

Recalled Board Questions: Perspective of the ABNM

CNN aired a report in January on the use of recalled questions by residents taking the American Board of Radiology (ABR) physics and written exams. This practice was widespread and was accepted within the radiology community for many years as an ethical way to study for board exams. To their credit, the ABR has decided to stop this practice, has called the use of recalled questions “cheating,” and has promised to take serious actions against residents and training programs that continue to support the use of recalled questions.

The reactions to the CNN report have been mixed. Reporters expressed surprise that “cheating” could go on, especially among doctors. Many radiologists did not think that the use of recalled questions was unethical. The reporters implied that the practice of reusing questions on multiple exams contributed to the problem. The purpose of this article is to: (1) discuss the role that boards have in allowing the medical profession to self regulate; (2) discuss the construction of a psychometrically valid exam; (3) describe how the use of recalled questions may invalidate the results of an exam; and (4) describe the steps the American Board of Nuclear Medicine (ABNM) takes to minimize the use of recalled questions on its exam.

Boards have a very different mission than that of specialty societies such as SNM. A major stakeholder for boards is the public. If the public is convinced that boards are acting in the public’s interest, the medical profession is given some degree of autonomy. If the public loses trust in the medical profession because of stories such as those on the use of recalled questions, regulations will be imposed from outside the medical profession. In contrast, the major stakeholders for specialty societies are the members of the society. The public expects specialty societies, unlike boards, to act out of self-interest. For this reason, the governance structures for boards and specialty societies are quite different. Board members are elected by the board (not the diplomates), whereas board members in specialty societies are elected by the society’s membership. It would be difficult for someone to be elected to a society leadership position if he or she did not support the views of the membership.

Reports of the use of recalled questions highlight a lack of understanding of the way in which a psychometrically valid exam is constructed. The passing score is not determined using a distribution of the exam results (e.g., so that those with exam scores <1 standard deviation from the mean fail). The passing score is determined by having the exam committee estimate what percentage of “minimally competent” physicians would answer each question correctly. Using this approach (called the criterion reference standard), it is possible that all examinees could pass the exam or all could fail. The criterion reference process is repeated approximately every 5 years to reflect changes that occur in practice. Once the passing score is selected, it can be adjusted each year as new questions are added to the exam. Repeat questions play a critical role in this process. By comparing the percentage

of correct answers for repeat questions to the percentage of correct answers for new questions, a psychometrician can determine whether the exam has become harder or easier. If new questions are harder, the passing score should be adjusted down; if new questions are easier, the passing score should be adjusted upward. Repeat questions also provide information on whether the examinees have become more capable (higher scores on the repeat questions) or less capable (lower scores on the repeat questions). Contrary to impressions given in the media, the use of repeat questions is essential for the construction of a psychometrically valid exam.

How would the use of recalled questions affect the validity of an exam? The common expectation is that more physicians will pass the exam than would otherwise, because the criterion reference standard process does not take into account the use of recalled questions. The reality is more complicated. Each question on every exam is evaluated for its ability to discriminate more-competent from less-competent examinees (based on their overall exam score). If a question has good discriminating ability (a higher percentage of more competent examinees are correct) the question is retained for scoring. If the use of recalled questions results in most examinees getting that question right, the question will likely lose its discriminating ability. Questions that do not discriminate more competent examinees from less competent examinees are usually deleted from the exam, so the use of recalled questions may not have a great effect on the results of the exam.

The ABNM believes that for many reasons it has much less of a problem with the use of recalled questions than many other boards. First, our exam is given after residents complete their training, so it is more difficult for examinees to have an organized effort to accumulate recalled questions. Second, the number of nuclear medicine residents is smaller, so recalling questions is a more difficult strategic task. Third, the ABNM exam is computer based, and the questions are given in random order, so attempting a group effort to recall questions is more difficult. Fourth, the ABNM monitors the Internet for the presence of ABNM board review questions. Finally, the ABNM has always had a strong policy against the use of recalled questions. Every examinee signs an agreement that states: “I understand that the ABNM certification examination is to be supervised by proctors responsible to ABNM and empowered to ensure that the examination is conducted ethically. Any candidate exhibiting dishonest or unethical behavior or other irregular activity, including, but not limited to copying answers, sharing information, using notes, recording or removing information or material from the examination, etc., will be reported to ABNM.” The ABNM strongly asserts that the use of recalled questions is an example of unprofessional and unethical behavior.

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