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**Background**

The National Registry of Emergency Medical Technicians (NREMT) is a national nonprofit corporation that provides a uniform process to assess the knowledge and skills required for competent practice by Emergency Medical Services (EMS) professionals. The NREMT, together with various State and local EMS certification and licensing bodies, is responsible for ensuring the initial and continued clinical competence of nationally registered Emergency Medical Technician-Paramedics (NREMT-P). NREMT issues a certification for NREMT-Ps that is valid for 24 months and requires a total of 72 hours of refresher training and continuing medical education to maintain.

Following initial certification, a difficulty arises in determining whether the EMT-Ps remain competent. Among the medical, nursing, health science, and other healing arts professions, continuing education, required practice frequency minimums, and periodic retesting are among the most common methods of ensuring the safe practice of clinicians. While NREMT-Ps have continuing education requirements and are required to have medical director skill verification, they do not have practice frequency minimums or mandatory retesting.

The important health policy question that arises is whether NREMT reregistration has its intended effect of maintaining competence. The principal objective of this study was to determine whether the continued cognitive competence of voluntarily reregistered paramedics differed from those who did not reregister.

**Methods**

The sample consisted of two groups: (1) NREMT-Ps who voluntarily reregistered and (2) EMT-Ps who did not voluntarily reregister after the initial 2-year registration cycle and chose to remain only licensed by the State. Subjects were sent a letter requesting they complete a multiple-choice online survey. The survey questionnaire consisted of a standardized exam similar to the initial certification test, an achievement test, and a demographic and professional practice questionnaire. The responses from cohorts of NREMT-Ps initially certified 2, 4, and 6 years earlier were compared.

**Findings**

The table below shows the difference in achievement scores for the reregistered and non-reregistered cohorts. While the reregistered cohorts averaged just one more correct answer on the achievement portion of the exam, all reregistered cohorts did better than their nonreregistered counterparts.

**Achievement Score Differences for Reregistered and Nonreregistered EMT-Ps**

Group	Difference reregistered vs. nonreregistered* (95% Confidence Intervals)	p-value
Year 2	0.95 (0.35, 1.55)	0.0020
Year 4	1.41 (0.59, 2.23)	0.0008
Year 6	1.21 (0.30, 2.12)	0.0094
Average over all years	1.07 (0.66, 1.48)	<0.0001

\* This is a difference in mean number of correct scores between reregistered and nonreregistered cohorts.

Several variables were associated with the reregistered cohorts' higher passing rate including having completed more Continuing Medical Education (CME) and having more years of clinical experience related to emergency calls. Future work in this area could include a more sophisticated prospective study that would assess the reasons for higher test scores and would perform more detailed analyses of the differences between EMT-Ps who reregister with the National Registry and those who do not.

#### How To Order

For a copy of National Reregistration and the Continuing Competence of EMT-Paramedics write to the Office of Research and Technology, NHTSA, NTI-130, 400 Seventh Street SW., Washington DC 20590 or send a fax to 202-366-7096, or download from [www.nhtsa.dot.gov](http://www.nhtsa.dot.gov). Paul J. Tremont, Ph.D. was the NHTSA project officer.

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