ACR Issues New MRI Safety Guidelines

Our 2007 Salary Survey

Going Mobile
Imaging Makes House Calls

Is There Enough Bite to HIPAA’s Privacy Rule?

Classifying PACS Clients
The 80-year-old woman had pneumonia several times previously. So when she experienced shortness of breath, her family worried she might have pneumonia again. They called her family physician, Natan Schleider, MD, who happens to make house calls.

Schleider, chief medical officer of New York House Call Physicians, based on Park Avenue in Manhattan, called Tim Daly, RT (R), who also makes house calls, and asked him to stop by her apartment building and do a chest x-ray.

It turned out that Daly, owner and operator of New York Home X-Ray LLC, was not far from the woman’s building. So Daly, who carts a nearly 100-pound x-ray machine in his SUV, made her apartment his next stop. He did the x-ray and transmitted the digital images to his radiologists for interpretation. Schleider received a preliminary reading and was able to review the patient’s images before walking through her door.

“It was a really cool case,” Schleider recalls. “The time between the call coming in, the patient having the x-ray done, and my showing up at her door was all within an hour and a half.”

Schleider’s practice accepts no insurance, thus catering to clients who can afford the cost of home- or office-delivered medicine. If possible—and the patient chooses—Schleider will have diagnostic testing done in the patient’s home or office as well. He charges $600 for an initial house call and $500 thereafter. Diagnostic studies are billed separately.

Classic Mobile Imaging

Nearly everyone in imaging knows of the classic scenario where the mobile van pulls up to the hospital or imaging facility parking lot once or twice per month and patients board the van where they are imaged in the MR or CT scanner according to a set schedule. Such mobile imaging typically happens in rural areas or other locations that, for whatever reason, do not have enough patient demand to support a full-time, permanent imaging center.

However, as medical imaging devices become more portable and increasingly digital, more physicians and their patients are finding additional uses for imaging diagnostics-on-the-go.

“We go where the patients or person needing the exam is better suited not to go out,” says Robin Reichert, regional vice president of sales for MobilexUSA, based in Sparks, Md. MobilexUSA stops include correctional facilities, long-term care facilities, and homebound patients. “Homecare and hospice is a big market for us,” Reichert says.

Among the services MobilexUSA takes to patients are x-ray services, ultrasound services, halter monitors, and electrocardiograms. MobilexUSA serves 6,000 locations in more than 30 states.

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In the 1990s, Medicare made changes that resulted in higher reimbursements for physicians who visit patients in their homes. Consequently, according to a November 2005 study in The Journal of the American Medical Association, house calls to the elderly and homebound have increased to more than 2 million visits per year.

Save Time, Possibly Money

Reichert says mobile imaging for the homebound can be cost-effective and time-saving. “We go straight to the bedside and, boom, you have a read. It’s very, very quick and cost-effective. Plus, you are saving the cost of an ambulance ride for the patient to the imaging facility, and, in some cases, that [ride] is just not practical.”

The turnaround time for reports is also much quicker. “We have doctors that read for us 24 hours a day, so they can turn around a report in a much shorter time than it takes to go to the ER, wait to be called, to be imaged, and to wait for the report of the test to be sent to the physician,” Reichert says.

Daly, who has seen patients in all five of New York City’s boroughs, says that even though his x-ray machine is heavy—it is the width of a wheelchair—it is still often easier for him to climb five flights of stairs than it is for his patients to come down them and make their way to an imaging facility.

By coming to the patients, “we’re keeping the elderly, the homebound, out of the hospital,” Daly says. “If you ask anybody who is older, coming down three, four flights of stairs and getting into a cab and sitting in the ER for four or five hours is too much for them.” Daly figures that is one reason he seems to be getting busier all the time.

Approximately five years ago, the Visiting Doctors Program of Mount Sinai Hospital in New York added mobile imaging services to its care for the homebound. The Visiting Doctors Program was founded in 1996 and cares for roughly 800, mostly elderly, people.
Frequently, elderly homebound patients will fall or have hip or ankle pain, and without an x-ray, it is difficult to tell whether they suffered a fracture that needs treatment, says Jeremy Boal, MD, director of the program.

"If we have to call an ambulance and have the patient taken to the hospital, it can make for a very long day," Boal says. Boal agrees that having a mobile imaging service come to the patients' homes saves a great deal of time and affords them much more comfort.

**Reimbursement Challenge**

The biggest challenge, Boal says, is reimbursement for the services. Most insurers will not cover the full cost of mobile imaging under the circumstances, and the patient ends up paying some out-of-pocket cost. "It's a real shame," adds Boal, who is also an associate professor of medicine and geriatrics at Mount Sinai School of Medicine, "because with more mobile imaging to the homebound, the healthcare system would use the ER less, and it saves patients from needlessly coming to the ER."

Boal says he hasn't done a head-to-head comparison of images taken with fixed vs. mobile equipment, but he has been impressed with the quality of the mobile diagnostics he has seen. External radiologists read all the images, he notes.

While those in long-term care facilities and the homebound make up the majority of MobilexUSA's patients, the mobile imaging company also provides its services to sporting events and workplaces.

MobilexUSA contracts with a number of professional sports franchises to be at every game in case players need x-rays taken at the game site. "You are in the locker room," Reichert says, "and if a player is injured, he is brought in, and that is when we kick into gear." The mobile x-ray often determines whether the player needs to be taken to the nearest hospital for further imaging or can soon resume playing, Reichert says.

Companies large and small have also hired MobilexUSA for health clinics and other screening programs they conduct on site for their employees. "If a company such as IBM is having mandatory physicals, we might contract and go on site and do the x-rays," Reichert says.

Even more unusual, MobilexUSA technologists have been called to the county morgue to help detectives find bullets lodged in corpses, Reichert says.

**Growth for Ultrasound**

Robert Lookstein, MD, an assistant professor of radiology at Mount Sinai School of Medicine, expects that in the near future, portable ultrasound will play an increasing role in doctors' messenger bags.

Today, ultrasound equipment can be extremely small and lightweight—less than 5 pounds—and require a computer no bigger than a laptop to operate. But with that kind of portability, Lookstein says, it is not too far off from when doctors making house calls may pull a transducer from their messenger bag and perform a bedside sonogram. "To my knowledge, no one has jumped on this yet," he says. "But I expect you'll soon see physicians who are willing to do this and make very technologically advanced house calls."

Sonograms can be used in the diagnosis of various problems from abdominal pain to vascular issues, he notes. Portable ultrasound equipment "will help us expand the field of community-based medicine to allow for more accurate triaging of patients in the community and more accurate diagnoses," Lookstein says.

A couple years ago, he says, Mount Sinai School of Medicine received a grant from an ultrasound manufacturer that enabled it to equip all its medical students with portable ultrasound equipment they could use as they learned the clinical ropes in the emergency department (ED). The equipment was returned when the study was over. However, Lookstein expects that equipping ED doctors and other community-based physicians with ultrasounds will someday be commonplace.

Schleider says any doctor who starts a house call practice like his needs to gather all the resources he or she can. Those resources clearly include mobile imaging equipment, so that as a doctor who makes house calls, you can provide modern medical care in the home.

— Beth W. Orenstein is a freelance medical writer and frequent contributor to *Radiology Today*. She writes from her home in Northampton, Pa.