

The Changing Practice of Nuclear Medicine

With the rapid changes occurring in the health care system today and the entrance of managed care consultants into hospitals around the country, *Newsline* decided to hold a roundtable forum in June at the SNM Annual Meeting in an effort to get nuclear physicians involved in a frank discussion of these issues. We gathered together practitioners from both private and university-based hospitals from various states and regions to get a complete cross section of the problems facing nuclear physicians.

Will nuclear medicine become an open practice?

Conrad E. Nagle, MD: One issue I'm curious about is do you ever foresee your department becoming an open shop? Should you open your department to cardiologists who want to read their own cardiac stress scans or medical oncologists who want to do bone scans? Are you antic-

ipating this situation or do you have this already in your hospital?

Martin P. Sandler, MD: That's a question that faces not only nuclear medicine but the imaging field in total. I think an open shop would be catastrophic because it would destroy the specialty as we know it. We're getting pressure from every direction from specialists who want to do their own radiology/nuclear medicine studies. If this happens, the three parts of the hospital which are critical for functioning—diagnostic imaging, pathology and anesthesiology—would break down. What can eventually happen is if you want someone to look at your nuclear cardiology study at on the weekend, you'll have to find a cardiologist. We've been in the middle of this fight, and I think it's a very dangerous situation that will allow nuclear medicine to become fragmented.

Robert J. Lull, MD: Our credentialing process is fairly open. Anyone who wants

to perform any test can apply for credentials. This creates significant risk for established imaging specialties and is responsible for the large numbers of residents who can't find jobs. In radiology, hospital administrators are under huge pressures to keep their costs down when competing for managed care contracts. Although we're providing the service, our facility may find someone who meets the credentialing criteria and is willing to do it at a lesser cost to the hospital. This puts the radiology/nuclear medicine group at a greater risk for getting wiped out. Unfortunately, I don't know how we can avoid it or keep it from happening with an open staff credentialing process.

Richard K. J. Brown, MD: The answer is you have to treat your practice like a private business and show that you can treat patients cost effectively. When metastron became available for bone cancer—a great drug with immense benefits for patients—I researched what the cost and reimbursement was. It became clear that hospitals could lose \$1600 per procedure, and I told this to the administrators. You have to look at the expense of the study on the basis of its patient management impact. You have to ask yourself, "in a managed care environment, can we afford to do this test?"

Roberta C. Locko, MD: In New York, we're at the tail end of the managed care continuum, but at Harlem Hospital we're getting in there rather quickly, especially with Medicaid managed care issues. We've headed off the open shop possibility by improving our services. For example, we're trying to provide the most rapid turn-around time you can possibly get for nuclear scans with a goal of 12 hours for same-day interpretation. If we compromised on this, we'd be opening ourselves up to individuals who say they can provide that service in a more timely fashion. In our facility, we have a situation in which the quality and credentialing of individuals who will provide nuclear medicine services must be approved through the department of radiology. This lessens the possibility of hav-

Participants in the Forum

The following people participated in *Newsline's* roundtable discussion on the changing state of nuclear medicine practices.

Richard K. J. Brown, MD, practices nuclear medicine at Crittenton Hospital, a private hospital in Rochester, MI.

Stanley J. Grossman, MD, practices nuclear medicine at Western Pennsylvania Hospital, a private hospital in Pittsburgh, PA.

Roberta C. Locko, MD, is the chief of nuclear medicine at the Harlem Hospital Center and is an associate professor of radiology at Columbia University College of Physicians and Surgeons in New York.

Robert J. Lull, MD, is the chief of nuclear medicine at San Francisco General Hospital, which is affiliated with the University of California at San Francisco.

Conrad E. Nagle, MD, is a nuclear medicine physician at William Beaumont Hospital in Troy, MI. He is the associate editor of *The Journal of Nuclear Medicine* in charge of *Newsline* and served as moderator during this forum.

Robert E. O'Mara, MD, is the chief of nuclear medicine and professor of radiology at the University of Rochester Medical Center in Rochester, NY.

Martin P. Sandler, MD, is the director of nuclear medicine and vice-chairman of the radiology department at Vanderbilt University in Nashville, TN.

Douglas Van Nostrand, MD, practices nuclear medicine at Good Samaritan Hospital in Baltimore, MD.

* "The Nuclear Physician at Work" is an occasional series that will run in *Newsline*.

ing other individuals take components of our practice.

Is managed care having an impact on your practice?

Sandler: In Tennessee, the state has adopted a new health care plan called TennCare in which TennCare have made a deal with the Federal government to take control of the state's Medicaid money. With this money, TennCare will cover not only Medicaid patients but all patients, who don't have health insurance in the state. Medicaid, which covers 750,000 patients, now will cover 1.5 million. Our hospital must participate in this plan and will now get \$.30 for every \$1 charged to the patient. Several things have happened as a result. One is that the Medicaid money that would have gone to graduate education is no longer available, so there have been residency cutbacks across the state. Second, the practices have changed dramatically. Our out-patient volume has increased tremendously so we've had to organize ourselves differently. On a positive note, we've set up teleradiology services to increase our number of covered lives with outlying hospitals to read radiology and nuclear medicine scans. We're also working on developing new techniques to provide information that other modalities can't. We've been one of the first to start doing FDG-SPECT scans; as a result our total nuclear medicine volume is up 10%.

Robert E. O'Mara: We have a system based on a collaborative effort with 11 county hospitals. We have a 70% HMO load, and the uninsured market is a little less than 3%. It's true we are under tight controls that are a pain in the neck, but we are still seeing volume going up. This is not a panacea: If any of the hospitals decide to get competitive, we could enter into price wars. Another danger for us is if there's a national cut across the board. We're running near maximum efficiency, so further cutbacks could mean trouble.

Brown: In Michigan, we received a letter from Blue Cross that said there may be a preapproval process for out-patient procedures. The hospital would get paid their component, but the practitioner will not be paid unless preapproval is given. Is that going on in the rest of the country?

Lull: That's not happening in California, but there are plans where they'll only pay

for the first or second scan and with partial or no coverage for each subsequent scan. It's a way to try to squeeze down the number of procedures. In San Francisco, managed care consultant groups predict that the current 5000 beds in the city will drop to somewhere between 500 and 700. We've already had several hospital consolidations where hospitals are closed and the staff is laid off. The outcome could be very devastating. We have to try to be calm in the face of the storm.

Locko: We have an office of managed care that deals with all the particulars of managed care contracts. One of the things we've found helpful is our involvement with practice guidelines and critical pathways. Many departments are trying to develop their own critical pathways and we've been trying to get included in these. We've found we can't afford to ignore what other departments are doing, and we need to make sure that nuclear medicine is plugged into those areas. We've actually found that some nuclear medicine and radiology procedures that we offer are being underutilized, so we're trying to enhance our educational base and to develop guidelines for radiation utilization. Knowledge will become one of our most important assets and nuclear medicine ought to become more aggressive in this area.

Has cost-benefit analysis become a vital part of your practice?

Douglas Van Nostrand, MD: I've seen some studies on the cost analysis of nuclear medicine procedures, and these data would be very useful for my hospital to have available. Part of the problem is that the numbers don't apply to individual institutions. We need a software program that we can use to enter data from our institution and come up with our own cost analyses.

Lull: As my hospital prepares for the possibility of managed care, my colleagues and I are doing a complete analysis and figuring out how much it costs us to do each nuclear medicine procedure. We're looking at each one critically in an effort to minimize the actual costs, which may be unrelated to what patients are being charged. We also want to see how we can modify procedures to ensure a reduction in the cost of doing business. The people who aren't doing this now are setting themselves up

for big problems.

Nagle: In our hospital, we have a separate engineering department, and they come in and do the analysis. We started this project about 5 or 6 years ago and use it to make decisions about adding new technologists and physicians to our department.

O'Mara: Evaluations of nuclear medicine procedures need to go beyond cost analyses. What we really need is outcomes research, especially in relationship to other procedures—both within radiology and in other specialties. We need hard data to take to our hospital administrators to prove not only that nuclear medicine is cost-effective but will improve patient outcomes.

Is there a move toward more out-patient procedures to reduce costs?

O'Mara: I think so. One thing we're exploring is a network outpatient nuclear medicine facility to serve the whole community as a joint effort with all the other hospitals in our area. We're not sure yet if it will work, but we're working out the details.

Nagle: It seems to me that most nuclear medicine in this nation is done in the hospital, and we suffer collectively from the high indirect costs associated with that. I'm intrigued by your group looking into outpatient scenarios. Most hospitals bring in 70% to 80% of their revenues from outpatient procedures. The question is are nuclear physicians paying a price by performing outpatient procedures in hospitals with high built-in overhead?

O'Mara: There are two problems with running an outpatient service in a hospital. The first is that very few individual nuclear medicine departments have enough volume to make an outpatient office profitable. That's why we're looking at trying to combine with several other hospitals in our local area to set up an outpatient service. We currently have the largest outpatient practice in town, and our own figures show we pay a price in terms of patient satisfaction in scheduling appointments and in high overhead hospital costs.

Locko: Can you name some of the procedures that will be done if your outpatient clinic is established?

O'Mara: We could do everything but ¹³¹I whole-body surveys, and that's only because this procedure typically takes a long time

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Academy Stays on at RERF

Researchers at the Radiation Effects Research Foundation (RERF) breathed a collective sigh of relief when the Department of Energy (DOE) announced in June that it would delay its decision to replace the U.S. manager of the research lab for at least two years. The announcement came on the heels of a letter written by DOE Secretary Hazel O'Leary that appeared to imply that the lab and its U.S. manager, the National Academy of Sciences (NAS), were involved in covert radiation research. The recent decision appears to be an attempt by the DOE to mend its relations with NAS.

The DOE originally decided to transfer the management of RERF from NAS to a university about eight months ago with the explanation of wanting to encourage the training of radiation research experts. RERF and NAS officials opposed this change from the getgo, arguing that the academy was better suited than a university at administering the politically sensitive program. The sparring came to a head in April when 191 academy members signed a resolution criticizing the DOE's decision. O'Leary responded to the petition with a letter dated June 14 to academy President Bruce Alberts and ignited anger with these comments: "With the end of the cold war, it is now time

to bring the Foundation into the mainstream of scientific and public health research...The need for secret research on the biological effects of radiation has ended." In a statement on June 23, the academy responded that "at no time has the academy—through its study of the biological effects of human radiation by the RERF—conducted secret radiation research."

Just four days later, the DOE announced it would adopt a recommendation by RERF's bilateral Science Council, issued in May, to defer action for 2 years while a blue-ribbon panel of radiation scientists assesses RERF's activities. "I wouldn't characterize our decision as abrupt," said Paul J. Seligman, MD, deputy assistant secretary for health studies at the DOE. "We listened to the reaction of the scientific community." He said the DOE still plans to select a university to oversee a radiation research training program at the RERF. ■

Radiation Sabotage at NIH

Employees at the National Institutes of Health (NIH) were shaken up recently when officials found traces of a radioactive phosphorus isotope, P-32, near a lunchroom refrigerator and in a nearby water cooler. A pregnant scientist and 27 co-work-

ers unknowingly consumed contaminated food or water on June 28. The woman, who was 4 months pregnant, is believed to have been exposed to 200 to 300 microcuries of radiation, well below any potentially harmful levels to her and her fetus, according to NIH officials. Federal guidelines say a person can be safely exposed to 600 microcuries annually. The others were exposed to 60 microcuries or less.

At this point, federal investigators are fairly certain that the incident was not accidental, according to NIH spokesperson Don Ralbovsky. "They don't know yet, however, if the perpetrator was someone who worked at NIH or was from the outside," he said. The isotope P-32 is widely found in cancer research labs throughout the building where the contamination occurred.

Since the incident, NIH has told laboratory workers to step up security measures to ensure that all radioactive substances are kept under watchful eyes when they are not stored in locked containers. "Researchers are no longer allowed to keep radioactive materials on lab benches unattended—even if they leave the room for just a few minutes," said Ralbovsky. The Nuclear Regulatory Commission is conducting its own investigation to see if any changes in safety protocols are warranted. ■

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to perform and requires a specific camera.

Stanley J. Grossman, MD: I have some concerns over these nuclear medicine outpatient clinics because I think that the specialty is too small to support a stand-alone clinic. Nuclear medicine departments really have to be linked with a larger organization. Our hospital is affiliated with a large health maintenance organization (HMO) that is in the process of renewing and revising its hospital contract. Nuclear physicians in my department are trying to get involved early on to tell these HMO administrators about the necessity of nuclear medicine. I'm concerned that if opened, an outpatient clinic would be in competition with the hospital. Right now—at least in Pittsburgh—this would be dangerous.

Lull: One approach is to invite the hos-

pital to become a partner in the clinic. If the hospital declines to get involved, at least you can say that you offered it to them. I know several places in California where outpatient facilities have opened and have given hospitals the option to join but were declined. The hospitals wound up losing business to the clinics which offer better quality.

Are any of you reaching out to referring physicians?

Locko: Yes, last March the department of radiology at my hospital invited physicians from various specialties to a retreat. The goal was to get referring specialists up to date on what our department offered during a full day symposium. Basically, we brought "potential threats" to nuclear medicine into the fold. From this retreat, we've established task forces—two specif-

ically dealing with referral base involvement—that will be working on recommendations over the next 6 months. We'll have another meeting in December to discuss some plans of action for dealing with the future impact of managed care in New York.

Lull: We emphasize communication with referring physicians, although in a more informal way. We recognize the importance of reaching not only referring specialists such as cardiologists but general and family practitioners who have not been part of our traditional referral base. We have a practice of calling all our referring physicians with all our abnormal studies. We talk to them and explain the results and possible treatment options. We, as nuclear physicians, have become part of their problem solving team, and that's important to them.