

# Letters to the Editor

## ACQUISITION OF CAMERA FLOOD IMAGES UNDER CLINICAL CONDITIONS

It has been reported (1) that to ascertain adequately the characteristics of the NaI (Tl) crystal of a scintillation camera, flood field images should contain 1,000 K to 2,000 K counts. Tests of crystal uniformity and spatial resolution obtained in this manner, in conjunction with commercially available phantoms, produce scintigraphs in which possible defects in uniformity and excellent spatial resolution are often noted. However, I question the value of routine acquisition of 1,000 K to 2,000 K counts for flood field uniformity and spatial resolution checks. I believe that any quality control analysis of scintillation camera performance, as determined through the use of photographic film, should be imaged under conditions representative of clinical imaging. This means that count acquisition of quality control films should closely correspond to that obtained during patient imaging.

The objective of routine scintillation camera quality control films should not be to determine maximum system resolution or to produce an aesthetically acceptable quality control film—but to determine system performance under operating conditions encountered during patient imaging. In this way, the uniformity and maximum achievable spatial resolution that is to be expected during clinical operation can be determined.

It is not only in the routine quality control program that one should be interested in clinical count acquisition. The prospective purchaser of new scintillation camera equipment should also be wary of the effects of increased spatial resolution and improved uniformity with increasing count acquisition. When viewing scintigraphs of phantom studies presented during a sales presentation, it is wise to determine the imaging technique used to obtain these films. If these sales films were obtained under a clinically unrealistic situation, a prospective purchaser should ask to visit an existing facility to ascertain the actual capabilities of the system by viewing patient studies.

I want to stress the importance of this spatial resolution-count acquisition phenomenon. Simply by increasing accumulated counts, spatial resolution will be increased up to the system's maximum capabilities. Thus, one should not expect the same resolution measured with a 2,000 K-count bar phantom as with a 500 K-count brain scan. Therefore, to determine resolving capabilities of any Anger camera system, phantoms should be obtained using a count acquisition that closely patterns each diagnostic procedure currently performed in your nuclear medicine department.

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## Reference

1. Rollo FD: Quality assurance in nuclear medicine. In *Nuclear Medicine Physics, Instrumentation and Agents*, Rollo FD, ed. St. Louis, CV Mosby Co., 1977, pp 322-360

## ON ANONYMITY IN NMT

I would like to comment on a letter published recently (June 1979) in the *JNMT* entitled "The Nuclear Medicine Technologist and the Commercial Radiopharmacy."

First, may I call your attention to the December 1978 issue of "Isotopics," my chapter's (Mideastern) newsletter, in which Larry Camper wrote a letter from the president concerning this issue: "any communication made public should be subject to criticism and editorial review. This becomes difficult when an author chooses to be anonymous. Regardless of the controversy involved, an author's purpose would seem better served by associating his name with this publications."

I was shocked upon reading the June issue of the *JNMT* to find this anonymous letter published in a national medium! I wholeheartedly agree with Mr. Camper on this matter. I have complete faith in my fellow colleagues' ability to address any controversial issue with the highest degree of professionalism and can count on them to affix their names to a publicly released opinion.

I would hope that you will not see fit to publish any more anonymous viewpoints.

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## REPLY

Ms. Clay provides me with a unique opportunity to share my feelings on the letter in question. It was a difficult decision to publish a letter anonymously for all the reasons that Mr. Camper mentions. However, the content cannot be considered invalid merely because of the absence of a signature.

The subject matter merited the attention of the readership. In my experience, few technologists are aware of the potential aspects, both positive and negative, of commercial radiopharmacies. To my knowledge they had never been discussed in print, so the arrival of the letter was motivation to risk criticism and publicize the controversy in the best interest of the group. One of my personal goals as Editor of the *JNMT* is to make sure that technologists are aware of the state-of-the-art—scientifically and professionally. By professionally, I mean how the

practice of our profession will be impacted upon by outside forces.

In addition, I am not as sure of my colleagues' ability to address any controversial issue with complete candor as Ms. Clay is. Suppose, for example, a hospital administrator had made the decision to patronize a commercial radiopharmacy in spite of objections by the nuclear medicine staff. The disconcerted technologist might have found his job in jeopardy had he signed a critical letter for publication. If he felt an obligation to his fellows by describing his plight, he might have decided that an unsigned letter was the only recourse.

In my judgement, then and now, publication of the letter may have inspired some constructive thought. My ignoring it would have inspired nothing. That is not to say that the Journal publishes every anonymous letter it receives; rather, extenuating circumstances may sometimes require publishing a letter without identifying the author.

PATRICIA WEIGAND  
Editor  
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#### QUESTIONS RE: NMTCB

In reference to the June 1979 *JNMT* article by Mark Muilenburg, concerning the certification process, I raise the following questions.

- 1) What about those technologists who had certificates granted after September 15, 1978?
- 2) Why that cut-off date?
- 3) Why not wait until ARRT is finished with their certification process in nuclear medicine?
- 4) What happens to those who are registered by the ARRT but not the NMTCB in future years?

I fully support the break with the radiologic technology registry, but I feel you are penalizing people who have taken that registry. When I participated in the NMTCB exam, I found that the test was being held over 300 miles away in Chicago; this entailed an overnight stay to be in good shape to participate after the journey, and cost \$10 more than the ARRT exam, which was given in my home town, Indianapolis.

5) Is there any wonder that some people chose to take the ARRT nuclear medicine registry exam?

6) If quality of the radiologic registry in nuclear medicine is in question, why allow any recognition of previous certification at all?

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#### REPLY

I am writing in response to Mr. Burris's letter. The answers will reference the questions by number.

Questions 1 and 4 are similar and answered at the same time. Recognition of previous certification was extended

to Dec. 31, 1978. Since it was difficult to know if applicants certified in 1978 received certification before or after Sept. 15, 1978, the deadline was extended. Certificates issued after Dec. 31, 1978 by other boards will not be accepted for recognition of previous certification by the NMTCB. In the future, those certified by the ARRT who took the ARRT after the NMTCB started certifying and those who were eligible for recognition of previous certification and did not apply will be required to take the NMTCB exam if they desire NMTCB certification. Technologists certified before Sept. 15, 1978, are eligible to apply for recognition of previous certification by September 1980. This will become increasingly important since NMTCB certification is recognized as the national standard for competence in nuclear medicine technology by the SNM and ACNP.

Question 2 addresses the cut-off date for recognition of previous certification. If a test candidate chose not to take the NMTCB when that choice was available, then recognition without NMTCB examination at a later date is certainly not logical. The cut-off date coincided with the first NMTCB examination date.

In response to question 3, I will not speculate on if and when the ARRT might cease their certification efforts in nuclear medicine technology.

Number 5 is a rhetorical question and is more of a statement than a question for which it is difficult to answer. If a technologist practicing nuclear medicine technology wants to be known as a radiologic technologist and a subspecialist in radiologic technology instead of a certified nuclear medicine technologist (CNMT) practicing the profession of nuclear medicine technology, then the answer to 5 might be no.

Question 6 goes back to the issue of recognition of previous certification again. Until the NMTCB gave its first examination, the only examination available was that of ARRT and ASCP. Comments regarding those examinations addressed concerns such as: out-of-date questions; testing basic knowledge and not clinical application; lack of input on the examinations and governing policies from the profession of nuclear medicine technology; and the necessity of professional identity as nuclear medicine technologists and not radiologic or medical technologists. Recognition of previous certification was allowed because the NMTCB felt it could not penalize technologists wanting NMTCB recognition who were previously certified when the choice of the NMTCB was not available. The other, not too popular, alternative would have been to require examination as the only route to recognition by the NMTCB. The NMTCB, through developmental and governing policies, is offering a competency-based examination developed by and for the profession of nuclear medicine technology.

Hopefully, these statements satisfy the concerns expressed regarding some NMTCB policies.

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