

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

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BACKGROUND

- Accreditation of training programs has long been a requirement for other healthcare professions.
- However, paramedics have only been recently required to attend accredited programs (2013).
- The impact of accreditation status and candidate performance is unknown.

OBJECTIVE

To assess the relationship between program accreditation and candidate performance on the National Paramedic Certification examination.

METHODS

- Study Population: Paramedics who graduated in 2012 and attempted the National EMS Certification cognitive examination.
- Independent Variable: For each graduate taking the certification examination, the independent variable was the program status as either accredited or non-accredited.
- Outcome: These included first-attempt pass rate and cumulative third-attempt pass rate.
- Data Analysis: Descriptive and comparative statistics were conducted as well as univariable logistic regression modeling.

RESULTS

Population: 8,404 candidates who graduated in 2012 were administered the National Paramedic Certification examination.

- Accredited Programs: 7,317 graduates (87%)
- Non-Accredited Programs: 1,087 graduates (13%)

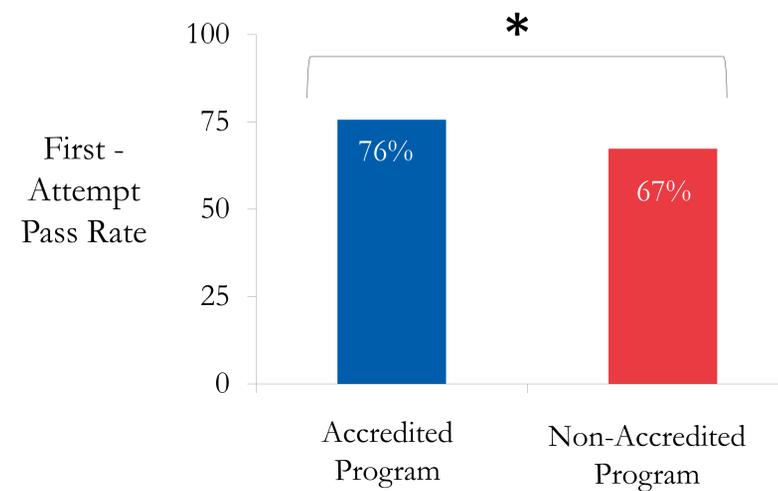


Figure 1: First-attempt pass rates for accredited and non-accredited programs. Accredited programs had a higher first pass rate (*, p<0.001)

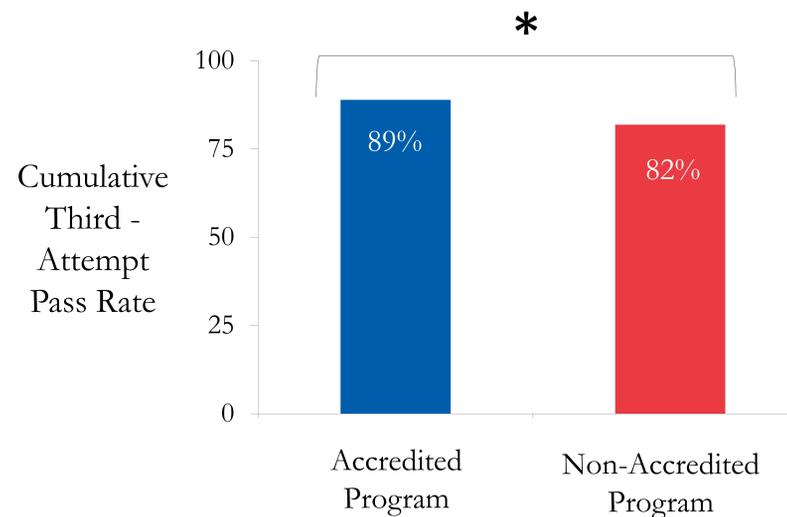


Figure 2: Cumulative third-attempt pass rate for accredited and non-accredited programs. Accredited programs had a higher cumulative third attempt pass rate (*, p<0.001)

RESULTS

Table 1: Odds of first-attempt success on national paramedic examination for accredited program graduates. Accredited program graduates have 51% greater odds of first-time success.

	Odds Ratio	95% CI	P-value
Non-Accredited Program	Referent		
Accredited Program	1.51	1.31-1.73	p<0.0001

LIMITATIONS

- This evaluation used data from one graduation year (2012) so it provides a spotlight on one time period which may not be representative.
- During this time, many programs were preparing for accreditation possibility underestimating the effect noted.
- Smaller total number of non-accredited program graduates compared to accredited program graduates.

CONCLUSIONS

Accredited program graduates had greater first-attempt and cumulative third-attempt success on the National Paramedic Examination. Further, accredited program graduates had 51% greater odds of first-time success.