

## Adaptive Testing is a Valuable Tool for EMS Officials

Computerized Adaptive Testing (CAT) is an important part of the Computer Based Testing (CBT) transition slated to be initiated January 2007 by the NREMT. CAT is most valuable for those responsible for the safety of the public and the integrity of their EMS community. In implementing CAT, a computer algorithm determines the difficulty level of a candidate's next test question, based on how the previous question was answered. Computer adaptive exams

- are customized according to the candidate's ability
- are individualized according to the candidate's performance
- target the questions' difficulty to match the candidate's performance
- measure every candidate against a predetermined minimum competency level.

"We believe the public and EMS community deserve the benefits Computerized Adaptive Testing offers," says NREMT Associate Director Gregg Margolis. "This superior form of testing is quickly becoming the 'standard of care' when it comes to high stakes testing."

With CAT, candidates are measured more precisely, and high and low performers can be determined quicker using fewer questions. Since fewer questions are necessary for reliably determining competency, security of the test is increased.

Affirming the benefits of CAT is Mountain Measurement, Inc. CEO Brian Bontempo, Ph.D., who currently serves as Psychometric Consultant for the NREMT. "Virtually all cheating and security issues related to high stakes testing can be eliminated through Computerized Adaptive Testing," Dr. Bontempo states. Much more information about the competency of a student can also be gained in the same amount of testing time as linear or pencil and paper tests. In fact, the beauty of Computerized Adaptive Testing is that the custom tailored assessment made on-the-fly for each student *maximizes* the amount of EMS knowledge obtained from each student," says Dr. Bontempo. In the case of high stakes testing, this more precise method of testing greatly reduces the potential of jeopardizing the integrity of the EMS community.

Desiring to keep the EMS community at pace with other medical professions, the National Registry is eager to adopt CAT in 2007. "This is the direction in which most certification agencies are moving," explains Mr. Margolis. "Linear testing was acceptable when there were no other tools available. However, we are committed to employing the most reliable method of testing, and believe it is our responsibility to adopt Computerized Adaptive Testing."