



**Paramedic Program Accreditation and Student Performance on the National
Paramedic Certification Examination**

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Background: Starting January 1, 2013, the National Registry of Emergency Medical Technicians (NREMT) required graduation from an accredited paramedic program to be eligible to take the National Paramedic Certification examination. A minimal amount is known about the potential impact of accreditation on student performance. Our objective was to assess the relationship between paramedic program accreditation and student performance on the National Paramedic Certification examination. We hypothesized that graduates of accredited programs would have higher first and cumulative third attempt pass rates compared to their non-accredited counterparts.

Methods: National Paramedic Certification cognitive examination results for all students who completed paramedic programs in 2012 were analyzed. Paramedic program status was categorized as either accredited or non-accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Individual performance on the National Paramedic Certification in terms of first-attempt and cumulative third-attempt pass rates were analyzed. Descriptive statistics were calculated and Chi-square tests were used to compare pass rates between accredited and non-accredited graduates. Univariable logistic regression was used to assess the impact of program accreditation status on first-attempt pass/fail.

Results: A total of 8,404 students that graduated from paramedic programs in 2012 were included in the analysis. Of these, 87.1% (n = 7,317) graduated from an accredited paramedic program. The first-attempt pass rate for graduates of accredited programs was significantly higher than that of their non-accredited counterparts (75.6% vs. 67.3%, $p < 0.001$). Likewise, the cumulative pass rate after three attempts was significantly higher for graduates of accredited programs at 88.9% compared to 81.9% for graduates of non-accredited programs ($p < 0.001$). Graduates of accredited programs had 51% greater odds of passing the National Paramedic Certification examination compared to non-accredited graduates (OR: 1.51, 95% CI: 1.31–1.73, $p < 0.001$).

Conclusions: Students graduating from accredited paramedic programs exhibited significantly higher first-attempt and cumulative third-attempt pass rates compared to graduates of non-accredited programs. Individuals seeking a career in prehospital EMS should consider program accreditation status when selecting a program as accreditation was associated with greater odds of first-time success on the National Paramedic Certification examination. Future efforts should evaluate the impact of expanding accreditation to all levels of EMS education.