THE NUCLEAR MEDICINE WORKFORCE AFTER HEALTH CARE REFORM: RESIDENCIES

Clinton plan calls for ceilings on number of specialist residencies per year; nuclear medicine may have to re-examine qualification standards

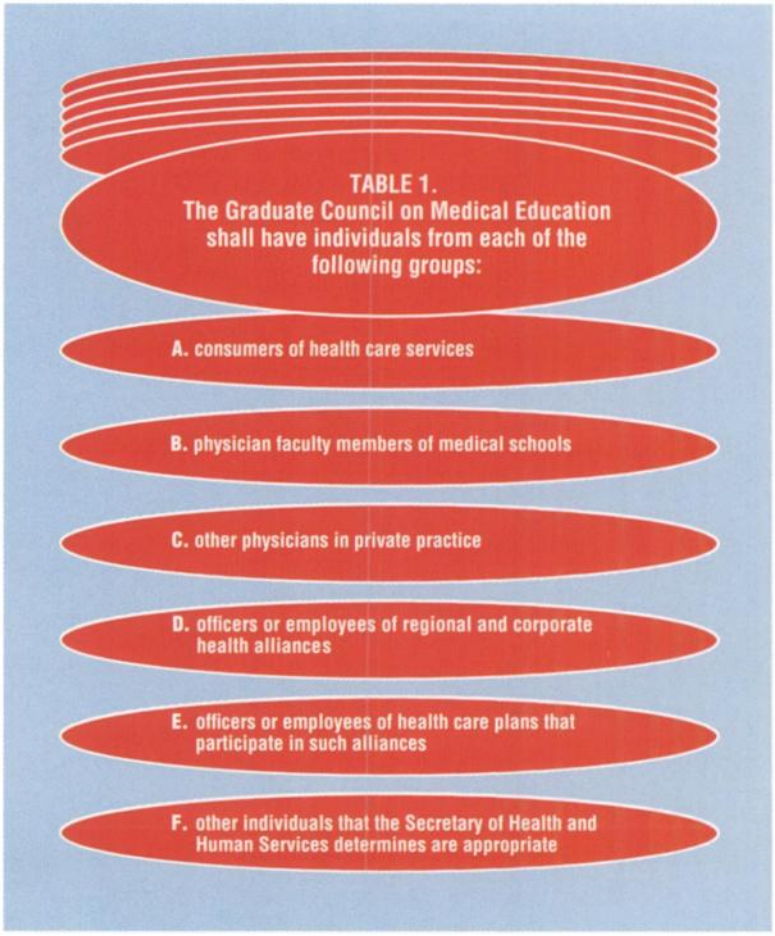
ONE PART OF PRESIDENT CLINTON'S proposed Health Security Act that nuclear medicine practitioners are giving careful scrutiny is Title III, Subtitle A, "Workforce Priorities Under Federal Payments," which would affect the number of nuclear medicine residencies. The provision would set up a Council on Graduate Medical Education (CGME), composed of individuals from particular groups (Table 1), which would oversee the allocation of funds toward specific residencies. This plan would in effect centralize the decision-making process about graduate medical education and thus shape the face of the workforce.

"There will be eight to nine members appointed by the President" on the CGME, said Richard C. Reba, SNM president and professor of radiology at the University of Chicago. "Every specialty will be fighting for [a spot]. Nuclear medicine represents probably about 0.1% of about 550,000 physicians in the United States"; therefore, "we're vulnerable, we don't have a big voice, and the odds we can influence a national board will be small."

Yet the proposed CGME would have considerable influence on nuclear medicine and all other medical practice. It would set the number of specialty positions that would be open each year, with no less than 55% of residencies going to primary health care (family, general internal medicine, general pediatrics, and obstetrics and gynecology). The three factors the Council would use to determine the number of specialty positions would be: incidence and prevalence of diseases or health conditions the specialty handles; number of physicians practicing in the specialty that year; and the number of physicians practicing in the specialty at the end of the ensuing five-year period. The number of positions would be enforced by the allocation of funds to institutions; the money for these funds will come from a general health care budget rather than from a specific allocation—and the amounts are set for each year in the bill proposal. For example, for 1996, the overall allocations are $3.2 billion, with half to come from Medicare and half from private payers.

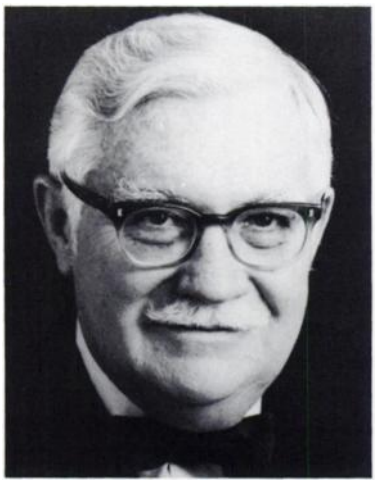
Distinguishing a Small Specialty

Some nuclear medicine watchers perceive that a major problem for a small specialty like their own is that, most likely, individuals without sufficient knowledge of the field or with other interests will be deciding its fate. Dr. Reba described how the process of assigning numbers of residencies within individual hospitals could become very political. "Though they know the 45/55 [ratio], it depends on who has the biggest mouth" as to which residencies get assigned to which types of practice. Thus, if in one hospital radiologists are particularly powerful, there may



be no nuclear medicine positions assigned. Recognizing how larger interests are gaining control of smaller interests, whatever the particular health care reform plan, Dr. Reba averred that "No matter what we do, there will be a decrease in the number of nuclear physicians by the year 2000. That is a concern."

Joseph F. Ross, MD, president of the American Board of Nuclear Medicine (Los Angeles, CA), also stated that, with health care reform, "Certain things are happening that could be devastating to the field of nuclear medicine." He projected that, under the President's proposal, the current 124 first-year nuclear medicine training positions would be reduced to 76, a decrease of 39%. One threatening scenario, he pointed out, might occur if nuclear medicine residencies were to be lumped with those of another specialty, which the government might then consider oversupplied with physicians.



Joseph F. Ross, MD

"Such a possibility is very real," Dr. Ross said, "and might well be lethal to the independent specialty of nuclear medicine." He also noted that the problem is compounded by drain from the profession owing to retirements.

Heads of nuclear medicine departments are also concerned about what such an upcoming crunch could do to their programs. Robert E. Henkin, MD, chairman of the nuclear medicine division at Loyola University Medical Center (Maywood, IL), noted that an anti-specialist trend could exacerbate an already existing problem. "There are about 125 [nuclear medicine] residency positions—at most 80% are filled.... The first thing [reformers] will do is lop off vacant spots at the top." Furthermore, there have been nuclear medicine recruitment problems anyway, and an anti-specialist atmosphere could discourage prospective recruits. "We're not reproducing ourselves already," he said. "We're in great danger of not having nuclear medicine specialists down the line. Is nuclear medicine even going to be talked about in specialist allocations? Radiologists would love to say they could do it."

Although these observers are sounding a note of alarm, they also assure that all is hardly yet lost and action can be taken. Right now, "We're so full of what-if's, we can't do any planning," Dr. Ross said. "Also, we don't know what health care reform will look like—the Clinton or [some other] plan, whether there will be specialist allocation. But the general mood is anti-technology, thus we're in danger." Perhaps the best way to know what action to take is to understand how nuclear medicine is perceived within the entire medical context. As Dr. Ross asked, "Why should a hospital subsidize a nuclear medicine residency? Someone taking [direct] care of the patient... is the obvious revenue generator. It's not so obvious for nuclear medicine." As human nature regretably often lets important decisions be made more by image than reality, this perceptual problem is a force to be reckoned with. "As we talk about decreases in workforces... we can demonstrate how important nuclear medicine is in health care outcome," Dr. Ross said. "We aren't playing up publicly what we have to offer."

As health care reform debates intensify, one important tool in showing what nuclear medicine offers the medical community will be the Manpower Survey for 1995-1996. James C. Clouse, DO, chairman of SNM's Manpower Committee and chairman of the nuclear medicine department, Golden Valley Hospital (North Clinton, MO), noted that his group is currently gathering data and statistics on nuclear medicine to help support training in nuclear medicine. The last survey came out in November 1992, "But at that time, none of this [reform discussion] was in the forefront.... In our new survey, we'd like to establish the need for the specialty of nuclear medicine and for residency programs and increased number of slots to continue to provide quality care in nuclear medicine."

Definitions and Qualifications

Quality care is the buzzword for all parties in the health care reform debate—whether those parties emphasize universal care or choice—and the nightmare for nuclear medicine practitioners is that if their field gets swallowed by another, highly professional care will also be devoured. "The concern is not that nuclear medicine will disappear—because it's too important," said Dr. Reba, "but that there will be those not qualified doing the tests." Dr. Reba pointed out that one of the best ways to counteract this possibility is to ask, "What's the definition of nuclear medicine? who's qualified? what training and education are involved? That's how we can influence: by defining what it is to be a nuclear medicine physician."

Nuclear medicine physicians have been fighting the battle of asserting and defining their identity on many fronts. In a recent exemplary case, Dr. Reba and ACNP President Conrad E. Nagle sent a letter on December 29, 1993, to NRC Chairman Ivan Selin concerning the agency's minimum requirements for allowing physicians to use unsealed sources of byproduct material for ther-

apy. The letter described the greatest problem arising from such requirements revolved around the use of strontium-89 chloride, used for severe pain from widespread bone metastases of cancer. Because the isotope is so potent and long-lived, the letter states, only physicians who understand basic radiation science and low-level radioactive waste disposal should administer this drug; otherwise, mistakes, not hard to make, could threaten the patient and the public. The NRC's requirement guidelines allow training courses that take as little as nine days—while the board examination in nuclear medicine calls for two years residency. The NRC's guidelines thus interfere with the general definition of what it means to be a nuclear medicine physician.

Dr. Reba told *Newsline* that one way of defining a nuclear medicine physician is by describing what a nuclear medicine physician does—which is where the Manpower Survey comes in useful again. The answer incorporates, for example, "how many studies are done and how long it takes to complete a study from the beginning—from meeting with the patient, performing the study, analyzing the study, talking to the physician, and issuing a report," he said. With such numbers in hand, "It's simple arithmetic to determine how many physicians it takes to perform nuclear medicine studies." Hard numbers like these might be the first step in convincing the powers that be just what the future workforce in the field will need.

Lantz Miller

News Analysis

NOT NUCLEAR MEDICINE: THE GOVERNMENT'S RADIOBIOLOGICAL AND OTHER EXPERIMENTS

News media have new heyday with old hat; scientific questions glossed over

IN A REVERSAL FROM EARLIER departmental policy, Energy Secretary Hazel O'Leary announced in December that the DOE would investigate the propriety and legality of a random set of scientific studies from the 1940's to the 1970's united only because the agency or its predecessor partly sponsored them and they dealt with radiation. Although the public and media reacted with shock, as if the experiments had been top secret files just now opened, the studies had long been publicly accessible; the new elements this time were the DOE's new attitudes and the revelation of subject names. What may concern nuclear medicine practitioners is how this research—lit in a harsh light—has been haphazardly lumped into their field.

Media outcry about such experiments dates at least to 1974, when *Mother Jones* magazine brought to light a series of studies at Oak Ridge National Laboratory that tested whole-body radiation as therapy for leukemia, resulting, the article complained, in no benefit to the subjects. In 1984, Richard Ottinger, chairman of the House Subcommittee on Energy Conservation and Power, requested information from the DOE on human radiation-test subjects in projects funded by the department and its predecessors. With this information, Ottinger's successor on the committee, Edward Markey, devised a report, "American Nuclear Guinea Pigs: Three Decades of Radiation Experimentation on U.S. Citizens." The DOE responded in 1987 with a letter countering Markey's alarmism and concern for harmful effects and concluding there was no need for compensating or following-up the subjects.

Nuclear War, Nuclear Medicine

Now in what some observers see as a shift in attitudes between the Reagan-Bush and Clinton administrations, Sec. O'Leary has said there is a need to consider follow-up and compensation. But such a strategic shift may also be partly a privilege of the "post-Cold War" era. Perceiving a lessened nuclear threat after the Soviet Union's demise, many members of the federal government, like O'Leary and President Clinton himself, are promoting the image of greater openness with the pub-