

Attention NREMT Candidates: Put down your No. 2 pencils!

By William E. Brown Jr.

The National Registry of Emergency Medical Technicians (NREMT) is transitioning its pencil-and-paper exams to computer-based testing starting in January 2007.

We at NREMT are excited about the benefits that the implementation of computer-based testing will provide for candidates and stakeholders. With computer-based testing, the National Registry can offer more rapid turnaround of test results and increased testing flexibility. In addition, each exam will be tailored to the ability of the individual candidate and conducted via computer in a conveniently located, secure testing center.

The NREMT has entered into an agreement with Pearson VUE Inc. to provide its computer-based tests. Pearson VUE offers innovative electronic testing solutions that enhance the performance, reliability and security of high-stakes testing programs throughout the world. Its clients include such organizations as the National Council of State Boards of Nursing (which licenses all nurses in the United States), the American Board of Emergency Medicine, the American Board of Internal Medicine and the American Board of Surgery.

Why make the change to computer-based testing? There are four main benefits: rapid turnaround of test results, increased testing flexibility, more accurate evaluation and increased professionalism for licensed EMS providers.

Rapid turnaround of test results

A survey conducted by the NREMT in 2002 showed that it took most EMTs 30 days to receive their NREMT cards and an additional 30 days to receive their state

EMT certification or license. Further, some EMTs have had to wait 60 days just for a testing location to become available near them. We found these delays unacceptable and wanted to improve these services.

With the new computer-based testing, candidates and their state licensing agency will receive the results the day after the test, enabling candidates to begin (or continue) their careers as EMS providers much more quickly. After completing the test, results are transmitted electronically as encrypted, secure data to the National Registry. Once the Registry receives the test score, it will be posted in a secure area on our Web site (www.nremt.org) and sent to the appropriate state licensing agency.

This rapid receipt of results will allow candidates awaiting certification/ licensure to go to work much more quickly, filling critical slots as highly qualified professionals. It will also expedite promotion and pay-rate increases for existing EMS providers who have taken the next step in their careers.

Increased testing flexibility

The Registry exams will be administered through Pearson VUE's computer-based testing network, which includes hundreds of testing centers located in major cities in every state across the country. By conducting all exams at Pearson VUE's secure facilities, we're ensuring that every EMT nationwide has a similar testing experience.

The National Registry and state EMS directors from across the country are working with Pearson VUE to establish even more testing locations to accommodate EMTs living in rural areas. However, some EMTs in remote areas may still have to travel farther than before in order to take their exam. We understand that this may be a slight inconvenience, but expect the benefit of receiving test results more quickly to be worth it.

Applying for and scheduling the National Registry exam will also be easier. Computer-based testing will allow EMTs to apply quickly and take the National Registry exam at the time and location they prefer.

During an EMS course, candidates will complete an application on the NREMT Web site and pay by credit card online or by mail in a money order before their test date. Once the individual has completed their EMS course and practical examination, the official designated to validate successful completion will be able to confirm that the candidate has passed the practical exam on a password-secured section of the NREMT Web site, accelerating the process.

On successful completion of these steps, the candidate can schedule a test. Based on availability at the testing center, candidates may even be able to test on the same day

they call to schedule an exam.

Computer-based testing allows EMTs to prepare and study at their own pace and schedule when they're ready. Exams can be taken during the day, on some evenings or on selected weekends. In addition, candidates who may need to take the exam a second time can retest much sooner than before. They no longer have to wait until the next scheduled examination or travel several hundred miles to find a timely test site.

More accurate evaluation

Computer-based testing allows the National Registry to take advantage of technology called computer-adaptive testing (CAT). CAT more accurately measures the competency of a candidate by using a computer algorithm that selects questions for each candidate based on how they're doing as they proceed through the test.

Each candidate is given a set of starting questions. Based on their answers to those questions, the computer estimates the candidate's ability up to that point and selects the next question. Every time the candidate answers a question, the computer will re-estimate their ability and select the next question to be presented—one that the candidate will find challenging (i.e., not too hard and not too easy). With every additional answer, the ability estimate becomes more precise.

By tailoring the exam with CAT, we are reducing the number of easy questions that high-ability candidates receive as well as the number of difficult questions that low-ability candidates receive. Questions that are too easy tell little about a high performer's ability, and when candidates guess on questions that are too difficult for them, the precision of the exam is reduced.

If the EMT quickly shows competency by successfully answering the more difficult questions, they will receive a minimum number of questions to pass the examination. Lower performing candidates may need more questions at varying levels to prove their competency. Some candidates may be unable to meet the passing standard, but, again, with computer-based testing, they'll be able to retest more quickly.

The exam is based entirely on the candi-

On successful completion of these steps, the candidate can schedule a test. Based on availability at the testing center, candidates may even be able to test on the same day they call to schedule an exam.

date's individual ability, allowing the candidate to better show what they do and do not know about being an EMT.

Although the functionality of the CAT exam is complex, taking it will be simple. Candidates will arrive at the test center, receive a briefing on how to use the computer to take the exam and then take the test one question at a time until they demonstrate that they are either competent or not yet competent.

Increased professionalism for EMS

Until 1994, almost every testing organization in the United States administered pencil-and-paper examinations. Then the National Council of State Boards of Nursing made a revolutionary move to computer-based testing and, in doing so, started a trend in health-care testing. Since then, numerous health-care testing organizations have changed their testing methods by implementing computer-based examinations.

To maintain our credibility, now is the time for change. If, in five years, the National Registry doesn't modernize its testing methods, we'll be unable to fulfill our mission of protecting the public by providing examinations that are secure and have precise pass/fail scores.

By transitioning to computer-based testing now, we're saying we value test security and valid measurement. We're demonstrating that, like doctors, nurses and other health-care workers, we are true professionals. We're not a secondary provider of health care in any community: We are the frontline of emergency medical care in every ZIP code in America.

Computer-based testing is right for the National Registry of Emergency Medical Technicians certification. It will provide test results more quickly, allow more flexibility in test scheduling and help us develop the most accurate and secure examinations. Further, it demonstrates the professionalism of the field of EMS.

Implementing computer-based testing

The National Registry will spend the next two years preparing to deliver tests via computer. During this time, we will be in constant communication with our network of EMS directors, educators, training programs and others to make this transition as smooth as possible.

In March 2005, we'll host three regional meetings for state EMS directors as a forum to discuss the implementation of computer-based testing and its effect on each state, as well as to determine where additional testing centers are needed. Based on information collected from these meetings, we'll work with Pearson VUE to establish new testing centers.

During these two years, we'll visit EMS offices in every state to discuss area-specific implementation issues. We'll also meet with key stakeholders to present a complete overview of computer-based testing and its impact on current certification procedures.

In addition, we'll be in contact with EMS educators to outline a new online system for confirming a candidate's course completion. This new system will help expedite the scheduling of a candidate's exam.

And finally, we'll develop brochures explaining computer-based testing and a DVD that will contain a sample computer-based test, directions for online registration, information about the National Registry and more.

Your support in this process is vital. By implementing computer-based testing, we're ensuring that your department will be able to hire new EMTs much more quickly and that those new EMTs will be safe, effective and competent members of your team. JEMS

William E. Brown Jr. is the executive director of the National Registry of Emergency Medical Technicians. He is also a frequent lecturer at the EMS Today Conference and contributes as a member of many national EMS committees.