

Medical technology moving forward

BY DYLAN SKRILOFF

The benefits of advances in internet, microchip and telecommunications technology haven't passed over the medical world, attendees of a recent meeting of the RBA Technology Initiative learned.

Four experts in the fields of medical technology and health care visited the Technology Initiative meeting last month, speaking to about 40 RBA members and guests. Each lauded the improvements new technology has afforded the industry.

"There's some film to digital revolution happening in radiology," Dr. Evan Kaminer of Hudson Valley Radiology Associates was pleased to report. He explained that storing images on a picture archiving & communication system (PACS) was many times more efficient than keeping them on film in massive reams of files, which were cumbersome and often hard to find.

"We spent a lot of time dealing with complaining patients because we were behind schedule. That had to change," Kaminer said.

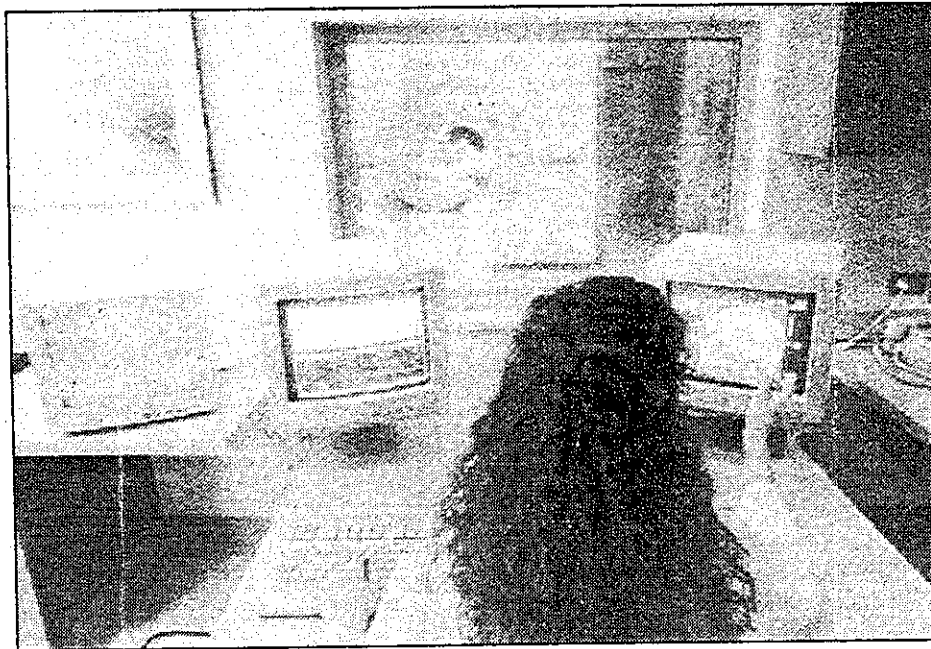
Now, not only are all images conveniently on file, but they can easily be shared for analysis with radiologists all over the world via e-mail and the internet. As his company has several offices in the Hudson Valley, staff members can now instantly share images with each other. The conversion was costly and required the hire of some IT staff, but the pay back in customer service and office efficiency has been more than worth it, he said.

"It's a very costly system to implement. The idea is not to save money but improve services and now we can compete better. The time from seeing a doctor to a report being in his hands has gone from days to hours," Kaminer said.

What's more the PACS systems are being integrated into a county-wide, state-wide, nation-wide system. "In PACS future everyone has access," Kaminer

said, recalling a quote from former Secretary of Health Tommy Thompson that electronic health technology will provide a quantum leap in patient power.

Brian Phelan, CEO, Imaging On Call, explained how his company uses modern technology to examine X-Rays over the internet. They call their practice "teleradi-



ology" and he has 50 certified radiologists on staff dealing with over 600 cases a night.

"We started the company because there are 24/7 radiology demands and a shortage of radiologists," he said.

Kathy McDonough, RN, BSN, informatics nurse in Bon Secours Health Systems spoke about the new bar coded medication system that is changing the way medicine is dispersed in the United States and the world.

McDonough lauded the advent of the bar-coded medication system which memorizes all medication information on

a computer and ensures nurses give the exact right dosage of the exact right medicine. According to McDonough the average hospital is being saved 40 mistakes a day and nationwide approximately 7,000 preventable deaths a year.

An adverse drug reaction typically costs a hospital around \$3,000. She estimated

that in all the technology is saving the average hospital \$2 million a year and will save the health care industry upwards of \$90 billion over the next decade. One reason for high rates of medication errors is the massive influx of new drugs every year. Last year over 7,000 new medicines reached the marketplace, many with very similar sounding names.

RBA member Kurt Griffith said he was very happy about the bar-code innovation because during a recent stay in the Emergency Room the nurses told him they were overburdened with paper work.

"The nurses said that for every 10 min-

utes of patient care there is 45 minutes of record keeping," Griffith said.

Kathryn Reed, CMPE, executive director of Catskill Hudson Area Health Education Center discussed the latest technology that makes a paperless physician office possible. The computer program is called "electronic medical records."

She said benefits of an electronic office include less staff needed over time, eliminating recurring costs of paper charts and associated space needs, eliminating loss of paperwork, immediate internet access, enhanced charting efficiency, ability to monitor your office while away and increased quality of life.

"No matter where you are you can monitor your office...It's a high cost, but it is so worth it. It's a whole new world," Reed said.

In spite of the technology's benefits the health care industry has been slow to convert to an electric system. As of 2006 EMR's have been implemented in less than 10 percent of American hospitals and 16 percent of primary care physician offices. Paper transactions still dominate the industry in the United States, a system that has remained unchanged since the 1950s.

According to a study done for Kaiser Permanent Institute for Health Policy, 2001, the healthcare industry spends only 2 percent of gross revenues on information technology, compared to other information intensive industries such as finance, which spend upwards of 10 percent.

RBA Technology Initiative co-chair Howard Reis said he felt everyone who attended benefited from the information presented at the event.

"We are all health-care patients, so this topic had universal appeal," he said.