



SCANNER

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ACNP Annual Meeting Jan. 15–19 at Hilton San Diego Resort

In addition to the excellent educational meeting, be sure to attend the following events:

- ACNP's reception
Saturday, Jan. 15, 5–7 pm
- Residents' meeting
Monday, Jan. 17, 3–5 pm
- ACNP's gala
Tuesday, Jan. 18, 7–10 pm

Congratulations to ACNP's Residents Organization Officers

- President**
Henry Kim, M.D.
- Vice President**
Ghassan El-Haddad, M.D.
- Secretary**
Daniel Sigg, M.D., Ph.D.

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President's Message: Focus of ACNP Annual Meeting: CT, Clinical and Economic Aspects of PET, PET/CT

Thanks to the efforts of Program Committee members (Drs. Lale Kostakoglu, Simin Dadparvar and Hossein Jadvar) and several others, the 2005 annual meeting in San Diego looks to be a great success from both academic and practical standpoints.

I would like to focus your attention on only a few of the varied aspects of the program. The presentations for the meeting start off on Sunday with a minicourse in CT. This is an area of critical interest and more than a little concern for many nuclear medicine physicians. Many of us who are not radiologists have seen an erosion of our involvement with PET/CT imaging because of real or perceived deficiencies in our ability to interpret CT images independent of the PET data. This trend is expanding, and the upgrading of the CT component machinery and the more recent investigations of the use of contrast and other standard CT techniques will doubtless drive this further and faster. For those of us who do not wish to give up on our participation in this clinically important modality and who do not want to relegate ourselves to the "PET only" facilities and studies, obtaining more training and ultimately certification in CT is an important and immediate task. Since no one entity is likely to provide all of the required training in one cohesive program in the near future, we must piece together our training from various sources such as SNM, ACR, RSNA and others. The upcoming ACNP contribution to your overall education in this area makes a firm statement that we wish to be involved in the solution to this problem for all of those imaging professionals who are not already expert in CT. The committee has enlisted the support of an excellent group of speakers, and although I have already attended several PET/CT presentations in different forums and will certainly attend others in the relatively near future, I am very much looking forward to the ACNP course.

In addition to the CT portion of the meeting, additional speakers will address the clinical and economic aspects of PET and PET/CT, a part of the program that will be beneficial to all physicians in the field, regardless of prior training. The clinical component of the meeting will continue with a session on non-PET topics. All of us are aware of the immediate impact that the release of the initial PIOPED study had on lung scanning. This impact was due in part to the fact that the project was not controlled by imaging people but had buy-in from the medicine specialties as well. Once published, the current PIOPED II project will clearly have a similar impact. We are fortunate to have Dr. Gottschalk to review the new study with us.

Dr. Dadparvar has developed a resident program that includes both research presentations by the residents and presentations to the residents by leaders in our field. All of this is to help promote the strength of nuclear medicine by better preparing our current residents for the world of practice, whether it is in an academic or a private setting.

On other fronts, ACNP still hopes to provide useful information to its members and colleagues in the field via a salary survey of nuclear medicine professionals. In reviewing other available sources of this information, we have found them to be lacking in many



Warren H. Moore, M.D., FACNP
ACNP President

ACNP/Cardinal Health: PET Referrals—Critical Factors Study

A key element of the ACNP mission is to promote the continuing competence and socioeconomic awareness of practitioners of nuclear medicine. To achieve this mission, the ACNP must consistently assess market trends, identify educational needs of the community and work to develop programs to meet those needs.

One year ago the board of ACNP did an informal assessment of the current needs of nuclear medicine. A key area that stood out at that time was that most PET imaging centers were not operating at a financially viable patient volume level. This fact was validated with Cardinal Health, a leading provider of PET radiopharmaceuticals, which demonstrated that on average, clinical users of FDG perform 1.3 scans per day, well below financial break-even points in most centers. Clearly, this represented a risk to the growth of the field and deserved some action.

The result was an ACNP survey delivered to PET imaging centers and their referring physicians through Cardinal Health PET Services. The goal was to better understand referral patterns and, **in the minds of referring physicians**, determine which factors most encouraged the use of PET and which factors discouraged the use of PET. Highlights from the results of that survey follow.

The Good News

- Medical oncologists and general practitioners were the key referring groups (we're reaching the right people).
- Referring physicians consider accurate staging the most important factor in referring for PET (they are getting the right messages).

Where Work Still Remains

- Between 26% and 56% of all referrals come from a single referring physician (this represents high risk to the imaging center if that referrer is lost).
- While 48% of referrers say clarity of the report is very important, 22% list the lack of a definitive report as a key deterrent to ordering repeat scans. (We must improve report quality.)
- Lack of confidence in the particular type of PET technology offered by an imaging center and lack of confidence in the image quality produced were the top two deterrents to ordering a PET scan. (Competition between centers may be discrediting the technology inappropriately.)
- Sixty-four percent of referring physicians consider the fact that PET confirms conventional imaging results to be very important (simply telling them they were right—there's no new information or clinical value in this positioning of PET).

The bottom-line take-away from the survey was that there is still much education needed both in nuclear medicine and in referring communities in order to increase the appropriate utilization of PET, increase diversity of the referral base of PET providers, clarify the unique clinical value of PET and improve the quality of services provided (e.g., report writing).

These survey results will be used to help guide the prioritization of ACNP activities going forward in order to continue to pursue excellence and the socioeconomic health of nuclear medicine.

*Susan L. Wallace, Ph.D.
Executive Director, Marketing and Strategic Relations
Cardinal Health PET Services*

Medicare Coverage Update for FDG-PET in CNS Disorder and for Refractory Seizures

Medicare will cover FDG-PET for presurgical evaluation for the purpose of localization of a focus of refractory seizure activity.

Limitations: Covered only for presurgical evaluation

Documentation that these conditions are met should be maintained by the referring physician in the beneficiary's medical record, as is normal business practice.

Coverage of FDG-PET for Dementia and Neurodegenerative Diseases

Medicare covers one FDG-PET scan per beneficiary lifetime for either the differential diagnosis of frontotemporal dementia and Alzheimer's disease under specific requirements or a Centers for Medicare and Medicaid Services (CMS)-approved practical clinical trial focused on the utility of FDG-PET in the diagnosis or treatment of dementing neurodegenerative diseases. Specific requirements for each indication are clarified below.

Nationally Covered Indications

1. FDG-PET requirements for coverage in the differential diagnosis of AD and FTD

An FDG-PET scan is considered reasonable and necessary in

patients with a recent diagnosis of dementia and documented cognitive decline of at least six months and who meet diagnostic criteria for both AD and FTD. These patients have been evaluated for specific alternate neurodegenerative diseases or other causative factors, but the cause of the clinical symptoms remains uncertain.

The following additional conditions must be met before an FDG-PET scan will be covered.

- The patient's onset, clinical presentation or course of cognitive impairment is aberrant for AD and FTD is suspected as an alternative neurodegenerative cause of the cognitive decline.

- The patient has had a comprehensive clinical evaluation (as defined by the American Academy of Neurology) encompassing a medical history from the patient and a well-acquainted informant (including assessment of activities of daily living), physical and mental status examination aided by cognitive scales or neuropsychological testing, laboratory tests and structural imaging such as magnetic resonance imaging or computed tomography.

- The evaluation of the patient has been conducted by a physician experienced in the diagnosis and assessment of dementia.

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Profile in Nuclear Medicine: M. Donald Blaufox, M.D., Ph.D., FACNP

The contributions made by Don Blaufox to nuclear medicine are considerable; it will be a definite challenge to adequately summarize them in this brief presentation. For the past four decades, he has remained one of the world's authorities in the application of radionuclide methodology to the study of renal physiology and disease.

Following his graduation from New York's Downstate Medical Center, Don spent four years at the Mayo Clinic completing a medical residency and a doctoral degree in medicine. His thesis dealt with the study of renal disease and experimental hypertension. This was followed by a two-year research fellowship at Harvard under the tutelage of Dr. John Merrill. It was at the Brigham that he developed an interest in many of the radionuclide renal tracer and clearance techniques that he subsequently refined and utilized in clinical practice.

Don returned to New York in 1966, assuming the position of director of nuclear medicine at the Albert Einstein College of Medicine. It was at this point that Don and I met and started our long collaborative relationship that, among many other things, resulted in the introduction of Seminars in Nuclear Medicine in 1970. The department of nuclear medicine was established at Montefiore Medical Center in 1976 and at Einstein in 1982. Don has served as its unified chairman since its inception. Most of his research work over the years has focused on hypertension and renal disease, for which he has been the recipient of many governmental, foundation and commercial grants. More recently, he has spent considerable time and energy establishing the PET centers at Einstein and Montefiore, both investigating and promoting the technology with lecture appearances both nationally and internationally.

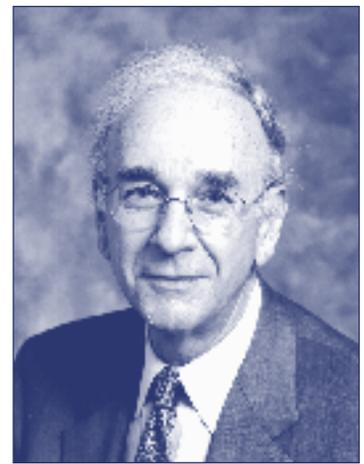
The nonscientific contributions that Don Blaufox has made to—and the accolades that he has received from—the nuclear medicine profession have also been enormous. To highlight only a few: he was chairman of the American Board of Nuclear Medicine, first chairman of the New York Academy of Medicine's Section of Nuclear Medicine and chairman of the Society of Nuclear Medicine's committees on publications, education and training and its Academic Council. As an excellent spokesman for our profession, he has delivered many named lectures. Among his many impressive awards are the Albert Lasker Public Health Service Award for his work on hypertension, the Berson-Yalow Award of SNM's Greater New York

Chapter (first recipient) and the lifetime achievement award of the International Society of Radionuclides in Nephrourology.

Apart from his exemplary medical career, Don Blaufox has a number of other consuming interests. Those of you who have had the opportunity to dine with him know that he is a consummate oenophile. His primary hobby has always been an enormous interest in the history of medicine, and he has just completed a 10-year tenure as chairman of the History of Medicine's Advisory Committee of the New York Academy of Medicine. He is the founder and continuing president of the Medical Collector's Association. He has collected and contributed many artifacts associated with the history of both medicine and nuclear medicine and is a lifetime member of the National Atomic Museum in Albuquerque, N.M. Two of his crowning achievements in the past few years are the publication of "A History on Blood Pressure Measurement" (with N.H. Naqvi) and "An Ear to the Chest: An Illustrated History of the Stethoscope." Both books have received worldwide acclaim in the medical community.

Don Blaufox's extraordinary accomplishments have always received wonderful support from Paulette, his wife of 46 years, and his children, Laurie, Ellen and Andrew. Last, but certainly not least, is the great pleasure that he derives from his five grandchildren.

Clearly, M. Donald Blaufox, M.D., Ph.D., has been a major contributor to the development of nuclear medicine and has played a very significant role in its emergence as a distinct and clinically useful medical discipline. We are all thankful to him for the significant contributions that he has made in achieving this.



M. Donald Blaufox, M.D., Ph.D., FACNP

Leonard M. Freeman, M.D., FACNP

President's Message: Focus on ACNP Annual Meeting

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categories of data pertinent to nuclear medicine physicians. Specifically, the existing surveys generally do not adequately address the proportion of professional time spent in nuclear medicine activities and thus do not necessarily provide an accurate RVU comparison with our colleagues. Full-time nukes are frequently lumped with part-time nukes, and even when these are separated, the degree of "part" varies in such a way that comparisons of compensation are not realistic. Stay tuned for more information on this project.

Best wishes to all, and I hope to see you in San Diego in January.

Warren H. Moore, M.D., FACNP

Announcements

Annual Program for Residents and Fellows

A “Residents as Future Leaders” session, examining how residents and fellows can get published (Abass Alavi, M.D.) and exploring mentoring in the United States (Simin Dadparvar, M.D.), will be held at the ACNP Annual Meeting. As part of the ACNP Residents Organization mentorship program, trainees will also be matched with mentors who are attending physicians.

The ACNP Residents Organization has a listserv at http://groups.yahoo.com/group/acnp_ro that is used primarily for the officers to send occasional e-mail notices to the Residents Organization membership. Members are invited to join in order to receive e-mails and to view prior messages.

Mentors Needed

ACNP needs junior and senior nuclear medicine physicians who are willing to serve as mentors for nuclear medicine trainees. Please sign up at <http://www.acnponline.org>. Click on Residents as Future Leaders on the right-hand side of the Web page.

Medicare Coverage Update

(Continued from page 2)

■ The evaluation of the patient did not clearly determine a specific neurodegenerative disease or other cause for the clinical symptoms, and information available through FDG-PET is reasonably expected to help clarify the diagnosis and/or help guide future treatment.

■ The FDG-PET scan is performed in a facility that has all the accreditation necessary to operate nuclear medicine equipment. The reading of the scan should be done by an expert in nuclear medicine, radiology, neurology or psychiatry with experience interpreting such scans in the presence of dementia.

■ A brain single photon emission computed tomography or FDG-PET scan has not been obtained for the same indication.

■ The referring and billing provider(s) have documented the appropriate evaluation of the Medicare beneficiary. Providers should establish the medical necessity of an FDG-PET scan by ensuring that the following information has been collected and is maintained in the beneficiary medical record: date of onset of symptoms; diagnosis of clinical syndrome (normal aging; mild cognitive impairment or MCI; mild, moderate or severe dementia; minimal status exam or similar test score); presumptive cause (possible, probable, uncertain AD); any neuropsychological testing performed; results of structural imaging (MRI, CT); relevant laboratory tests (B12, thyroid hormone); and number and name of prescribed medications.

■ The billing provider must furnish a copy of the FDG-PET scan result for use by CMS and its contractors in Medicare quality assessment and improvement on CMS request. These verification requirements are consistent with federal requirements set forth in 42 Code of Federal Regulations section 410.32 (generally for diagnostic X-ray tests, diagnostic laboratory tests and other tests). In summary, section 410.32 requires the billing physician and the referring physician to maintain information in the medical record of each patient to demonstrate medical necessity [410.32(d) (2)] and submit the information demonstrating medical necessity to CMS and/or its agents upon

request [410.32(d)(3)(I)] (OMB number 0938-0685).

■ Note: This policy will undergo inspector general audit.

2. FDG-PET requirements for coverage in the context of a CMS-approved practical clinical trial utilizing a specific protocol to demonstrate the utility of FDG-PET in the prevention, diagnosis and treatment of neurodegenerative dementing diseases

An FDG-PET scan is considered reasonable and necessary in patients with mild cognitive impairment or early dementia (in clinical circumstances other than those specified in subparagraph 1) only in the context of an approved clinical trial that contains patient safeguards and protections to ensure proper administration, use and evaluation of the FDG-PET scan.

The clinical trial must compare patients who do and do not receive an FDG-PET scan and have as its goal to monitor, evaluate and improve clinical outcomes. In addition, it must meet the following basic criteria:

- written protocol on file;
- institutional review board review and approval;
- scientific review and approval by two or more qualified individuals who are not part of the research team; and
- certification that investigators have not been disqualified.

Nationally Non-covered Indications

All other uses of FDG-PET for patients with a presumptive diagnosis of dementia-causing neurodegenerative disease (e.g., possible or probable AD, clinically typical FTD, dementia of Lewy bodies or Creutzfeldt-Jacob disease) for which CMS has not specifically indicated coverage continue to be noncovered. Specifically, the differential diagnosis of AD from neurodegenerative diseases other than FTD remains a non-covered indication.

*Centers for Medicare & Medicare Services
(<http://www.cms.hhs.gov>)*