Message from the Chair

Ruth Lim, MD – Chair, American Board of Nuclear Medicine

Dear ABNM Diplomates:

As we mark the one-year anniversary of our “new normal” during the COVID-19 pandemic, I hope that you and your loved ones are staying safe and healthy. Let’s all take a moment to acknowledge and grant extra compassion for having pushed through our fatigue to meet the challenges of each new day. Without doubt, you are all doing your best to fulfil many roles and responsibilities, and for this you should be unreservedly commended.

The work of the Board continues uninterrupted, although in a very different manner than in pre-pandemic times. The 103rd and 104th Board Meetings were conducted remotely, enabling us to keep up with important tasks such as administering examinations, delivering CertLink content, credentialing, and addressing disruptions to these areas caused by the pandemic. For diplomates and trainees who have been unduly affected by COVID-19, we encourage you to contact the ABNM office as needed and refer to our COVID Policy Modification at https://www.abnm.org/index.php/covid-19.

Of equal importance, we are also in the midst of a historic shift in our social fabric as we confront past and currents truths about race in the United States and around the world. The “ABNM Statement on Racism as a Public Health Crisis” addresses racism and violence against Blacks and other people of color. The public places its trust in us as physicians, and this statement affirms the Board’s commitment to promoting diversity and inclusion. While this is a starting point, there remains a lifetime of sustained effort ahead.

I am pleased to share that the Board will be continuing its open nomination process for selection of new members. The ABNM aims for membership that reflects our diverse community of diplomates and Nuclear Medicine trainees. Despite our best efforts, we acknowledge that some minority groups, including Blacks, continue to be underrepresented and we certainly welcome applications and inquiries from all diplomates who may be interested. A formal call for applications will be sent in April, and we encourage both new and previous applicants to consider applying.

In other good news, the Board has made substantial progress on some important long-term projects. We are nearing our transition to a new database system for examination questions, after extensive vetting of several vendors. The new question banking platform is specific to organizations who design and deliver examinations. After on-boarding and training are completed, we anticipate a gradual improvement in the quality, efficiency, and reliability of exam-related operations. The new system will also enable the In-Training Examination (ITE) to be delivered electronically to trainees world-wide beginning in 2022. The Board is also in the process of re-vamping our Exam Blueprints so that they will better reflect current training and practice patterns. These changes will be based on survey data from current practitioners of nuclear medicine in private, community, and academic practice settings. The implementation date for the new Exam Blueprints has not yet been determined but expect to see more emphasis on the rapidly-expanding practice of radionuclide therapy, and a larger proportion of questions devoted to oncology and cardiac imaging.

The ABNM has recently updated its Radionuclide Therapy Requirements for initial certification to reflect the expanding use of Radionuclide Therapy/Theranostics in clinical practice. As I am sure many of you are experiencing, all aspects of Nuclear Medicine (Molecular Imaging, Radionuclide Therapy/Theranostics, Hybrid Imaging, etc.) are growing at an unprecedented rate. There have been some expressed concerns about whether the supply of Nuclear Medicine physicians will keep pace with this growth. The ABNM is confident in our community’s ability to create an ample supply of high-quality training opportunities and provide patients with safe, expert care. However, it is incumbent upon all of us in the near- and long-term future to attract the best and brightest trainees to our specialty. This effort begins on a micro-scale: in your daily interactions with medical students, residents, and mentees; during lectures; while networking at conferences. With coordinated intention, we can ensure that patients continue to have access to innovative diagnostic and therapeutic nuclear medicine techniques developed by our community.

In closing, I would like to extend heartfelt thanks to Past Chair, Dr. Jonathan McConathy, for his year of exemplary leadership that enabled us to thrive despite the challenging circumstances. No less deserving of thanks is the ABNM Office Staff (Maria Watts, Patrick Murphy, Monica Frye), who have pivoted repeatedly on a moment’s notice with the highest level of professionalism and patience. It is my honor to work with this dedicated Board, including our Executive Director, Associate Executive Director, and panel of volunteer Officers and Directors. We will continue our socially-distanced work toward growth and recovery, as we look forward to a time when we may safely connect in person again.

Sincerely,

Ruth Lim, M.D.
Chair
The ABNM fiscal year is January 1 through December 31. A full audit is conducted every two years by a certified public accounting firm, UHY. The firm conducts a less extensive financial review in alternate years. In 2020, UHY reviewed ABNM’s financial statements for the year ending December 31, 2019. The report dated September 23, 2020, noted total assets of $3,910,348 with an increase of $547,610 compared to the prior year. The report also noted that ABNM financial statements conformed to generally accepted accounting principles, and that no material modifications were required.

The United States Income Tax Return, Form 990, filed by all non-profit organizations, is publicly available. There are many websites that provide free access to the tax returns, including the returns filed by the ABNM. One such website is [http://foundationcenter.org/find-funding/990-finder](http://foundationcenter.org/find-funding/990-finder).

The ABNM started 2020 with a budget of $762,688 in operating (non-investment) income. At the end of the year, the estimated operating income was $973,503. Income was above budget mostly due to a larger than expected number of physicians paying MOC fees for prior years.

The ABNM started 2020 with a budget of $863,594 in operating expense, which was $48,908 higher than the amount budgeted for the previous year mostly due inflation. At the end of the year, the estimated operating expense was $835,116, mostly due to the impact of COVID-19 on business related travel.

The ABNM ended 2020 with a net operating income of $239,253, versus $64,155 for the prior year.

A breakdown of the major income and expense categories for 2020 is shown in the following diagrams.

The largest percentage of income (75%) was derived from Maintenance of Certification (MOC) annual fees. Annual fees were $150 when they were instituted in 2007. They were increased to $175 in 2010. The fees were increased to $400 in 2012 to reduce the additional registration fees paid by diplomates for the MOC examination. The MOC examination fee will be phased out completely in 2021. Diplomates participating in CertLink®, a longitudinal learning and self-assessment program launched in 2018 as an alternative to the MOC exam, also will not pay any additional fees going forward.

Annual MOC dues were increased to $500 in 2019 after 6 years without an increase, but inflation made it impossible to maintain a balanced operating budget without a dues increase despite reducing the number of staff in the ABNM office from 4 to 3 full-time employees, as well as reducing travel and meeting expenses.

The largest expense was salary for five employees (3.5 FTE), including the Executive Director (0.25 FTE), Associate Executive Director (0.25 FTE), Administrator, MOC and Examinations Program Manager, and Diplomate Relations.
The ABNM had $3.26 million in an investment portfolio on December 31, 2020, which is managed by Wells Fargo Advisors. The investment portfolio is the ABNM’s reserve fund for unexpected financial difficulties, as well as major new initiatives. The value of the portfolio increased 12.8% during 2020.

One major new initiative this year is updating the examinations database. The ABNM has signed a contract with Internet Testing Systems to provide a new system for authoring, storing, and delivering questions for ABNM examinations. The new contract will make it possible to administer the In-Training Examination on-line in January 2022 for the first time.
The American Board of Nuclear Medicine presented its CertLink® pilot data to the American Board of Medical Specialties (ABMS) Committee on Continuing Certification (3C) in November 2020. CertLink is a longitudinal assessment program introduced in 2018 that satisfies Part 3 of the ABNM Maintenance of Certification (MOC) program. 3C is the ABMS committee that oversees the MOC programs of ABMS Member Boards. The committee recommended making CertLink a permanent part of ABNM MOC. The ABMS Board of Directors approved the committee’s recommendation in February 2021.

Preliminary analysis of a psychometrically determined passing score indicates that 96-99% of ABNM diplomates participating in CertLink from 2018-2020 had a passing score, which is similar to the percentage of diplomates with a passing score on the MOC exam during the same period of time. Diplomate feedback on CertLink has been very positive, with 99% agreeing it is a valuable learning experience, and 88% likely to recommend it to a colleague.

We hope that more ABNM diplomates will see the value of CertLink as an educational self-assessment tool, and convenient way to satisfy MOC Part 3. We also hope that more lifetime certificate holders will see the value of CertLink and begin to participate.

Leonie Gordon
Associate Executive Director
Our first and foremost purpose as ABNM communications committee is to serve our diplomates by conveying effective and timely updates related to our specialty and certification/maintenance of certification processes. In addition to our quarterly Tracers issue, we enhance communication with our diplomates by a multitude of modes including mailings as well as utilization of various social media platforms. We are aware of the important role social media platforms have come to play in communications of organizations worldwide by providing concise yet relevant information in a timely manner, especially in the COVID-19 era and its aftermath. The ABNM is active on LinkedIn, Twitter, and Facebook with frequent updates and notifications for our diplomates on all matters that need swift attention as well as on those matters relevant to our discipline and training, such as our important notifications: "COVID-19: Impact on Nuclear Medicine Training Programs" and "ABNM Statement on Racism as a Public Health Crisis". Our biannual Tracers newsletter can also be easily accessed from our Twitter feed. We invite all ABNM diplomates to be followers and engage with our board actively on these platforms. This will not only enhance timely communication with our diplomates but will also enable us to more efficiently address any concerns or questions. We welcome all suggestions and ideas from our diplomates related to how we can better serve them by further improving our connection.
How I Became Interested in Nuclear Medicine

Joseph Osborne M.D., Ph.D. – Chief, Molecular Imaging and Therapeutics, Professor of Radiology, Director of the Molecular Imaging Innovations Inclusion lab (MI 4), NewYork-Presbyterian Hospital/Weill Cornell Medicine Center

After completing the MD/PhD program at Columbia, I realized that I needed to find a subspecialty that would accept a physician-scientist to do work that was quite visual but would also include a strong basic science and connection with the patient. I did my Radiology sub-internship at Sloan Kettering where I spent time with Steve Larson. It was there that I realized that Nuclear Medicine was a really good option for me because of this combination of science and medicine.

It was helpful that some of the stronger Nuclear Medicine programs were local to New York. At the time, the Radiology Chair at Columbia was Phil Alderson, a Nuclear Medicine physician. Dr. Alderson was willing to work out a research agreement with Dr. Larson, who at the time was the Nuclear Medicine Division Chief at Sloan Kettering. Many other former Columbia Radiology Residents had settled at Cornell with Robert Min, who was Radiology Chair at Cornell. Stanley Goldsmith was the Nuclear Medicine Division Chief at Cornell.

I decided on Nuclear Medicine while working on my PhD at Richard Axel’s lab at Columbia. More specifically, an experiment that required cloning green fluorescent protein (GFP) as a reporter gene in mice was consistent with similar experiments being done in the Nuclear Medicine labs at Sloan Kettering who were doing the same thing with GFP and the sodium-iodide symporter channel.

A key factor in the decision was ensuring positive clinical outcomes for patients. It was important that the practical application of medicine had a direct impact on patient lives and within the community. It was important to have a work-research balance that allowed me to be a Radiologist while utilizing my scientific background to challenge issues impacting the community. This led me to Nuclear Medicine as a subspecialty, and a focus on Prostate Cancer disparities.

Nuclear Medicine was experiencing an evolution of sorts at the time that included wider acceptance within the medical community, favorable reimbursement, improved technology and wider range of applications that would impact patient care directly. As a subspecialty, Nuclear Medicine was the optimal choice for me.

It’s important that Nuclear Medicine Physician leaders teach students into making choices that reflect what drives them both professionally and personally. Equally important is to challenge students to develop an inclusive mindset and engage the communities they serve. Focus on health equity and improving access to underserved communities should be standard in any substantive program.

My students at Cornell are interested in tackling the clinical questions that are pervasive in a diverse society. The growth in PET and Theranostics provide students with flexibility, and the unique opportunity to act as gatekeepers to positive clinical outcomes. Improving access to the Nuclear Medicine profession will be what makes or breaks the future of the field.
As we are approaching ABNM's 50th anniversary, a new chapter opens for the Maintenance of Certification (MOC) program by introducing CertLink® 2.0.

The CertLink pilot “soft launch” phase started in Jan 2018 and successfully transitioned to “hard lunch” in April 2018. The initial cohort of 200 for the soft launch, increased to 534 diplomates in April 2018.

The CertLink pilot phase completed in January 2021 with 1054 diplomates’ participation. During the pilot phase there was ample amount of opportunities for feedback. The ABNM office launched multiple surveys at baseline, during the soft launch and at the end of each year. Additionally, participants were able to submit feedback or support tickets as they progressed in the assessments. The ABNM office also received feedback via phone, email and face-to-face during national meetings at the ABNM booth. ABNM received a very positive feedback from participating diplomates indicating their satisfaction with CertLink. Survey results demonstrated 99% of respondents believed that CertLink questions were useful learning tools, 89% found questions helpful to stay current in the specialty, and 88% would recommend CertLink to a colleague. Overall assessment of participants’ feedback indicated that the longitudinal assessment provided a highly preferred alternative to the secure examination. Additionally, psychometric analysis of performance score distribution in CertLink revealed a similar passing rate to the MOC exam pass rates. Furthermore, performance on CertLink was also positively correlated to the performance on the initial certification and MOC examinations.

The ABNM also started an introduction to longitudinal assessments for trainees by launching CertLink-In-Training, which started later in the pilot phase.

In 2021, ABNM along with other participating members of ABMS is moving to a new platform called CertLink 2.0. Although very similar in design and functionality to the CertLink 1.0, the new platform offers enhanced and improved capabilities.

With transition still ongoing, we are looking forward to working with all diplomates to enhance their MOC experience for years to come.
WHAT’S NEW IN CERTLINK® 2021
New Features and Updates

Logging in
FAQs, Support, and Readiness system check available on both the login page and in the platform, on the upper right menu. You are presented with any unread notifications upon logging in. These messages can be viewed at any time by going to the Messages icon on the upper right menu.

Dashboard
Updated cards on your dashboard separate your performance (the percentage of questions answered correctly) and your progress through the assessment (percentage of questions that have been answered).

Profile
You can now edit your email from your profile page. You can specify your time zone. On the last day of a segment, the end time of 11:59 pm EST will display according to your time zone.

Answering Questions
Improved user experience when answering questions:
• A button by every option and a new strike out icon make answer selection more intuitive.
• If an option is selected but you don’t submit your answer before the time runs out, the selected option will be automatically submitted as your answer.
• Highlighting is now automatic when you select text in the question.
Welcome to Our New Board Member

Meet the Newest Member of the ABNM

Maria Rosana Ponisio, MD – Assistant Professor of Radiology; Program Director, Nuclear Medicine Residency Program, Mallinckrodt Institute of Radiology at Washington University School of Medicine

Dr. Maria Rosana Ponisio is ABNM’s newest board member. She moved to the United States after spending many years as a pediatric radiologist in Argentina, where she received medical and specialty training. She is an Assistant Professor in the Division of Nuclear Medicine of the Mallinckrodt Institute of Radiology (MIR) at Washington University School of Medicine and became ABNM and ABR board certified after completing additional training in the United States. She moved to the United States after spending many years as a pediatric radiologist in Argentina, where she received medical and specialty training.

Outside of work, her passion is traveling to exciting and unique places, especially to Argentina’s Patagonia region, famous for its beautiful lakes and mountains. She enjoys doing flow yoga, especially in Forest Park in the summer and hiking in state parks around St. Louis. She is very excited to join the ABNM and use her expertise in pediatrics and neuroimaging.
THANK YOU TO ALL OUR DONORS

**Radium ($2000-above)**
Vaseem Chengazi, MD, PhD

**Fluorine ($1000-$1999)**
George Segall, MD

**Indium ($500-$999)**
J. Anthony Parker, MD

**Iodine ($200-$499)**
Scott Perlman, MD
David Mankoff, MD
Luvenia Bender, MD
Eva Dubovsky, MD
Sung Kim, MD
Yogesh Kumar Patel, MB BS

**Technetium (Up to $199)**
Maria Lindenberg, MD
Ellen Bahtiarian, MD
Paul Bauer, DO
Kevin Donohoe, MD
Sami Fakir, MD
Ahmed Gharib, MB BCh
Edwin Goldstein, MD
Bennett Greenspan, MD
Christine Yeoh Hauser, MD
David Hillier, MD, PhD
Carlos Jimenez, MD
Muhammad Khawar, MD
Nii Koney, MD, MBA
Tong Li, MD

Ruth Lim, MD
Ping Lu, MD
Veena Mathur, MD
Robert Matthews, MD
Eileen Jose Mercado-Yap, MD
Blaine Mischen, MD
Sudha Narasimhan, MB BCh
Cesar Santana, MD, PhD
Jamil Sarfraz, MD
Barry Shulkin, MD, MBA
David Tenenberg, MD
Bradley Trotter, MD
Thomas Vreeland, MD
Robert Wolek, MD

The ABNM appreciates all the Diplomates who support the ABNM by paying MOC fees and voluntary contributions every year. In addition, we would like to thank the above listed Diplomates for their generous support of the ABNM through a financial donation in 2020.
CONGRATULATIONS TO OUR NEW DIPLOMATES WHO RECENTLY PASSED THE ABNM INITIAL CERTIFICATION EXAMINATION OCTOBER 2020

Shadi Abdar Esfahani, MD MPH
Murad Mohammad Mahmoud Abusamra
Gensuke Akaike, MD
Thomas M. Anderson, MD, PhD
Sacha Baldeosingh, MD
Julio Cordero, MD
Joshua Marcus Eichhorn, MD, PhD
Mohamed Hassan Eloliby, MD
Naghmehossadat Eshghi MD
Susie Forbes, MD
Ashwani Gore, MD
Karen Guy Grajewski, MD
Artineh Hayrapetian, MD
Kevin Paul Horn, PhD, MD
Husein Husein, MD
Richard Houston Jenkins MD
Roxanna D. Juarez, MD
Vivek Kesari, MD
Omar Khan, MD
Brent James King, MD
Andrew Nicholas Kozlov, MD
Courtney Krug, MD
Yekaterina Kucerova, MD
James Loncy Leake, MD
Derek Lee, MD
Meredith Parks Lewis, MD
Umar Mahmood, MD, PhD
Seyed Ali Nabavizadeh MD
Ayesha Nasrullah, MD
Sheung Chee Thomas Ng, MD

Uzoezi Ozomaro, MD, PhD
Fauziya S Parkar, MD
Dhruv Patel, MD
Justin Gregory Peacock, MD, PhD
Stamatoula Pilati MD, MPH
Ravishankar Pillenahalli Maheshwarappa
Mikhael Polotsky, MD
Sarv Priya, MD
Kesav Raghavan, MD
Shakunthala Revannagowda, MD
Junsung Rho, MD
Joshua Leighton Ryan, MD
Vanessa Sanders, MD
Jennifer Schroeder, MD
Kai-Yin See, MD
Kalpana Shah, MD
Hardik Uresh Shah, MD
Einat Slonimsky, MD
Duncan Ewan Keith Sutherland, MD
Brittany Dru Varney, MD
Gaurav Vishwasrao Watane, MD
Gabriela Zagarodne Spilberg, MD
Cathy Zhou, MD
Diplomates Who Passed the 2020 MOC Examination

CONGRATULATIONS TO OUR DIPLOMATES WHO RECENTLY PASS THE ABNM MAINTENANCE OF CERTIFICATION EXAMINATION OCTOBER 2020.

Martin R. Blum, MD
Paco E. Bravo, MD
Stephen Lee Ferrante, MD
Do Hee Kim, MD
Oussama Nachar, MD, PhD
Alexandra Liza Seltzer, MD
Jabi Shriki, MD
Yana Studentsova, MD
Abdel Kader Tahari, MD, PhD
Chiarra Michelle Thompson, MD

Simon Trubek, MD
Xuexian Yan, MD
Babington Chun-kuen Yung, MD
Maria Rosana Ponisio, MD
Ahmed Fathala, MD
2020 CE & MOC Exam Pass/Fail Rates

CE
- Passed: 54
- Failed: 11
- Pass Rate: 83%

MOC
- Passed: 14
- Failed: 0
- Pass Rate: 100%
From 1972 to 2019 the American Board of Nuclear Medicine (ABNM) certified 5,862 diplomates, of whom 3,667 are not retired or deceased. Practicing diplomates certified since 1992 (53%) have time-limited certificates and must recertify every 10 years. Ninety percent of diplomates with time-limited certificates are currently participating in Maintenance of Certification (MOC). The ABNM requires that diplomates participating in MOC update their professional profiles every year. These data are confidential and are not shared with other individuals or organizations. The ABNM uses these data in various ways, the most important of which is in development of examination content reflecting the practice profiles of diplomates. Collection of data began in 2007.

The percentage of time reported by diplomates spent practicing nuclear medicine varies from 0 to 100%, with a mean of 58% from 2006 to 2020. In 2020, the mean percentage of time practicing nuclear medicine was 57%, with 30% of diplomates practicing nuclear medicine 91%–100% of the time and 17% practicing 0–10% (Fig. 1). The distribution of diplomates in academic and private practice is shown in Figure 2.

Nuclear medicine is primarily a hospital-based specialty. The numbers of diplomates practicing in an exclusively outpatient setting or practicing teleradiology are unknown. The types of studies typically being performed by diplomates are shown in Figure 3. The largest category is general nuclear medicine, which covers a wide range of studies and accounts for 37% of practice. These types of studies have decreased slightly from 38% in 2007 to 32% in 2020. No data are available on the percentage of studies based on physiology versus molecular imaging, although molecular imaging studies are likely increasing as a result of new radiopharmaceuticals. PET and PET/CT account for more than one-third of studies performed by diplomates, with the percentage of practice increasing from 25% in 2007 to 42% in 2020. The majority of these studies are for oncology, although the exact percentage is unknown. Cardiovascular nuclear medicine accounts for 21% of practice and has shown a slight decrease over time, from 25% of practice in 2007 to 17% in 2020. The reasons for the decrease are likely the result of competing modalities (such as CT angiography), as well as increasing utilization of appropriateness criteria that decrease the number of unnecessary studies across all modalities. The percentage of practice devoted to radionuclide therapy has remained relatively constant at 6%–7% each year since 2007, with 8% in 2020. It is anticipated that the number of therapies will increase in the future along with the growth of targeted radionuclide therapy, although some of the increase will likely be offset by fewer patients being treated with radioiodine for thyroid cancer.

The practice of nuclear medicine is evolving. PET/CT has had the biggest impact. It is anticipated that molecular imaging with SPECT/CT and PET/CT will continue to expand and that targeted radionuclide therapy will be an increasingly important part of practice. The ABNM plans to modify the data it collects to ensure that the information is current and accurate. Diplomates are encouraged to update their practice profiles annually.
The American Board of Nuclear Medicine (ABNM) recognizes the strains under which diplomates are currently practicing and wants them to prioritize their time to serve the immediate needs of their practice, their families, and themselves. We realize that many medical professionals and trainees are working tirelessly to treat and monitor those exposed to or diagnosed with coronavirus disease 2019 (COVID-19), and we recognize the associated enhanced health risks and potential for training disruptions. We have taken the actions outlined here after careful consideration of options available for our diplomates, candidates, staff, and the public.

The ABNM understands that physicians may not have time for nonurgent professional activities during the COVID-19 public health emergency and so extended the end of the first quarter of CertLink from March 31 to June 30, 2020, to give diplomates more time to answer the questions released in January 2020. Diplomates will not receive additional questions during this time (even those who have already completed their assignment), and no one will receive extra questions when new questions become available on July 1. The net effect will be a reduction in the total number of questions in 2020 by one-fourth. This action will have no impact on diplomates’ CertLink performance as shown on their dashboards.

The ABNM also recognizes that COVID-19 has affected trainees and training programs. The ABNM leave policy was modified to allow an additional 2 weeks of leave (10 working days) in 2020 for all COVID-19–related reasons, including home quarantine. We also understand that cancellation/deferral of nonurgent medical procedures will reduce the number of diagnostic nuclear medicine studies performed in adults and children and will also likely reduce the number of oral radioiodine therapies for hyperthyroidism when thyroid scans are deferred and/or patients are maintained on antithyroid medication. The impact of COVID-19 on radioiodine treatment for thyroid cancer and parenteral therapies for other cancers is likely to be somewhat less but may still be significant. Because it may be impossible for residents who complete training this year to obtain experience with the required number of studies, the ABNM has made a 1-time modification of the case experience requirements in 2020 for all COVID-19–related reasons. The changed requirements include:

- Cardiovascular stress test supervision (exercise or pharmacologic): 75 studies (normally 100 studies).
- Pediatric nuclear medicine: 75 studies (normally 100 studies).
- Radiotherapy with $^{131}$I: 20 cases (at least 10 benign plus 10 malignant, including 3 ≤ 33 mCi and 3 > 33 mCi) (normally 30 cases).
- Parenteral therapies requiring a written directive: 3 cases (normally 5 cases).

Candidates for the ABNM certification examination are also required to be certified in advanced cardiac life support (ACLS). The American Heart Association is allowing a 60-day extension of ACLS instructor cards beyond the renewal date and recommends that employers and regulatory bodies extend provider cards 60 days beyond renewal date. The ABNM is adopting this recommendation:

- ACLS certification: 60-day extension beyond renewal date of current provider cards.

If trainees do not meet these modified requirements, program directors will be required to provide the ABNM with an educational plan and request for exemption that will be considered on a case-by-case basis.

The ABNM is still planning to give the Certification and Maintenance of Certification Examination during the first week of October 2020, with applications accepted April 1 through May 31. We are monitoring the situation very closely and will make adjustments if necessary.

The ABNM office staff is working remotely, but diplomates, program directors, and the public should notice no difference and receive the same level of excellent service that we always try to provide.

The ABNM recognizes the importance of the broad community of nuclear medicine professionals and all the work they are doing during the COVID-19 pandemic. We appreciate the patience of our diplomates and trainees during this chaotic time. We will continue to thoughtfully evaluate the situation as it evolves and notify our diplomates of any changes.
The era of unsealed radionuclide therapy began in 1941 with the treatment of hyperthyroidism with sodium $^{131}$I. Radionuclide therapy has been an important part of nuclear medicine practice since the founding of the American Board of Nuclear Medicine (ABNM) in 1971 and currently accounts for an average of 8% of ABNM diplomate practice hours. The ABNM periodically reevaluates radionuclide therapy requirements for initial certification. There has been an evolution of practice since the requirements were last changed in 2014, resulting in fewer radioiodine therapies for benign and malignant thyroid disorders and more parenteral therapies. The ABNM is, therefore, proposing to change the requirements, as summarized in Table 1.

In August of this year, the ABNM asked nuclear medicine training program directors for feedback on the proposal and received responses from the directors of all 38 Accreditation Council for Graduate Medical Education–accredited programs. Fifty-three percent supported the proposal in its entirety, and another 34% supported the proposal with reservations. One reservation was the concern that radioiodine therapies accounted for the majority of therapies at some hospitals and that lowering the minimum number of required therapies would lower standards of competency. Another reservation addressed training with at least 2 different approved FDG radiopharmaceuticals, given the limited number of U.S. Food and Drug Administration (FDA)–approved parenteral therapies used in routine practice at this time.

Four directors (10%) did not support the proposal, citing challenges in providing training opportunities for parenteral therapy resulting from the cost of the agents, limited or noncoverage by medical insurance companies, limited number of FDA-approved radiopharmaceuticals actually used in practice, treatment being performed at dedicated cancer centers, and treatment being performed in radiation oncology rather than nuclear medicine departments.

Suggestions regarding radioiodine therapies included raising the proposed minimum number above 10 (5 for benign plus 5 for malignant thyroid conditions), but a recent SNMMI survey of nuclear medicine program directors indicated that several programs were unable to meet current requirements for a minimum number of 20 radioiodine therapies (10 for benign plus 10 for malignant thyroid conditions). Suggestions regarding parenteral therapies included giving credit for $^{90}$Y-microsphere ablation of liver tumors, but the Nuclear Regulatory Commission considers this treatment a form of manual brachytherapy, which is regulated under 10 CFR 35.1000, whereas other parenteral radiopharmaceuticals are considered to be drugs, regulated under 10 CFR 35.396. Another suggestion was to require 10 parenteral therapies with a minimum of 1 FDA-approved radiopharmaceutical (rather than 2) or not to change the requirements until the FDA approves more agents. A summary of the feedback received from nuclear medicine program directors, with ABNM responses, is available at http://ow.ly/WeDV30rgwv.

Based on the feedback, the ABNM has decided that candidates for initial certification in 2021 and 2022 can fulfill the requirements by using the current criteria in effect since 2014 or by using the new criteria. The ABNM will require all candidates to submit a training record that includes dates of treatments, names of treating facilities, radiopharmaceuticals, and administered doses. Based on this information and the state of practice in 2022, the ABNM will reevaluate requirements for radionuclide therapy. The ABNM believes that the new criteria will improve resident training, give nuclear medicine program directors more flexibility in meeting ABNM requirements, and maintain high standards for the specialty.

<table>
<thead>
<tr>
<th>Therapy</th>
<th>Current</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>$^{131}$I ≤ 33 mCi (benign)</td>
<td>10–15</td>
<td>5+</td>
</tr>
<tr>
<td>$^{131}$I &gt; 33 mCi (malignant)</td>
<td>10–15</td>
<td>5+</td>
</tr>
<tr>
<td>Parenteral</td>
<td>5</td>
<td>10+*</td>
</tr>
<tr>
<td>Total therapies</td>
<td>35</td>
<td>35</td>
</tr>
</tbody>
</table>

*At least 2 different FDA-approved radiopharmaceuticals, excluding $^{90}$Y microspheres.