care to craft a database that provides feedback to the organization's physician groups, he saw the advantages of being able to access data that resides in different systems, and then "slice and dice it" to gain perspective.

In Dr. Tveten's view, managed care has spawned the growth of "oppositional systems"—bureaucratic layers of control—instead of fostering alignment of the processes of delivering and managing care. This forward-thinking physician is now working independently to help medical groups align their information systems so that there is no conflict between these two areas. "Knowing what works and what doesn't, and knowing the relative costs and outcomes of various options, supports a very rational process of care," he says.

Simon Cohn, M.D., clinical information systems coordinator for Kaiser Permanente nationwide, is also in a position to facilitate operations and break new ground. "My position exists to provide leadership, consultation, and support for the development, implementation, and evaluation of effective clinical information systems," he explains. As senior emergency physician at Kaiser in Martinez, he is in touch with the practical aspects of automating medical information. Dr. Cohn stresses the importance of involving physicians in system design. "If you're not currently involved in clinical practice, it's easy to forget the complexities of patient care, and the fact that patients and their problems often do not fall into predictable patterns or neat little boxes," he says.

During his hours wearing the administrative hat, he helps Kaiser regions and their medical groups develop and implement systems to aid physicians and improve patient care. He

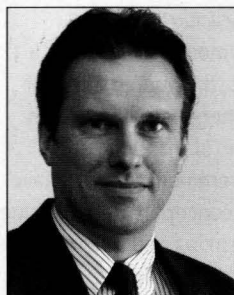


Dr. Cohn

has created software programs that assist clinicians in documenting medical records and writing prescriptions and patient instructions for Kaiser's emergency departments and outpatient clinics.

Both Drs. Tveten and Cohn agree it's high time that physicians—who for the most part have shunned computer systems out of lack of necessity—begin to take advantage of the technology. Dr. Cohn became interested in automating medical records more than a decade ago, when his coworkers had to constantly attempt to decipher his illegible handwriting. While some doctors already use single-purpose practice-management systems (e.g., for billing), these two doctors-turned-information-system gurus believe there is a strong need to move all records out of file folders and into

databases. Of course, there is also the issue of poor access to cumulative patient data. With hard-copy records, says Dr. Tveten, "you basically have to send an army into the records room and extract the information you're after. We need the ability to learn from our own experience through having cumulative information available."



Dr. Tveten

Dr. Tveten acknowledges that making the switch to a central computer system in a busy office is a heroic task. He warns that "physicians tend to be novices in the computer applications area, so they are somewhat susceptible to vendor dependence." But he is quick to stress that there are enormous benefits in integrating medical data into one system that's accessible by both doctors and patients. He also thinks patients should be more involved in maintaining their own records. "For example," he explains, "a patient's recording ongoing blood-pressure data in a jointly available computer file is much more useful than the doctor's checking the patient's blood pressure every three months."

Rest assured, computers are not likely to take over medicine in an Orwellian coup. "It's the people who make a system work. No software package does everything," Dr. Tveten says. "And tech people don't know much about medicine, so communication has to flow in both directions."

The information age will provide physicians a much better grasp of their medical knowledge and experience, Dr. Tveten predicts. "In terms of increasing our effectiveness, this is going to rival the introduction of antibiotics."

*Ms. Dee is a Bay Area freelance writer.*