Focus on Radiation Oncology

Clinical Practice Analysis and Radiation Oncology Maintenance of Certification Examination Development

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From the time of its initial incorporation in 1934 and extending through 1995, the focus of the ABR examination process was on initial certification of candidates at the completion of their post-graduate specialty training programs or shortly thereafter. The examination development process consistently utilized current psychometric and security principles to ensure an optimum level of fairness, reliability, and validity in testing the candidate’s knowledge of all aspects of radiation oncology and general oncology at the completion of training.

In 1995, the ABR administered its first time-limited certificate in radiation oncology, and in 1999, the first Part 3 Maintenance of Certification (MOC) cognitive examination was administered to diplomates who had been in practice for up to 10 years. Some diplomates entering MOC on a voluntary basis had been in practice for significantly longer than 10 years, and in some instances, had limited their practices to single organ systems or sites of disease. Although the level of a diplomate’s knowledge remains a critically important issue, development of the MOC examinations demanded a more intense focus on relevance, especially to the practice of each individual. Other than hospice and palliative medicine, there are no certificates for subspecialties in radiation oncology, so a level of knowledge in all aspects of general radiation oncology practice is essential.

To meet the challenge of developing examinations that would be relevant, non-intimidating, and fair to seasoned practitioners, several long-term initiatives were undertaken. In 2006, the ABR trustees updated the ABR strategic plan to include regular clinical practice analyses (CPA) to assist examination developers and content expert volunteers in creating blueprints for radiation oncology, diagnostic radiology, and medical physics examinations. The CPAs were to be carried out on an every three-year rotation.
In 2010, the first radiation oncology CPA was designed to determine how radiation oncologists practice, e.g., how a diplomate would treat a cancer of the distal esophagus, base of tongue, prostate, etc. The second full CPA, completed in 2013, was designed as an evaluation with greater emphasis on what diplomates treat. For example, does the individual respondent treat solid pediatric cancers, head/neck cancers, primary or secondary liver tumors, benign cranial lesions, use brachytherapy, etc.? The CPA process employs simple web-based surveys sent to all currently active ABR radiation oncology diplomates. In 2013, 3,504 surveys were distributed, with an evaluable response rate of 26.26 percent. These responses were collated and reviewed in detail by ABR psychometricians, examination development staff, senior managers, and trustees, and future examination roadmaps were developed.

Future examinations will incorporate the results of past and future CPAs in a number of clearly apparent ways:

- The ratio of various items/disease sites will be closely aligned with what our diplomates are actually doing on a day-to-day basis, e.g., far fewer items in pediatric oncology will reflect the fact that this category of disease entities represents a minimal portion of most radiation oncology practices.

- Items related to cancer and radiation biology, as well as physics, will concern only those issues diplomates might actually encounter in the clinic, e.g., no items will relate to such issues as the radium rules or calculations of dose in air.

- To reflect the fact that many diplomates treat only one or several organ systems or sites of disease, a modular examination is being developed. The current timeline for rollout of the first modular examination is late 2015. Diplomates will be able to self-determine approximately 30 percent of the total examination content by selecting either one or two modules specific to one of the eight current clinical categories, or brachytherapy.

- Participants in the ABR Focused Practice Recognition in Brachytherapy initiative will be able to select one or two modules in that modality.

Future Beam articles will provide greater details regarding some of these developmental examination issues.