



CoAEMSP

Committee on Accreditation of Educational Programs
for the Emergency Medical Services Professions



Paramedic educational program entry requirements and student resources and their association with attrition

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Disclosures

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Background

- Paramedic educational program attrition contributes to a loss of potential clinicians from the EMS workforce
- To mitigate this, programs have developed entry requirements and student resources to enhance retention
- The impact of these strategies on student retention is unclear



Objective

- Our objective is to evaluate program entry requirements and student resources and their association with high paramedic educational program attrition.



Methods

- Cross-sectional evaluation of the 2021 Committee on Accreditation of Educational Programs for the EMS Professions (CoAEMSP) annual report
- All paramedic educational programs completed the accreditation report
- As part of the report, additional questions focused on program entry requirements and student resources (e.g., open enrollment, transportation, daycare, tutoring)



Methods

- Included in the analysis are all paramedic programs that reported >4 enrolled students
- Attrition rates were calculated, and programs with high attrition (>30%) were identified
- All program resources and requirement variables were measured dichotomously (yes/no)



Measurements & Analysis

- Program Demographics
- Attrition rate
- Meets 80% RAM Minimum
 - Identify program resource deficiencies affecting educational delivery
- Open enrollment policy
 - Seen as a driver for high attrition



Measurements & Analysis

- Additional Program Resources
 - Tutoring, healthcare benefits, career planning, childcare
- Admission Requirements:
 - Language, math, or reading proficiency, interview, medical knowledge exam, medical skills, minimum aptitude test, GPA, physical abilities, orientation, medical prescreen
 - College level courses: anatomy, math, medical terminology, physiology, reading



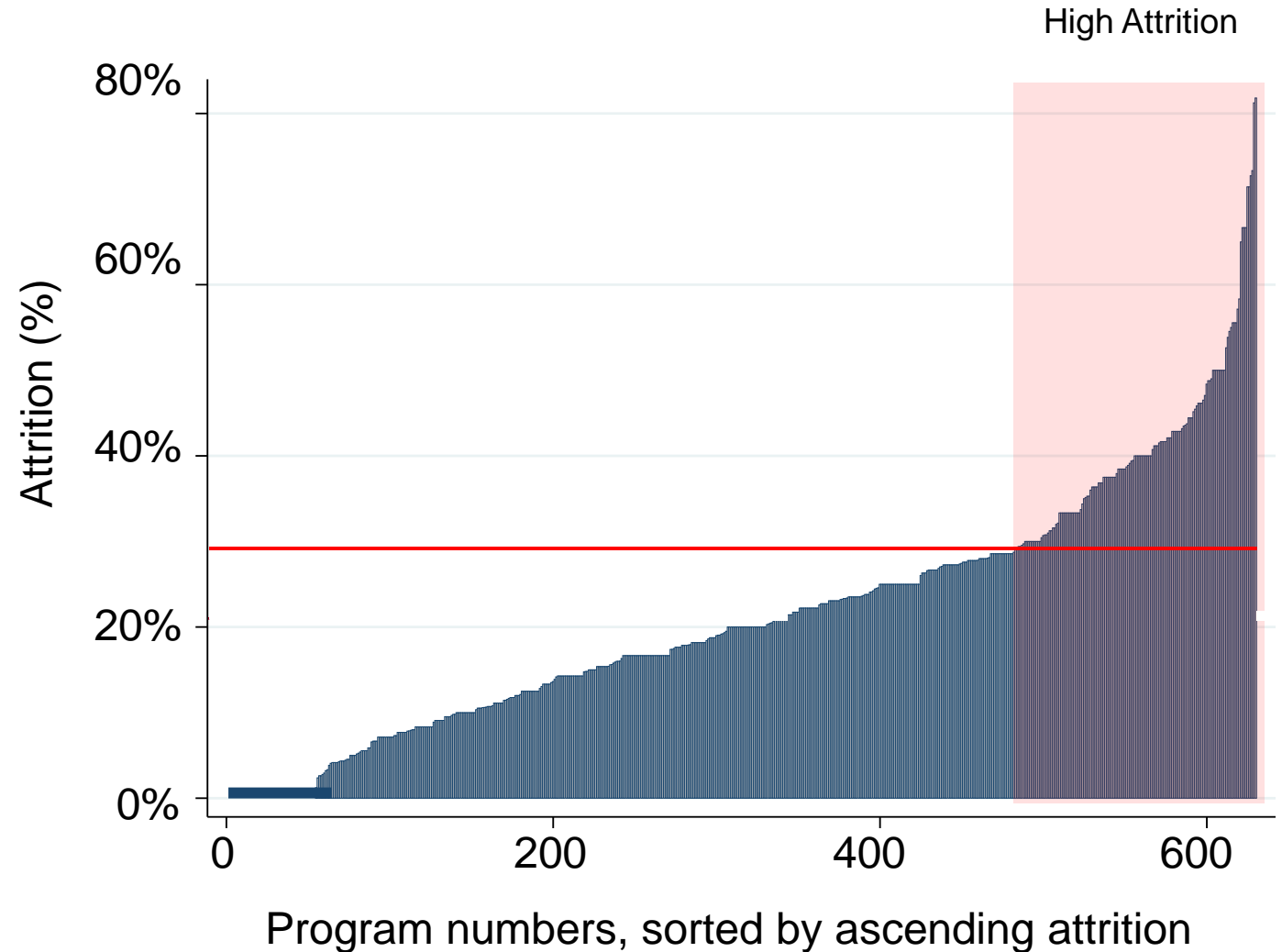
Measurements & Analysis

- Descriptive statistics were calculated
- Univariable Logistic Regression
 - Outcome variable: High attrition
 - All student resources and entry requirements were assessed for their individual associations with the outcome (OR, 95% CI)



Results

- 630 paramedic educational programs (89%) were included
- 30% did not meet the RAM minimum
- 44% used open enrollment
- 23% had high attrition



Program Entry Requirements

Requirement	2021 Cohort N (%)
Reading Proficiency	400 (63%)
Math Proficiency	371 (59%)
College Level Courses	300 (48%)
Pre-Admission Interview	259 (41%)
Medical Knowledge Exam	221 (35%)

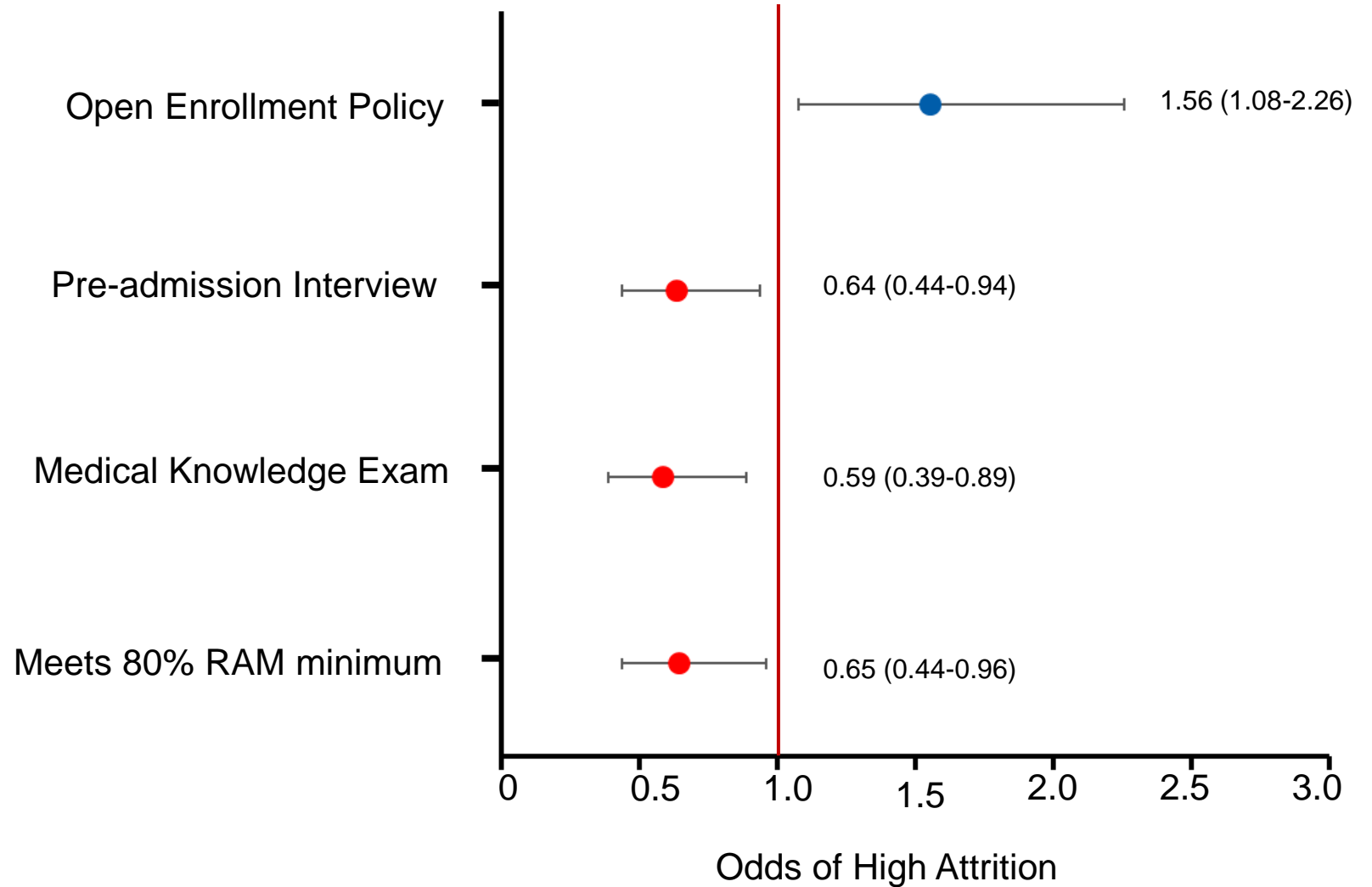


Program Resources

- Though critical for the success of students, tutoring, counseling, and career planning were not ubiquitous
- Classic wrap-around services, like daycare, were uncommon in paramedic education programs

Resource	2021 Cohort N (%)
Tutoring	532 (84%)
Counseling	448 (71%)
Career Planning	449 (71%)
Paid Employment	334 (53%)
Tuition Assistance	278 (44%)
Daycare	35 (6%)

Univariable Logistic Regression Analysis for Odds of High Attrition



Limitations

- Estimates of attrition are based on self-reported data from programs and raw student-level data collection
- Due to the structure of the annual report, potential for recall bias is also present
- We do not have granular data on student-level attrition



Conclusions

- High paramedic program attrition was associated with open enrollment policies and mitigated with pre-admission interviews and medical knowledge exams.
- High variability existed in baseline program requirements and the provision of common student resources (e.g., tutoring).
- Paramedic educational programs should consider the impact of entry requirements, in conjunction with student support systems, to enhance student retention.



Acknowledgements



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We would also like to thank the hard-working EMS clinicians providing patient care and protecting the public of the United States.





Thank you!

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